Appendix C
Data Usability Assessment Report
(On CD)

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The purposes of this data usability and assessment report (DUAR) are to 1) summarize the data validation performed on the data sets for the Historic Site Assessment (HSA) Subarea 5D North and 5D South samples collected, and 2) determine whether the sample results meet the Data Quality Objectives (DQOs) outlined in the *Master Work Plan/Field Sampling and Anlaysis Plan, Co-Located Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California (CDM Federal Programs Corporation* [CDM] 2011a) (WP/FSAP) *Addendum No. 4 to Master Work Plan/Field Sampling and Analysis Plan, Co-Located Chemical Sampling at Area IV, Santa Susana Field Laboratory, Ventura County, California, EPA Subarea 5D North Soil Sampling* (CDM 2011b) (WP/FSAP Addendum) and *Addendum No. 6 to Master Work Plan/Field Sampling and Analysis Plan, Co-Located Chemical Sampling at Area IV Santa Susana Field Laboratory, Ventura County, California, EPA Subareas 3, 5D South, 7 and 8 South Soil Sampling* (CDM 2011c).

A total of 498 soil samples were collected and analyzed from 13 drainage locations, 73 surface locations, and 186 soil boring locations for Subarea 5D North. For Subarea 5D South 59 soil samples were collected and analyzed two drainage locations, 30 surface locations, and 20 soil boring locations.

C.1 Usability Summary

For this data usability assessment, 117 data sets were reviewed. A data set consists of 20 or fewer samples grouped together by analytical method for analyses depending on the time and date of when the samples were received by the laboratory. A data set is called a sample delivery group, or SDG. The analyses performed are discussed in Section 2.5 of the Subarea 5D North and 5D South Technical Memorandum (TM).

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

The validated data for Subareas 5D North and 5D South samples are usable as reported, with the exception of the rejected data. One fluoride result, one antimony result, one ethanol result, one m-terphenyl result, one p-terphenyl result, three EFH results, 72 pesticide results, ten PCB results, 50 herbicide results, 11 SVOC results and 30 explosive results were rejected for Subarea 5D North sample data. For all Subarea 5D North data, 0.18 percent of the results were rejected. For Subarea 5D South data one pesticide result, 16 herbicide results and four SVOC results were rejected. For all Subarea 5D South data, 0.23 percent of the results were rejected. These rejected data do not impact project objectives and goals. Specific details are provided in the validation reports in this Appendix and below in Section C.8.

C.2 Data Validation Procedures

Data were validated by the independent data validation firm Laboratory Data Consultants, Inc. All data validation was conducted in accordance with *U.S. Environmental Protection Agency (EPA) Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 2004), *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2008), and *EPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review* (EPA 2005).

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

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

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

C.3 Quality Assurance Objectives

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

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

- Specification and adherence to analytical method and reporting detection limit requirements
- Identification of the appropriate laboratory analytical QC requirements and verification of whether these QC requirements were met

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

- Verification that measurement performance criteria (representativeness and completeness) for the data have been met

- Verification that field procedures were followed, deviations were documented, and determination of impact on data quality from these deviations

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

C.4 Summary of Field and Laboratory QA Activities

CDM completed sampling activities in Subarea 5D North and 5D South in accordance with the approved WP/FSAP (CDM 2011a). A total of 498 soil samples were collected and analyzed from 13 drainage locations, 73 surface locations, and 89 soil boring locations for Subarea 5D North. For Subarea 5D South 59 soil samples were collected and analyzed from two drainage locations, 30 surface locations, and 20 soil boring locations. Tables 2-1 and 2-2 in the Subarea 5D North and 5D South TM provide a summary of the samples collected and the laboratory analyses requested.

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

C.5 Field Quality QA/QC

Field QC samples, such as matrix spike/matrix spike duplicates (MS/MSDs) and field duplicates, were to be collected at a frequency of 1 per 20 samples (5 percent) for MS/MSDs and field duplicates. MS/MSD and field duplicate samples were collected by CDM at 25 sample locations for Subarea 5D North and four sample locations for Subarea 5D South. As discussed in the TM, collection frequency of MS/MSDs was changed. MS/MSD and field duplicate samples met the frequency requirements detailed in the WP/FSAP (CDM 2011a) and in accordance with the changes implemented.

Twenty-four equipment rinsate blank samples were collected for Subarea 5D North and three were collected for Subarea 5D South. The equipment rinsate blank results are presented in Table C-2 and Table C-3.

No field blanks were collected during sampling for 5D North and 5D South. The field blank associated with this ASTM decontamination water has been applied to the 5D North and 5D South samples accordingly.

Forty-six trip blank samples were shipped with the Subarea 5D North soil samples and eight trip blank samples were shipped with the Subarea 5D South samples. The results for these samples are presented in Tables C-4 and C-5. Data qualifications

based on blank detections are discussed in Section C.7.3 and in the Appendix C validation reports.

Temperature blanks were to be included with each shipment of samples. Based on validation results, all temperature blanks for 5D North and 5D South met criteria.

The number of field QC samples collected satisfies the minimum requirements for the Subarea 5D North and 5D South sampling events specified in the WP/FSAP (CDM 2011a) and any implemented modifications. Field QA/QC objectives were accomplished through the use of appropriate sampling techniques and collection of the required QC samples at the required frequencies.

C.6 Laboratory Quality QA/QC

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCSs), MSs, calibration recoveries, surrogates, tuning criteria, second column confirmations, internal standards, serial dilutions, laboratory duplicates, and interference check standards. The majority of the laboratory QC sample criteria met project requirements as indicated in the data validation reports in this appendix with the appropriate qualifiers applied. One hundred and eighty-one individual analyte results for samples from Subarea 5D North (0.18 percent of all the analytes) and 21 individual analyte results for samples from Subarea 5D South (0.23 percent of all analytes) were rejected as discussed below and in the validation reports presented in this appendix.

C.7 Data Quality Indicators

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

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

C.7.1 Precision

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

RPD is calculated as follows:

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

Where:

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

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

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

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

Qualifiers were applied to applicable sample analyte results during the validation process based on laboratory and field duplicate precision results. Details are discussed in the laboratory validation reports in this appendix. Table C-6 and Table C-7 show the field duplicate pairs and RPD results for Subareas 5D North and 5D South respectively. RPD results outside of criteria are highlighted.

The following individual analyte results were qualified as estimated "J/UJ" based on precision criteria for Subarea 5D North samples:

- Twenty-eight dioxin results, 34 pesticide results, 16 PCB/PCT results and 12 herbicide results were qualified as estimated based on second column RPD results

- Eight dioxin results; 31 fluoride/nitrate results; 2,713 metal analyte results; 37 mercury results; one TPH/glycol result; 12 PCB/PCT results; 14 SVOC SIM results; and four energetic results were qualified as estimated based on laboratory precision criteria

- One hundred and sixty-one dioxin results; four NDMA results; six fluoride/nitrate results; 36 metal results; nine hexavalent chromium results; 13 mercury results; one alcohol/terphenyl result; 14 TPH/glycol results; 28 pesticide results; 20 PCB/PCT results; 13 herbicide results; 13 VOC results; one SVOC result; and 110 SVOC SIM results were qualified based on field duplicate criteria

The following individual analyte results were qualified as estimated "J/UJ" based on precision criteria for Subarea 5D South samples:

- Two fluoride/nitrate results, 170 metal analyte results and 27 PCB/PCT results were qualified as estimated based on laboratory precision criteria

- Twenty-six dioxin results; four metal results; two hexavalent chromium results; eight pesticide results; four PCB/PCT results; one herbicide result; one SVOC result; and 15 SVOC SIM results were qualified based on field duplicate criteria

There was no discernable pattern or reason for the laboratory and field sample RPD exceedances identified. No field sampling issues were identified from the RPD results that were outside of criteria and the exceedances are reasonable for this type of sampling activity. Sample results that have been qualified as estimated "J/UJ" due to precision criteria are usable for project decisions with a degree of caution.

C.7.2 Accuracy

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

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

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

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

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

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

The following individual analyte results were qualified as nondetect “U” or nondetect estimated “UJ" based on accuracy criteria for Subarea 5D North samples:

- Two thousand and five metal analyte results were qualified as estimated based on inductively coupled plasma serial dilution results

- Two-hundred and seventy-three pesticide results, 122 PCB/PCT results and 35 VOC results were qualified as estimated based on calibration criteria

- Thirty-eight metal results; four TPH/glycol results; 54 pesticide results; 22 PCB/PCT result; 49 herbicide results; 55 VOC results; 379 SVOC results; 105 SVOC SIM; seven formaldehyde results; and 72 energetic results were qualified as estimated based on LCS percent recovery criteria

- Ten dioxin results; four NDMA results; 417 fluoride/nitrate results; three perchlorate results; 4,118 metal analyte results; 30 mercury results; 16 alcohol/terphenyl results; 42 TPH/glycol results; 26 pesticide results; seven herbicide results; seven VOC results; 85 SVOC results; 32 SVOC SIM results; two formaldehyde results; and five energetic results were qualified as estimated based on MS percent recovery criteria

- Two NDMA results; 11 alcohol/terphenyl results; 548 pesticide results; 45 PCB/PCT results; 6 herbicide results; 46 SVOC results; and four formaldehyde results were qualified as estimated based on surrogate recovery criteria

The following individual analyte results were qualified as nondetect “U” or nondetect estimated “UJ" based on accuracy criteria for Subarea 5D South samples:

- One hundred and forty-four metal analyte results were qualified as estimated based on inductively coupled plasma serial dilution results

- One perchlorate result; five PCB/PCT results; ten herbicide results; and nine SVOC results were qualified as estimated based on LCS percent recovery criteria

- One dioxin result; 43 fluoride/nitrate results; 420 metal analyte results; two pesticide results; nine herbicide results; six SVOC results; and one SVOC SIM result were qualified as estimated based on MS percent recovery criteria

- Forty-eight pesticide results, 32 PCB/PCT results and 21 SVOC SIM results were qualified as estimated based on surrogate recovery criteria

The following individual analyte results were rejected "R" based on accuracy criteria for the Subarea 5D North samples:

- One fluoride result based on MS

- One antimony result based on MS

- Three alcohol and terphenyl results (ethanol, m-terphenyl, and p-terphenyl) based on MS

- Three TPH results (EFH [C12-C14], EFH [C15-C20] and EFH [C8-C11]) based on MS
- Sixty-two pesticide results (from four samples) based on surrogates
- Ten pesticide results (from six samples) based on MSs
- Ten PCB/PCT results (from one sample) based on surrogates
- One herbicide result (dalaphon) (from one sample) based on MS
- Forty-nine herbicide results (dinoseb) (from 49 samples) based on LCSs
- Eleven SVOC results (from 11 samples) based on MSs
- Thirty energetics results (2,4-diamino-6-nitrotoluene and 2,6-diamino-4-nitrotoluene) (from 15 samples) based on LCSs

The following individual analyte results were rejected "R" based on accuracy criteria for the Subarea 5D South samples:

- One pesticide result (4'4-DDD) based on MS
- Sixteen herbicide results (nine for dinoseb and one each for 2,4,5-TP Silvex, 2,4-DB, dalaphon, diacamba, dichloroprop, MCPA and MCPP) based on MSs
- Four SVOC results (benzidine) based on MSs

Sample preservation, handling, and holding times are additional measures of accuracy of the data. All sample preservation, holding times and handling criteria were met except for one NDMA result and ten herbicide results for Subarea 5D North samples. These results were qualified as estimated "J/UJ."

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

C.7.3 Blank Contamination

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

The following individual analyte results were qualified as nondetect "U" based on blank contamination for the Subarea 5D North samples:

- Four-thousand two hundred and thirty-two dioxin results (50%); 24 NDMA results (11%); 612 metal results (4%); eight hexavalent chromium results (1.6%); 74 mercury results (8.4%); two alcohol/terphenyl results (0.15%); 20 TPH/glycol result (1.1%); one PCB/PCT result (0.016%); 317 VOC results (2.3%); 20 SVOC results (0.08%); and 31 SVOC SIM results (0.26%) were qualified as non-detect due to blank contamination criteria

The following individual analyte results were qualified as estimated "U" based on blank contamination for the Subarea 5D South samples:

- 408 dioxin results (40%), 66 metal results (3.7%), and three mercury results (5%) were qualified as non-detect due to blank contamination criteria

The percentage of results qualified as non-detect based on laboratory blank contamination was less than or equal to 5% for all these analyses except for the following analytes: 50 percent of the dioxins for Subarea 5D North; 40 percent of the dioxins for Subarea 8 South; 11 percent of the NDMA results for Subarea 5D North; and eight percent of the mercury results for Subarea 5D North.

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

The other reported analytes that had blank qualifications greater than 5 percent do not indicate a laboratory blank contamination problem as the overall sample counts for those analytes were low. For example, there were only 214 NDMA samples analyzed for Subarea 5D North and out of those samples 24 NDMA results were qualified due to blank contamination.

Tables C-2 through C-5 provide a summary of chemicals observed in the equipment and trip blank samples. Most of the equipment blanks and trip blanks detected compounds were below the RLs but above the MDLs. Compounds detected above the RL in equipment and trip blanks are highlighted yellow in the associated tables. The ASTM Type II water used to generate the equipment and travel blanks was previously analyzed as a field blank on April 27, 2011. This field blank (source water) had detections of naphthalene (above the RL) indicating inherent low level contamination in the source water used.

ASTM Type II water is not typically certified “clean” to the low RLs established for the low level methods used for the co-located sampling program. A review of the

ASTM Type II field blanks for all Phase 1 sampling showed one detect of heptachlor, three detects of naphthalene, and one detect of RDX above their respective RL. One field blank had detects above the RLs for four metal analytes and one field blank had detects above the RLs for a variety of VOC analytes. A review of ASTM Type II water field blanks will continue to monitor for detected concentrations of analytes throughout the sampling program.

A review of all Phase 1 equipment blanks was also performed. In general, a variety of analytes were detected above their respective RLs. The most frequently detected analytes were naphthalene, NDMA and RDX. Napthalene was detected in 28 percent of the equipment blanks, NDMA in 27 percent of the equipment blanks and RDX in 26 percent of the equipment blanks. Other analytes were detected in the equipment blanks with methylene chloride being detected in eight percent of the equipment blanks. All other analytes were detected in less than five percent of the equipment blank samples.

Further review of the equipment blanks is being conducted and all Phase 3 equipment blanks collected to-date are being evaluated to determine if these low level detections are consistent indicating a possible deficiency in decontamination procedures and/or source water impacts that need to be addressed and corrected. Associated sample results were qualified accordingly during the validation process regarding field blank contamination. No sample results were rejected due to detected concentrations in field blanks or laboratory blanks.

C.7.4 Representativeness, Comparability, and Sensitivity

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

C.7.4.1 Representativeness

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

Representativeness also can be monitored by reviewing field documentation and/or by performing field audits. For this report, a detailed review was performed on the COC forms, field data collection forms, laboratory sample confirmation logs, and data validation packages. Laboratory QA/QC requirements were included in the WP/FSAP (CDM 2011a) and laboratory statements of work (SOWs) to ensure that the laboratory analytical results were representative of true field conditions.

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

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

C.7.4.2 Comparability

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

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

C.7.4.3 Sensitivity

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

Detection Limits

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

The method detection limit (MDL) is defined as the concentration of an analyte that produces a signal with a 99 percent confidence that the concentration is above that of a blank but that that concentration cannot be accurately quantified. A blank is a sample that does not contain measurable concentrations of the analyte of concern. Tested by statistical performance, calibration samples, and LCSs, MDLs represent the best fundamental measurement of instrument sensitivity and the basis for establishing RLs.

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

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

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

The following analyses and individual analyte sample results were qualified as estimated "J" due to the sample results being reported as detected below the RL for Subarea 5D North samples:

- Method 1613B (Dioxins)
  - 3,919 individual analyte results
- Method 1625C (NDMA)
  - 37 individual analyte results
- Method 300 (Fluoride/Nitrate)
  - 72 individual analyte results
- Methods 6010B/6020 (Metals)
  - 1,692 individual analyte results
- Method 6850 (Perchlorate)
  - 9 individual analyte results
- Method 7199 (Hexavalent Chromium)
  - 312 individual analyte results
- Method 7471A (Mercury)
  - 182 individual analyte results

- Method 8015B (Alcohols and terphenyls)
  - 12 individual analyte results
- Method 8015M (TPHs and glycols)
  - 111 individual analyte results
- Method 8081A (Pesticides)
  - 260 individual analyte results
- Method 8082 (PCBs)
  - 195 individual analyte results
- Method 8151A (Herbicides)
  - 83 individual analyte results
- Method 8260B (VOCs)
  - 101 individual analyte results
- Method 8270C (SVOCs)
  - 417 individual analyte results
- Method 8270C SIM (SVOCs)
  - 1,127 individual analyte results
- Method 8315A (Formaldehyde)
  - 8 individual analyte results
- Method 8330A (Energetics)
  - 11 individual analyte results
- Method 9012B (Cyanide)
  - 2 individual analyte results

The following analyses and individual analyte sample results were qualified as estimated "J" due to the sample results being reported as detected below the RL for Subarea 5D South samples:

- Method 1613B (Dioxins)
  - 457 individual analyte results
- Method 300 (Fluoride/Nitrate)
  - 1 individual analyte results
- Methods 6010B/6020 (Metals)
  - 201 individual analyte results
- Method 6850 (Perchlorate)
  - 2 individual analyte results

- Method 7199 (Hexavalent Chromium)
  - 29 individual analyte results
- Method 7471A (Mercury)
  - 20 individual analyte results
- Method 8015M (TPHs and glycols)
  - 1 individual analyte results
- Method 8081A (Pesticides)
  - 50 individual analyte results
- Method 8082 (PCBs)
  - 46 individual analyte results
- Method 8151A (Herbicides)
  - 9 individual analyte results
- Method 8270C (SVOCs)
  - 19 individual analyte results
- Method 8270C SIM (SVOCs)
  - 214 individual analyte results

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

RLs for the modified methods identified in Table 2-3 of the Subarea 5D North and 5D South TM are evaluated through the analysis of RL-LCS and RL-MS samples created by LLI. The evaluation of these QC samples is ongoing throughout all subareas and recommendations regarding program-wide sample qualification based on the RL-LCS and RL-MS QC results have not been finalized. Qualification of individual sample results for Subareas 5D North and 5D South, based on the current RL-LCS and RL-MS QC sample results, was not performed.

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

C.8 Review of Selected Validation Reports

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

C.9 Data Completeness

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

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

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

Where:

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

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

Where:

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

The overall completeness goal, as defined in the WP/FSAP (CDM 2011a), for these sampling events was 90 percent for all project data.

A total of 523 Subarea 5D North and 63 Subarea 5D South soil samples including the field duplicates were collected and analyzed. As discussed in Section 2.7 of the TM, 201 locations were to be sampled in Subarea 5D North and 36 locations in Subarea 5D South. Some locations required only a subsurface sample while other locations required both a surface and subsurface sample. The number of subsurface samples to be collected at each location is not pre-determined because the total depth of each boring varies depending on the local geology. Hence, the completeness calculation defined in Equation A above is more accurately reflected by identifying whether all the locations were sampled at versus the actual number of samples collected since that is not pre-determined. Of all the locations indicated for collection in Subareas 5D North and 5D South, only two locations in Subarea 5D North was one location in

Subarea 5D South was not sampled due shallow refusal on sandstone or siltstone as noted in Table 2.1 and 2.2 and stated in Section 2.7. The remaining deviations from the proposed sample collection for Subareas 5D North and 5D South were due to shallow refusal on bedrock. For all of these locations, a surface sample was successfully collected.

As discussed in Section 2.7, the sampling deviations do not impact completeness objectives for this sampling event. Ninety-nine percent of the sample locations identified in the WP/FSAP Addendum were sampled meeting the completeness goal for the number of locations sampled versus number of locations planned to be sampled.

The completeness goal for acceptable data achieved was 99.82 percent of the number of measurements judged to be valid versus the total number of measurements made for all Subarea 5D North and 99.77 percent for Subarea 5D South samples analyzed. Tables C-8 and C-9, Completeness Calculation Summary, show a summary of the results that were estimated or rejected.

The following Subarea 5D North individual analyte results were rejected per analyses:

- Method 300
  - One out of 706 fluoride results (0.14 percent)
- Method 6020
  - One out of 7,952 antimony results (0.01 percent)
- Method 8015B
  - Three out of 1,254 alcohol/terphenyl individual analyte results (0.24 percent)
- Method 8015M
  - Three out of 1,798 TPH individual analyte results (0.17 percent)
- Method 8081A
  - Seventy-two out of 3,843 individual pesticide analyte results (1.87 percent)
- Method 8082
  - Ten out of 5,964 individual PCB/PCT analyte results (0.17 percent)
- Method 8151A
  - Fifty out of 1,830 individual herbicide analyte results (2.7 percent)
- Method 8270C
  - Eleven out of 24,315 individual SVOC analyte results (0.05 percent)
- Method 8330A
  - Thirty out of 4,248 individual energetic analyte results (0.71 percent)

The following Subarea 5D South individual analyte results were rejected per analyses:

- Method 8081A
  - One out of 672 individual pesticide analyte results (0.15 percent)
- Method 8151A
  - Sixteen out of 310 individual herbicide analyte results (5.16 percent)
- Method 8270C
  - Four out of 2,788 individual SVOC analyte results (0.14 percent)

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

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

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

Over 99 percent of the data validated and reported for Subarea 5D North and Subarea 5D South are suitable for their intended use for site characterization. Sample results that were rejected are not suitable for project use. The rejected analyte results do not impact achievement of the overall project objectives. The detection limits reported generally met the expected limits proposed by the analytical laboratory in their contract agreement with CDM.

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

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

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Table C-1 Sample Delivery Groups and Validation Levels for Subareas 5D North and 5D South

Sample Delivery Group	Level of Validation Performed	CDM Review
5D North		
DE151	Level III	
DE152	Level III	
DE153	Level III	
DE154	Level III	
DE155	Level III	
DE156	Level III	
DE157	Level III	
DE158	Level IV	Yes
DE159	Level III	
DE160	Level III	
DE161	Level III	
DE162	Level III	
DE163	Level III	
DE164	Level III	
DE166	Level III	
DE167	Level III	
DE168	Level III	Yes
DE169	Level III	
DE170	Level III	
DE171	Level III	
DE172	Level III	
DE173	Level IV	
DE174	Level III	
DE175	Level III	
DE176	Level IV	Yes
DE177	Level III	
DE178	Level III	
DE179	Level III	
DE180	Level III	
DE181	Level III	
DE182	Level III	
DE184	Level III	
DE185	Level III	
DE186	Level III	
DE187	Level III	Yes
DE188	Level III	
DE189	Level III	
DE190	Level III	
DE191	Level III	
DE192	Level III	
DE193	Level III	
DE194	Level III	
DE195	Level III	
DE196	Level III	
DE197	Level III	Yes
DE210	Level III	
DE211	Level III	
DE212	Level III	
DE213	Level III	
DE214	Level III	

Table C-1 Sample Delivery Groups and Validation Levels for Subareas 5D North and 5D South

Sample Delivery Group	Level of Validation Performed	CDM Review
5D North (cont.)		
DE215	Level III	
DE216	Level III	
DE218	Level III	
DE219	Level III	Yes
DE220	Level III	
DE221	Level III	
DE222	Level III	
DE229	Level III	
DX081	Level III	
DX082	Level III	
DX083	Level III	
DX084	Level III	Yes
DX085	Level III	
DX086	Level III	
DX087	Level III	
DX088	Level III	
DX089	Level III	
DX090	Level IV	
DX091	Level III	
DX093	Level III	
DX094	Level III	
DX095	Level III	
DX096	Level III	
DX097	Level IV	Yes
DX098	Level III	
DX099	Level III	
DX100	Level IV	
DX101	Level III	
DX102	Level III	
DX103	Level III	
DX104	Level III	
DX105	Level III	
DX106	Level III	
DX107	Level III	
DX108	Level III	Yes
DX109	Level III	
DX110	Level III	
DX120	Level III	
DX121	Level III	
DX123	Level III	
DX124	Level III	
DX125	Level III	
DX126	Level IV	Yes
DX127	Level III	
DX129	Level III	
Sample Delivery Group	**Level of Validation Performed**	**CDM Review**
5D South		
DE253	Level III	
DE256	Level III	Yes

Table C-1 Sample Delivery Groups and Validation Levels for Subareas 5D North and 5D South

Sample Delivery Group	Level of Validation Performed	CDM Review
DE257	Level III	
DE269	Level III	
DE270	Level III	
DE271	Level III	
DE272	Level IV	Yes
DE273	Level III	
DE282	Level III	
DE283	Level IV	
DE284	Level III	
DE285	Level III	
DE286	Level III	
DX142	Level III	
DX143	Level IV	Yes
DX144	Level III	
DX146	Level III	
DX149	Level III	
DX150	Level III	
DX151	Level III	
DX154	Level III	
DX155	Level III	

Note: Some SDGs contain samples from other subareas, but all samples in an SDG were validated together.

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB01-SA5DN-SS-051711		EB02-SA5DN-SS-051811		EB03-SA5DN-SB-051911		EB04-SA5DN-SS-051911		EB05-SA5DN-SS-052311		EB06-SA5DN-SS-052411		EB07-SA5DN-SS-052511	
	Location:	EB01-SA5DN		EB02-SA5DN		EB03-SA5DN		EB04-SA5DN		EB05-SA5DN		EB06-SA5DN		EB07-SA5DN	
	Sample Date:	05/17/2011		05/18/2011		05/19/2011		05/19/2011		05/23/2011		05/24/2011		05/25/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l					5	U								
1,1,1-Trichloroethane	ug/l					5	U								
1,1,2,2-Tetrachloroethane	ug/l					5	U								
1,1,2-Trichloroethane	ug/l					5	U								
1,1-Dichloroethane	ug/l					5	U								
1,1-Dichloroethene	ug/l					5	U								
1,1-Dichloropropene	ug/l					5	U								
1,2,3,4,6,7,8-HpCDD	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,4,6,7,8-HpCDF	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,4,7,8,9-HpCDF	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,4,7,8-HxCDD	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	0.241	J
1,2,3,4,7,8-HxCDF	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,6,7,8-HxCDD	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,6,7,8-HxCDF	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,7,8,9-HxCDD	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,7,8,9-HxCDF	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,7,8-PeCDD	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3,7,8-PeCDF	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
1,2,3-Trichlorobenzene	ug/l					5	U								
1,2,3-Trichloropropane	ug/l					5	U								
1,2,4-Trichlorobenzene	ug/l	5	U			5 5	U U	5	U	5	U	5	U	5	U
1,2,4-Trimethylbenzene	ug/l					5	U								
1,2-Dibromo-3-chloropropane	ug/l					5	U								
1,2-Dibromoethane	ug/l					5	U								
1,2-Dichlorobenzene	ug/l	5	U			5 5	U U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l					5	U								
1,2-Dichloropropane	ug/l					5	U								
1,2-Diphenylhydrazine	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
1,3,5-Trimethylbenzene	ug/l					5	U								
1,3,5-Trinitrobenzene	ug/l			0.6	U					0.6	R				
1,3-Dichlorobenzene	ug/l	5	U			5 5	U U	5	U	5	U	5	U	5	U
1,3-Dichloropropane	ug/l					5	U								
1,4-Dichlorobenzene	ug/l	5	U			5 5	U U	5	U	5	U	5	U	5	U
1,4-Dioxane	ug/l					2	U								
1-Methylnaphthalene	ug/l	0.032	J			0.033	J	0.032	J	0.034	J	0.019	J	0.028	J
2,2-Dichloropropane	ug/l					5	U								
2,2-Dichlor-Propionic Acid	ug/l	1.3	U					1.3	U	1.2	U	1.2	U	1.3	U
2,3,4,6,7,8-HxCDF	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
2,3,4,7,8-PeCDF	pg/l	10.5	U			10.2	U	10.2	U	9.78	U	10.1	U	10.5	U
2,3,7,8-TCDD	pg/l	2.09	U			2.03	U	2.04	U	1.19	J	2.01	U	0.234	J
2,3,7,8-TCDF	pg/l	2.09	U			2.03	U	2.04	U	1.96	U	2.01	U	2.09	U
2,4 DB	ug/l	1.1	U					1.1	U	0.98	U	0.99	U	1.1	U
2,4,5-T	ug/l	0.054	U					0.054	U	0.049	U	0.049	U	0.053	U
2,4,5-TP	ug/l	0.054	U					0.054	U	0.049	U	0.049	U	0.053	U
2,4,5-Trichlorophenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
2,4,6-Trinitrotoluene	ug/l			0.6	U					0.6	R				
2,4-D	ug/l	0.54	U					0.54	U	0.49	U	0.49	U	0.53	U
2,4-Diamino-6-nitrotoluene	ug/l			0.6	R					0.6	R				
2,4-Dichlorophenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	ug/l	10	U			10	U	10	U	10	U	10	U	11	U
2,4-Dinitrophenol	ug/l	30	U			31	U	31	U	29	U	29	U	32	U
2,4-Dinitrotoluene	ug/l	5	U	0.6	U	5	U	5	U	5 0.60	U R	5	U	5	U
2,6-Diamino-4-nitrotoluene	ug/l			0.6	R					0.6	R				

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB01-SA5DN-SS-051711		EB02-SA5DN-SS-051811		EB03-SA5DN-SB-051911		EB04-SA5DN-SS-051911		EB05-SA5DN-SS-052311		EB06-SA5DN-SS-052411		EB07-SA5DN-SS-052511	
	Location:	EB01-SA5DN		EB02-SA5DN		EB03-SA5DN		EB04-SA5DN		EB05-SA5DN		EB06-SA5DN		EB07-SA5DN	
	Sample Date:	05/17/2011		05/18/2011		05/19/2011		05/19/2011		05/23/2011		05/24/2011		05/25/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
2,6-Dinitrotoluene	ug/l	5	U	0.6	U	5	U	5	U	5 0.60	U R	5	U	5	U
2-Amino-4,6-Dinitrotoluene	ug/l			0.6	U					0.6	R				
2-Butanone	ug/l					10	U								
2-Chloroethyl Vinyl Ether	ug/l					10	U								
2-Chloronaphthalene	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
2-Chlorotoluene	ug/l					5	U								
2-Hexanone	ug/l					10	U								
2-Methylnaphthalene	ug/l	0.032	J			0.033	J	0.032	J	0.034	J	0.019	J	0.028	J
2-Methylphenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
2-Nitrotoluene	ug/l			0.6	U					0.6	R				
2-Propanol	ug/l			1000	U					1000	U				
3,3`-Dichlorobenzidine	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
3,5-Dimethylphenol	ug/l	10	U			10	U	10	U	10	U	10	U	11	U
3-Nitroaniline	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
3-Nitrotoluene	ug/l			1.2	U					1.2	R				
4,4'-DDD	ug/l	0.02	U					0.02	U	0.02	U	0.021	U	0.02	U
4,4'-DDE	ug/l	0.02	U					0.02	U	0.02	U	0.021	U	0.02	U
4,4'-DDT	ug/l	0.02	U					0.02	U	0.02	U	0.021	U	0.02	U
4,6-Dinitro-2-Methylphenol	ug/l	15	U			15	U	16	U	15	U	15	U	16	U
4-Amino-2,6-Dinitrotoluene	ug/l			0.6	U					0.6	R				
4-Bromophenyl Phenyl Ether	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
4-Chloro-3-Methylphenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
4-Chloroaniline	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
4-Chlorophenyl Phenylether	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
4-Chlorotoluene	ug/l					5	U								
4-Methyl-2-Pentanone	ug/l					10	U								
4-Methylphenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
4-Nitrophenol	ug/l	30	U			31	U	31	U	29	U	29	U	32	U
4-Nitrotoluene	ug/l			1.2	U					1.2	R				
Acenaphthene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Acenaphthylene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Acetone	ug/l					20	U								
Aldrin	ug/l	0.01	U					0.0098	U	0.0098	U	0.01	U	0.01	U
Alpha-BHC	ug/l	0.01	U					0.0098	U	0.0098	U	0.01	U	0.01	U
Aluminum	mg/l	0.2	U			0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Aniline	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
Anthracene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Antimony	mg/l	0.001	U			0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Aroclor 1016	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 1221	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 1232	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 1242	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 1248	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 1254	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 1260	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 1262	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 1268	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 5432	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 5442	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Aroclor 5460	ug/l	0.52	U			0.5	U	0.49	U	0.49	U	0.51	U	0.51	U
Arsenic	mg/l	0.002	U			0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Barium	mg/l	0.002	U			0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Benzene	ug/l					5	U								
Benzidine	ug/l	60	U			62	U	63	U	59	U	59	U	64	U
Benzo(a)anthracene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Benzo(a)pyrene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Benzo(b)fluoranthene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Benzo(g,h,i)perylene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Benzo(k)fluoranthene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Benzoic Acid	ug/l	15	UJ			15	UJ	16	UJ	15	UJ	15	UJ	16	UJ

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB01-SA5DN-SS-051711		EB02-SA5DN-SS-051811		EB03-SA5DN-SB-051911		EB04-SA5DN-SS-051911		EB05-SA5DN-SS-052311		EB06-SA5DN-SS-052411		EB07-SA5DN-SS-052511	
	Location:	EB01-SA5DN		EB02-SA5DN		EB03-SA5DN		EB04-SA5DN		EB05-SA5DN		EB06-SA5DN		EB07-SA5DN	
	Sample Date:	05/17/2011		05/18/2011		05/19/2011		05/19/2011		05/23/2011		05/24/2011		05/25/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Benzyl Alcohol	ug/l	15	U			15	U	16	U	15	U	15	U	16	U
Beryllium	mg/l	0.0005	U			0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Beta-BHC	ug/l	0.01	U					0.0098	U	0.0098	U	0.01	U	0.01	U
Bis(2-Chloroethoxy) methane	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
Bis(2-Chloroethyl) ether	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
bis(2-Chloroisopropyl) ether	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
Bis(2-Ethylhexyl) phthalate	ug/l	0.3	J			1.1	U	1.1	U	0.98	U	0.2	J	0.21	J
Boron	mg/l	0.05	U			0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Bromobenzene	ug/l					5	U								
Bromochloromethane	ug/l					5	U								
Bromodichloromethane	ug/l					5	U								
Bromoform	ug/l					5	U								
Bromomethane	ug/l					5	U								
Butylbenzylphthalate	ug/l	1	U			1.1	U	1.1	U	0.98	U	1	U	0.98	U
Cadmium	mg/l	0.0005	U			0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Calcium	mg/l	0.2	U			0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Carbazole	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l					5	U								
Chlordane	ug/l	0.51	U					0.49	U	0.49	U	0.51	U	0.51	U
Chlorobenzene	ug/l					5	U								
Chloroethane	ug/l					5	U								
Chloroform	ug/l					5	U								
Chloromethane	ug/l					5	U								
Chlorotrifluoroethene	ug/l					5	U								
Chromium	mg/l	0.002	U			0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Chromium VI	ug/l	10	U			10	UJ	10	U	10	U	10	U	10	UJ
Chrysene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
cis-1,2-Dichloroethene	ug/l					5	U								
cis-1,3-Dichloropropene	ug/l					5	U								
Cobalt	mg/l	0.0005	U			0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Copper	mg/l	0.002	U			0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Cyanide	mg/l			0.01	U					0.01	U				
Delta-BHC	ug/l	0.01	U					0.0098	U	0.0098	U	0.01	U	0.01	U
Dibenzo(a,h)anthracene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Dibenzofuran	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	ug/l					5	U								
Dibromomethane	ug/l					5	U								
Dicamba	ug/l	0.32	UJ					0.32	UJ	0.3	U	0.3	U	0.32	U
Dichlorodifluoromethane	ug/l					5	U								
Dichlorprop	ug/l	0.54	U					0.54	U	0.49	U	0.49	U	0.53	U
Dieldrin	ug/l	0.02	U					0.02	U	0.02	U	0.021	U	0.02	U
Diethylene Glycol	mg/l			100	U					100	U				
Diethylphthalate	ug/l	1	U			1.1	U	1.1	U	0.98	U	1	U	0.98	U
Dimethylphthalate	ug/l	1	U			1.1	U	1.1	U	0.98	U	1	U	0.98	U
Di-n-Butylphthalate	ug/l	0.17	J			1.1	U	1.1	U	0.98	U	1	U	0.063	J
Dinitrobutyl Phenol	ug/l	0.54	UJ					0.54	UJ	0.49	U	0.49	U	0.53	U
Di-N-Octyl Phthalate	ug/l	0.26	J			1.1	U	0.33	J	0.98	U	1	U	0.98	U
EFH (C12-C14)	mg/l			0.63	U					0.58	U				
EFH (C15-C20)	mg/l			0.63	U					0.58	U				
EFH (C21-C30)	mg/l			0.63	U					0.58	U				
EFH (C30-C40)	mg/l			0.63	U					0.58	U				
EFH (C8-C11)	mg/l			0.63	U					0.58	U				
Endosulfan I	ug/l	0.01	U					0.0098	U	0.0098	U	0.01	U	0.01	U
Endosulfan II	ug/l	0.02	U					0.02	U	0.02	U	0.021	U	0.02	U
Endosulfan Sulfate	ug/l	0.02	U					0.02	U	0.02	U	0.021	U	0.02	U
Endrin	ug/l	0.02	U					0.02	U	0.02	U	0.021	U	0.02	U
Endrin Aldehyde	ug/l	0.1	U					0.098	U	0.098	U	0.1	U	0.1	U
Endrin Ketone	ug/l	0.02	U					0.02	U	0.02	U	0.021	U	0.02	U
Ethanol	ug/l			1000	U					1000	U				
Ethylbenzene	ug/l					5	U								
Ethylene Glycol	mg/l			100	U					100	U				
Fluoranthene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Fluorene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Fluoride	mg/l	0.1	U			0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Formaldehyde	ug/l			50	U					50	UJ				
Freon 113	ug/l					10	U								

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB01-SA5DN-SS-051711		EB02-SA5DN-SS-051811		EB03-SA5DN-SB-051911		EB04-SA5DN-SS-051911		EB05-SA5DN-SS-052311		EB06-SA5DN-SS-052411		EB07-SA5DN-SS-052511	
	Location:	EB01-SA5DN		EB02-SA5DN		EB03-SA5DN		EB04-SA5DN		EB05-SA5DN		EB06-SA5DN		EB07-SA5DN	
	Sample Date:	05/17/2011		05/18/2011		05/19/2011		05/19/2011		05/23/2011		05/24/2011		05/25/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Freon 113a	ug/l					5	U								
Gamma-BHC (Lindane)	ug/l	0.01	U					0.0098	U	0.0098	U	0.01	U	0.01	U
GRO (C5-C12)	ug/l														
Heptachlor	ug/l	0.01	U					0.0098	U	0.0098	U	0.01	U	0.01	U
Heptachlor Epoxide	ug/l	0.01	U					0.0098	U	0.0098	U	0.01	U	0.01	U
Hexachlorobenzene	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	ug/l	5	U			5 5	U U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	ug/l	15	U			15	U	16	U	15	U	15	U	16	U
Hexachloroethane	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
HMX	ug/l			2	U					2	R				
Indeno(1,2,3-Cd)Pyrene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Iron	mg/l	0.2	U			0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Isophorone	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	ug/l					5	U								
Isopropyltoluene	ug/l					5	U								
Lead	mg/l	0.001	U			0.001	U	0.000056	J	0.001	U	0.001	U	0.001	U
Lithium	mg/l	0.02	U			0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
m,p-Xylene	ug/l					5	U								
Magnesium	mg/l	0.1	U			0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Manganese	mg/l	0.005	U			0.005	U	0.005	U	0.005	U	0.005	U	0.001	J
MCPA	ug/l	1100	U					1100	U	980	U	990	U	1100	U
MCPP	ug/l	210	U					210	U	200	U	200	U	210	U
m-Dinitrobenzene	ug/l			0.6	U					0.6	R				
Mercury	mg/l	0.0002	U			0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	UJ
Methanol	ug/l			1000	U					1000	U				
Methoxychlor	ug/l	0.1	U					0.098	U	0.098	U	0.1	U	0.1	U
Methyl tert-Butyl Ether	ug/l					5	U								
Methylene chloride	ug/l					3	J								
Mirex	ug/l	0.25	U					0.24	U	0.24	U	0.26	U	0.25	U
Molybdenum	mg/l	0.0005	U			0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
m-Terphenyl	mg/l			0.26	U					0.24	UJ				
Naphthalene	ug/l	0.2				0.28		0.21		0.23		0.13		0.16	
N-Butylbenzene	ug/l					5	U								
Nickel	mg/l	0.002	U			0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Nitrate	mg/l			0.1	U					0.1	U				
Nitrobenzene	ug/l	5	U	0.6	U	5	U	5	U	5 0.60	U R	5	U	5	U
Nitroglycerin	ug/l			15	U					15	R				
N-Nitrosodimethylamine	ng/l			2.25						2.07					
N-Nitrosodimethylamine	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
N-Nitroso-Di-N-Propylamine	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
N-Nitrosodiphenylamine	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
N-Propylbenzene	ug/l					5	U								
OCDD	pg/l	20.9	U			20.3	U	20.4	U	19.6	U	20.1	U	20.9	U
OCDF	pg/l	20.9	U			20.3	U	20.4	U	19.6	U	20.1	U	20.9	U
o-Terphenyl	mg/l			0.26	U					0.24	UJ				
o-Xylene	ug/l					5	U								
Pentachlorophenol	ug/l	15	U			15	U	16	U	15	U	15	U	16	U
Perchlorate	ug/l	2	U			2	U	2	U	2	U	2	U	2	U
PETN	ug/l			18	U					18	R				
Phenanthrene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
Phenol	ug/l	5	U			5	U	5	U	5	U	5	U	5	U
Phosphorus	mg/l	0.1	U			0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Potassium	mg/l	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Propylene glycol	mg/l			100	U					100	U				
p-Terphenyl	mg/l			0.26	U					0.24	UJ				
Pyrene	ug/l	0.051	U			0.053	U	0.054	U	0.049	U	0.052	U	0.049	U
RDX	ug/l			0.6	U					0.6	R				
sec-Butylbenzene	ug/l					5	U								
Selenium	mg/l	0.002	U			0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Silver	mg/l	0.0005	U			0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Sodium	mg/l	1	U			1	U	1	U	1	U	1	U	1	U
Strontium	mg/l	0.005	U			0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB01-SA5DN-SS-051711		EB02-SA5DN-SS-051811		EB03-SA5DN-SB-051911		EB04-SA5DN-SS-051911		EB05-SA5DN-SS-052311		EB06-SA5DN-SS-052411		EB07-SA5DN-SS-052511	
	Location:	EB01-SA5DN		EB02-SA5DN		EB03-SA5DN		EB04-SA5DN		EB05-SA5DN		EB06-SA5DN		EB07-SA5DN	
	Sample Date:	05/17/2011		05/18/2011		05/19/2011		05/19/2011		05/23/2011		05/24/2011		05/25/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Styrene	ug/l					5	U								
tert-Butylbenzene	ug/l					5	U								
Tetrachloroethene	ug/l					5	U								
Tetryl	ug/l			0.6	U					0.6	R				
Thallium	mg/l	0.0005	U			0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Tin	mg/l	0.02	U			0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Titanium	mg/l	0.01	U			0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Toluene	ug/l					5	U								
Toxaphene	ug/l	3	U					2.9	U	2.9	U	3.1	U	3	U
trans-1,2-Dichloroethene	ug/l					5	U								
trans-1,3-Dichloropropene	ug/l					5	U								
Trichloroethene	ug/l					5	U								
Trichlorofluoromethane	ug/l					5	U								
Vanadium	mg/l	0.0005	U			0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Vinyl Chloride	ug/l					5	U								
Zinc	mg/l	0.015	U			0.015	U	0.0213		0.015	U	0.015	U	0.015	U
Zirconium	mg/l	0.05	U			0.05	U	0.05	U	0.05	U	0.05	U	0.05	U

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

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

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB08-SA5DN-SB-052511		EB09-SA5DN-SS-052611		EB10-SA5DN-SS-053111		EB11-SA5DN-SB-053111		EB12-SA5DN-SS-060211		EB13-SA5DN-SS-060311		EB14-SA5DN-SB-060311	
	Location:	EB08-SA5DN		EB09-SA5DN		EB10-SA5DN		EB11-SA5DN		EB12-SA5DN		EB13-SA5DN		EB14-SA5DN	
	Sample Date:	05/25/2011		05/26/2011		05/31/2011		05/31/2011		06/02/2011		06/03/2011		06/03/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l	5	U					5	U						
1,1,1-Trichloroethane	ug/l	5	U					5	U						
1,1,2,2-Tetrachloroethane	ug/l	5	U					5	U						
1,1,2-Trichloroethane	ug/l	5	U					5	U						
1,1-Dichloroethane	ug/l	5	U					5	U						
1,1-Dichloroethene	ug/l	5	U					5	U						
1,1-Dichloropropene	ug/l	5	U					5	U						
1,2,3,4,6,7,8-HpCDD	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,4,6,7,8-HpCDF	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,4,7,8,9-HpCDF	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,4,7,8-HxCDD	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,4,7,8-HxCDF	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,6,7,8-HxCDD	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,6,7,8-HxCDF	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,7,8,9-HxCDD	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,7,8,9-HxCDF	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,7,8-PeCDD	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3,7,8-PeCDF	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
1,2,3-Trichlorobenzene	ug/l	5	U					5	U						
1,2,3-Trichloropropane	ug/l	5	U					5	U						
1,2,4-Trichlorobenzene	ug/l	5	U	5	U	5	U	5 5	U U	5	U	5	U	5	U
1,2,4-Trimethylbenzene	ug/l	5	U					5	U						
1,2-Dibromo-3-chloropropane	ug/l	5	U					5	U						
1,2-Dibromoethane	ug/l	5	U					5	U						
1,2-Dichlorobenzene	ug/l	5	U	5	U	5	U	5 5	U U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l	5	U					5	U						
1,2-Dichloropropane	ug/l	5	U					5	U						
1,2-Diphenylhydrazine	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-Trimethylbenzene	ug/l	5	U					5	U						
1,3,5-Trinitrobenzene	ug/l			0.6	U	0.6	U			0.6	U				
1,3-Dichlorobenzene	ug/l	5	U	5	U	5	U	5 5	U U	5	U	5	U	5	U
1,3-Dichloropropane	ug/l	5	U					5	U						
1,4-Dichlorobenzene	ug/l	5	U	5	U	5	U	5 5	U U	5	U	5	U	5	U
1,4-Dioxane	ug/l	2	U					2	U						
1-Methylnaphthalene	ug/l			0.032	J	0.028	J	0.023	J	0.029	J	0.026	J	0.028	J
2,2-Dichloropropane	ug/l	5	U					5	U						
2,2-Dichlor-Propionic Acid	ug/l			1.3	U	1.4	U	1.3	U	1.3	U	1.4	U		
2,3,4,6,7,8-HxCDF	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
2,3,4,7,8-PeCDF	pg/l	10.9	U	10.8	U	10.8	U	10.3	U	10.6	U	10.6	U	10.4	U
2,3,7,8-TCDD	pg/l	2.18	U	2.15	U	2.17	U	2.07	U	2.11	U	2.12	U	2.08	U
2,3,7,8-TCDF	pg/l	2.18	U	2.15	U	2.17	U	2.07	U	2.11	U	2.12	U	2.08	U
2,4 DB	ug/l			1	U	1.1	U	1	U	1	U	1.1	U		
2,4,5-T	ug/l			0.051	U	0.054	U	0.051	U	0.051	U	0.056	U		
2,4,5-TP	ug/l			0.051	U	0.054	U	0.051	U	0.051	U	0.056	U		
2,4,5-Trichlorophenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
2,4,6-Trinitrotoluene	ug/l			0.6	U	0.6	U			0.6	U				
2,4-D	ug/l			0.51	U	0.54	U	0.51	U	0.51	U	0.56	U		
2,4-Diamino-6-nitrotoluene	ug/l			0.6	U	0.6	U			0.6	U				
2,4-Dichlorophenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
2,4-Dimethylphenol	ug/l			10	U	11	U	11	U	10	U	11	U	11	U
2,4-Dinitrophenol	ug/l			31	U	32	U	32	U	31	U	32	U	33	U
2,4-Dinitrotoluene	ug/l			5 0.60	U U	5 0.60	U U	5	U	5 0.60	U U	5	U	5	U
2,6-Diamino-4-nitrotoluene	ug/l			0.6	U	0.6	U			0.6	U				

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

Sample Name:		EB08-SA5DN-SB-052511		EB09-SA5DN-SS-052611		EB10-SA5DN-SS-053111		EB11-SA5DN-SB-053111		EB12-SA5DN-SS-060211		EB13-SA5DN-SS-060311		EB14-SA5DN-SB-060311	
Location:		EB08-SA5DN		EB09-SA5DN		EB10-SA5DN		EB11-SA5DN		EB12-SA5DN		EB13-SA5DN		EB14-SA5DN	
Sample Date:		05/25/2011		05/26/2011		05/31/2011		05/31/2011		06/02/2011		06/03/2011		06/03/2011	
Sample Type		EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
2,6-Dinitrotoluene	ug/l			5 0.60	U U	5 0.60	U U	5	U	5 0.60	U U	5	U	5	U
2-Amino-4,6-Dinitrotoluene	ug/l			0.6	U	0.6	U			0.6	U				
2-Butanone	ug/l	10	U					10	U						
2-Chloroethyl Vinyl Ether	ug/l	10	U					10	U						
2-Chloronaphthalene	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
2-Chlorophenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
2-Chlorotoluene	ug/l	5	U					5	U						
2-Hexanone	ug/l	10	U					10	U						
2-Methylnaphthalene	ug/l			0.032	J	0.03	J	0.024	J	0.029	J	0.026	J	0.026	J
2-Methylphenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
2-Nitrophenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
2-Nitrotoluene	ug/l			0.6	U	0.6	U			0.6	U				
2-Propanol	ug/l			1000	U	1000	U			1000	U				
3,3`-Dichlorobenzidine	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
3,5-Dimethylphenol	ug/l			10	U	11	U	11	U	10	U	11	U	11	U
3-Nitroaniline	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
3-Nitrotoluene	ug/l			1.2	U	1.2	U			1.2	U				
4,4'-DDD	ug/l			0.02	U	0.02	U	0.021	U	0.021	U	0.021	UJ		
4,4'-DDE	ug/l			0.02	U	0.02	U	0.021	U	0.021	U	0.021	UJ		
4,4'-DDT	ug/l			0.02	U	0.02	U	0.021	U	0.021	U	0.021	UJ		
4,6-Dinitro-2-Methylphenol	ug/l			15	U	16	U	16	U	16	U	16	U	16	U
4-Amino-2,6-Dinitrotoluene	ug/l			0.6	U	0.6	U			0.6	U				
4-Bromophenyl Phenyl Ether	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
4-Chloro-3-Methylphenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
4-Chloroaniline	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
4-Chlorophenyl Phenylether	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
4-Chlorotoluene	ug/l	5	U					5	U						
4-Methyl-2-Pentanone	ug/l	10	U					10	U						
4-Methylphenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
4-Nitrophenol	ug/l			31	U	32	U	32	U	31	U	32	U	33	U
4-Nitrotoluene	ug/l			1.2	U	1.2	U			1.2	U				
Acenaphthene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Acenaphthylene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Acetone	ug/l	20	U					20	U						
Aldrin	ug/l			0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Alpha-BHC	ug/l			0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Aluminum	mg/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Aniline	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
Anthracene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Antimony	mg/l	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Aroclor 1016	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	UJ	0.51	UJ
Aroclor 1221	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	UJ	0.51	UJ
Aroclor 1232	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	UJ	0.51	UJ
Aroclor 1242	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	UJ	0.51	UJ
Aroclor 1248	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	U	0.51	U
Aroclor 1254	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	U	0.51	U
Aroclor 1260	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	U	0.51	U
Aroclor 1262	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	U	0.51	U
Aroclor 1268	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	U	0.51	U
Aroclor 5432	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	U	0.51	U
Aroclor 5442	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	U	0.51	U
Aroclor 5460	ug/l	0.53	U	0.48	U	0.5	U	0.52	U	0.52	U	0.52	UJ	0.51	UJ
Arsenic	mg/l	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Barium	mg/l	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Benzene	ug/l	5	U					0.9	J						
Benzidine	ug/l			62	U	63	U	63	U	62	U	63	U	66	U
Benzo(a)anthracene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Benzo(a)pyrene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Benzo(b)fluoranthene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Benzo(g,h,i)perylene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Benzo(k)fluoranthene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Benzoic Acid	ug/l			15	UJ	16	U	16	U	16	U	16	U	16	U

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB08-SA5DN-SB-052511		EB09-SA5DN-SS-052611		EB10-SA5DN-SS-053111		EB11-SA5DN-SB-053111		EB12-SA5DN-SS-060211		EB13-SA5DN-SS-060311		EB14-SA5DN-SB-060311	
	Location:	EB08-SA5DN		EB09-SA5DN		EB10-SA5DN		EB11-SA5DN		EB12-SA5DN		EB13-SA5DN		EB14-SA5DN	
	Sample Date:	05/25/2011		05/26/2011		05/31/2011		05/31/2011		06/02/2011		06/03/2011		06/03/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Benzyl Alcohol	ug/l			15	U	16	U	16	U	16	U	16	U	16	U
Beryllium	mg/l	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Beta-BHC	ug/l			0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Bis(2-Chloroethoxy) methane	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
Bis(2-Chloroethyl) ether	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
bis(2-Chloroisopropyl) ether	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
Bis(2-Ethylhexyl) phthalate	ug/l			0.98	U	1.1	U	0.082	J	0.22	J	0.055	J	0.057	J
Boron	mg/l	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Bromobenzene	ug/l	5	U					5	U						
Bromochloromethane	ug/l	5	U					5	U						
Bromodichloromethane	ug/l	5	U					5	U						
Bromoform	ug/l	5	U					5	U						
Bromomethane	ug/l	5	U					5	U						
Butylbenzylphthalate	ug/l			0.98	U	1.1	U	1.1	U	1	U	1.1	U	1	U
Cadmium	mg/l	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Calcium	mg/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Carbazole	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l	5	U					5	U						
Chlordane	ug/l			0.5	U	0.5	U	0.52	U	0.52	U	0.52	U		
Chlorobenzene	ug/l	5	U					5	U						
Chloroethane	ug/l	5	U					5	U						
Chloroform	ug/l	5	U					5	U						
Chloromethane	ug/l	5	U					5	U						
Chlorotrifluoroethene	ug/l	5	U					5	U						
Chromium	mg/l	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Chromium VI	ug/l	10	UJ	10	U	10	U	10	U	10	U	10	U	10	U
Chrysene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
cis-1,2-Dichloroethene	ug/l	5	U					5	U						
cis-1,3-Dichloropropene	ug/l	5	U					5	U						
Cobalt	mg/l	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Copper	mg/l	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Cyanide	mg/l			0.01	U	0.01	U			0.01	U				
Delta-BHC	ug/l			0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Dibenzo(a,h)anthracene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Dibenzofuran	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	ug/l	5	U					5	U						
Dibromomethane	ug/l	5	U					5	U						
Dicamba	ug/l			0.31	U	0.33	U	0.31	U	0.31	U	0.34	U		
Dichlorodifluoromethane	ug/l	5	U					5	U						
Dichlorprop	ug/l			0.51	U	0.54	U	0.51	U	0.51	U	0.56	U		
Dieldrin	ug/l			0.02	U	0.02	U	0.021	U	0.021	U	0.021	U		
Diethylene Glycol	mg/l			100	U	100	U			100	U				
Diethylphthalate	ug/l			0.98	U	1.1	U	1.1	U	1	U	1.1	U	1	U
Dimethylphthalate	ug/l			0.98	U	1.1	UJ	1.1	UJ	1	U	1.1	U	1	U
Di-n-Butylphthalate	ug/l			0.065	J	0.062	J	0.07	J	0.082	J	0.065	J	0.067	J
Dinitrobutyl Phenol	ug/l			0.51	U	0.54	U	0.51	U	0.51	U	0.56	U		
Di-N-Octyl Phthalate	ug/l			0.98	U	1.1	U	1.1	U	1	UJ	1.1	UJ	1	UJ
EFH (C12-C14)	mg/l			1.3	UJ	0.57	UJ			0.63	U				
EFH (C15-C20)	mg/l			1.3	UJ	0.57	UJ			0.63	U				
EFH (C21-C30)	mg/l			1.3	UJ	0.57	UJ			0.63	U				
EFH (C30-C40)	mg/l			1.3	UJ	0.57	UJ			0.63	U				
EFH (C8-C11)	mg/l			1.3	UJ	0.57	UJ			0.63	U				
Endosulfan I	ug/l			0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Endosulfan II	ug/l			0.02	U	0.02	U	0.021	U	0.021	U	0.021	UJ		
Endosulfan Sulfate	ug/l			0.02	U	0.02	U	0.021	U	0.021	U	0.021	UJ		
Endrin	ug/l			0.02	U	0.02	U	0.021	U	0.021	U	0.021	UJ		
Endrin Aldehyde	ug/l			0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ		
Endrin Ketone	ug/l			0.02	U	0.02	U	0.021	U	0.021	U	0.021	U		
Ethanol	ug/l			1000	U	1000	U			1000	U				
Ethylbenzene	ug/l	5	U					5	U						
Ethylene Glycol	mg/l			100	U	100	U			100	U				
Fluoranthene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Fluorene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Fluoride	mg/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Formaldehyde	ug/l			50	U	50	U			50	U				
Freon 113	ug/l	10	U					10	U						

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB08-SA5DN-SB-052511		EB09-SA5DN-SS-052611		EB10-SA5DN-SS-053111		EB11-SA5DN-SB-053111		EB12-SA5DN-SS-060211		EB13-SA5DN-SS-060311		EB14-SA5DN-SB-060311	
	Location:	EB08-SA5DN		EB09-SA5DN		EB10-SA5DN		EB11-SA5DN		EB12-SA5DN		EB13-SA5DN		EB14-SA5DN	
	Sample Date:	05/25/2011		05/26/2011		05/31/2011		05/31/2011		06/02/2011		06/03/2011		06/03/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Freon 113a	ug/l	5	U					5	U						
Gamma-BHC (Lindane)	ug/l			0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
GRO (C5-C12)	ug/l														
Heptachlor	ug/l			0.0088	J	0.0088	J	0.0084	J	0.0099	J	0.0086	J		
Heptachlor Epoxide	ug/l			0.01	U	0.01	U	0.01	U	0.01	U	0.01	U		
Hexachlorobenzene	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
Hexachlorobutadiene	ug/l	5	U	5	U	5	U	5 5	U U	5	U	5	U	5	U
Hexachlorocyclopentadiene	ug/l			15	U	16	U	16	U	16	U	16	U	16	U
Hexachloroethane	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
HMX	ug/l			2	U	2	U			2	U				
Indeno(1,2,3-Cd)Pyrene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Iron	mg/l	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Isophorone	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	ug/l	5	U					5	U						
Isopropyltoluene	ug/l	5	U					5	U						
Lead	mg/l	0.001	U	0.001	U	0.001	U	0.000062	J	0.000074	J	0.000062	J	0.000064	J
Lithium	mg/l	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
m,p-Xylene	ug/l	5	U					5	U						
Magnesium	mg/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Manganese	mg/l	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
MCPA	ug/l			1000	U	1100	U	1000	U	1000	U	1100	U		
MCPP	ug/l			200	U	220	U	210	U	210	U	220	U		
m-Dinitrobenzene	ug/l			0.6	U	0.6	U			0.6	U				
Mercury	mg/l	0.0002	UJ	0.0002	UJ	0.0002	UJ	0.0002	UJ	0.0002	U	0.0002	U	0.0002	U
Methanol	ug/l			1000	U	1000	U			1000	U				
Methoxychlor	ug/l			0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ		
Methyl tert-Butyl Ether	ug/l	5	U					5	U						
Methylene chloride	ug/l	2	J					5	U						
Mirex	ug/l			0.25	U	0.25	U	0.26	U	0.26	U	0.26	U		
Molybdenum	mg/l	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
m-Terphenyl	mg/l			0.26	U	0.26	UJ			0.27	U				
Naphthalene	ug/l			0.22		0.15		0.14		0.17		0.16		0.15	
N-Butylbenzene	ug/l	5	U					5	U						
Nickel	mg/l	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Nitrate	mg/l			0.1	U	0.1	U			0.1	U				
Nitrobenzene	ug/l			5 0.60	U U	5 0.60	U U	5	U	5 0.60	U U	5	U	5	U
Nitroglycerin	ug/l			15	U	15	U			15	U				
N-Nitrosodimethylamine	ng/l			0.99	U	1.06	UJ			2.13	U				
N-Nitrosodimethylamine	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
N-Nitroso-Di-N-Propylamine	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
N-Nitrosodiphenylamine	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
N-Propylbenzene	ug/l	5	U					5	U						
OCDD	pg/l	21.8	U	21.5	U	21.7	U	20.7	U	21.1	U	21.2	U	20.8	U
OCDF	pg/l	21.8	U	21.5	U	21.7	U	20.7	U	21.1	U	21.2	U	20.8	U
o-Terphenyl	mg/l			0.26	U	0.26	U			0.27	U				
o-Xylene	ug/l	5	U					5	U						
Pentachlorophenol	ug/l			15	U	16	U	16	U	16	U	16	U	16	U
Perchlorate	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
PETN	ug/l			18	U	18	U			18	U				
Phenanthrene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
Phenol	ug/l			5	U	5	U	5	U	5	U	5	U	5	U
Phosphorus	mg/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Potassium	mg/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Propylene glycol	mg/l			100	U	100	U			100	U				
p-Terphenyl	mg/l			0.26	U	0.26	U			0.27	U				
Pyrene	ug/l			0.049	U	0.054	U	0.053	U	0.052	U	0.053	U	0.051	U
RDX	ug/l			0.58	J	0.6	U			0.6	U				
sec-Butylbenzene	ug/l	5	U					5	U						
Selenium	mg/l	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Silver	mg/l	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Sodium	mg/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Strontium	mg/l	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB08-SA5DN-SB-052511		EB09-SA5DN-SS-052611		EB10-SA5DN-SS-053111		EB11-SA5DN-SB-053111		EB12-SA5DN-SS-060211		EB13-SA5DN-SS-060311		EB14-SA5DN-SB-060311	
	Location:	EB08-SA5DN		EB09-SA5DN		EB10-SA5DN		EB11-SA5DN		EB12-SA5DN		EB13-SA5DN		EB14-SA5DN	
	Sample Date:	05/25/2011		05/26/2011		05/31/2011		05/31/2011		06/02/2011		06/03/2011		06/03/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Styrene	ug/l	5	U					5	U						
tert-Butylbenzene	ug/l	5	U					5	U						
Tetrachloroethene	ug/l	5	U					5	U						
Tetryl	ug/l			0.6	U	0.6	U			0.6	U				
Thallium	mg/l	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Tin	mg/l	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Titanium	mg/l	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Toluene	ug/l	5	U					5	U						
Toxaphene	ug/l			3	U	3	U	3.1	U	3.1	U	3.1	U		
trans-1,2-Dichloroethene	ug/l	5	U					5	U						
trans-1,3-Dichloropropene	ug/l	5	U					5	U						
Trichloroethene	ug/l	5	U					5	U						
Trichlorofluoromethane	ug/l	5	U					5	U						
Vanadium	mg/l	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Vinyl Chloride	ug/l	5	U					5	U						
Zinc	mg/l	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
Zirconium	mg/l	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U

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

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

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

Sample Name:		EB15-SA5DN-SB-060711		EB16-SA5DN-SB-060911		EB17-SA5DN-SB-061411		EB18-SA5DN-SB-061511		EB19-SA5DN-SB-062211		EB20-SA5DN-SB-062911		EB21-SA5DN-SB-070711	
Location:		EB15-SA5DN		EB16-SA5DN		EB17-SA5DN		EB18-SA5DN		EB19-SA5DN		EB20-SA5DN		EB21-SA5DN	
Sample Date:		06/07/2011		06/09/2011		06/14/2011		06/15/2011		06/22/2011		06/29/2011		07/07/2011	
Sample Type		EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l					5	U	5	U	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/l					5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l					5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/l					5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethane	ug/l					5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/l					5	U	5	U	5	U	5	U	5	U
1,1-Dichloropropene	ug/l					5	U	5	U	5	U	5	U	5	U
1,2,3,4,6,7,8-HpCDD	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,4,6,7,8-HpCDF	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,4,7,8,9-HpCDF	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,4,7,8-HxCDD	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,4,7,8-HxCDF	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,6,7,8-HxCDD	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,6,7,8-HxCDF	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,7,8,9-HxCDD	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,7,8,9-HxCDF	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,7,8-PeCDD	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3,7,8-PeCDF	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
1,2,3-Trichlorobenzene	ug/l					5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	ug/l					5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	ug/l					5 5	U U	5 10	U U	5 5	U U	5 5	U U	5 5	U U
1,2,4-Trimethylbenzene	ug/l					5	U	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	ug/l					5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	ug/l					5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	ug/l					5 5	U U	5 10	U U	5 5	U U	5 5	U U	5 5	U U
1,2-Dichloroethane	ug/l					5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/l					5	U	5	U	5	U	5	U	5	U
1,2-Diphenylhydrazine	ug/l					5	U	10	U	5	U	5	U	5	U
1,3,5-Trimethylbenzene	ug/l					5	U	5	U	5	U	5	U	5	U
1,3,5-Trinitrobenzene	ug/l	0.6	U	0.6	U			0.6	UJ	0.6	U	0.6	UJ		
1,3-Dichlorobenzene	ug/l					5 5	U U	5 10	U U	5 5	U U	5 5	U U	5 5	U U
1,3-Dichloropropane	ug/l					5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	ug/l					5 5	U U	5 10	U U	5 5	U U	5 5	U U	5 5	U U
1,4-Dioxane	ug/l					2	U	2	U	2	U	2	U	2	U
1-Methylnaphthalene	ug/l					0.014	J	0.013	J	0.012	J	0.099	U	0.051	U
2,2-Dichloropropane	ug/l					5	U	5	U	5	U	5	U	5	U
2,2-Dichlor-Propionic Acid	ug/l														
2,3,4,6,7,8-HxCDF	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
2,3,4,7,8-PeCDF	pg/l					10.3	U	10.1	U	10.2	U	10.2	U	10.2	U
2,3,7,8-TCDD	pg/l					2.05	U	2.02	U	2.04	U	2.04	U	2.04	U
2,3,7,8-TCDF	pg/l					0.212	J	0.436	J	2.04	U	2.04	U	2.04	U
2,4 DB	ug/l														
2,4,5-T	ug/l														
2,4,5-TP	ug/l														
2,4,5-Trichlorophenol	ug/l					5	U	10	U	5	U	5	U	5	U
2,4,6-Trichlorophenol	ug/l					5	U	10	U	5	U	5	U	5	U
2,4,6-Trinitrotoluene	ug/l	0.6	U	0.6	U			0.6	U	0.6	U	0.6	U		
2,4-D	ug/l														
2,4-Diamino-6-nitrotoluene	ug/l	0.6	U	0.6	U			0.6	U	0.6	U	0.6	U		
2,4-Dichlorophenol	ug/l					5	U	10	U	5	U	5	U	5	U
2,4-Dimethylphenol	ug/l					10	U	20	U	10	U	10	U	10	U
2,4-Dinitrophenol	ug/l					30	U	60	U	30	U	31	U	29	U
2,4-Dinitrotoluene	ug/l	0.6	U	0.6	U	5	U	10 0.60	U U	5 0.60	U U	5 0.60	U U	5	U
2,6-Diamino-4-nitrotoluene	ug/l	0.6	U	0.6	U			0.6	U	0.6	U	0.6	U		

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB15-SA5DN-SB-060711		EB16-SA5DN-SB-060911		EB17-SA5DN-SB-061411		EB18-SA5DN-SB-061511		EB19-SA5DN-SB-062211		EB20-SA5DN-SB-062911		EB21-SA5DN-SB-070711	
	Location:	EB15-SA5DN		EB16-SA5DN		EB17-SA5DN		EB18-SA5DN		EB19-SA5DN		EB20-SA5DN		EB21-SA5DN	
	Sample Date:	06/07/2011		06/09/2011		06/14/2011		06/15/2011		06/22/2011		06/29/2011		07/07/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
2,6-Dinitrotoluene	ug/l	0.6	U	0.6	U	5	U	10 0.60	U U	5 0.60	U U	5 0.60	U U	5	U
2-Amino-4,6-Dinitrotoluene	ug/l	0.6	U	0.6	U			0.6	U	0.6	U	0.6	U		
2-Butanone	ug/l					10	U	10	U	10	U	10	U	10	U
2-Chloroethyl Vinyl Ether	ug/l					10	U	10	U	10	U	10	U	10	U
2-Chloronaphthalene	ug/l					5	U	10	U	5	U	5	U	5	U
2-Chlorophenol	ug/l					5	U	10	U	5	U	5	U	5	U
2-Chlorotoluene	ug/l					5	U	5	U	5	U	5	U	5	U
2-Hexanone	ug/l					10	U	10	U	10	U	10	U	10	U
2-Methylnaphthalene	ug/l					0.015	J	0.014	J	0.012	J	0.021	J	0.051	U
2-Methylphenol	ug/l					5	U	10	U	5	U	5	U	5	U
2-Nitroaniline	ug/l					5	U	10	U	5	U	5	U	5	U
2-Nitrophenol	ug/l					5	U	10	U	5	U	5	U	5	U
2-Nitrotoluene	ug/l	0.6	U	0.6	U			0.6	U	0.6	U	0.6	U		
2-Propanol	ug/l	1000	U	1000	U			1000	U	1000	U	1000	U		
3,3`-Dichlorobenzidine	ug/l					5	U	10	U	5	UJ	5	U	5	UJ
3,5-Dimethylphenol	ug/l					10	U	20	U	10	U	10	U	10	U
3-Nitroaniline	ug/l					5	U	10	U	5	U	5	U	5	U
3-Nitrotoluene	ug/l	1.2	U	1.2	U			1.2	U	1.2	U	1.2	U		
4,4'-DDD	ug/l														
4,4'-DDE	ug/l														
4,4'-DDT	ug/l														
4,6-Dinitro-2-Methylphenol	ug/l					15	U	30	U	15	U	15	U	15	U
4-Amino-2,6-Dinitrotoluene	ug/l	0.6	U	0.6	U			0.6	U	0.6	U	0.6	U		
4-Bromophenyl Phenyl Ether	ug/l					5	U	10	U	5	U	5	U	5	U
4-Chloro-3-Methylphenol	ug/l					5	U	10	U	5	U	5	U	5	U
4-Chloroaniline	ug/l					5	U	10	U	5	UJ	5	U	5	U
4-Chlorophenyl Phenylether	ug/l					5	U	10	U	5	U	5	U	5	U
4-Chlorotoluene	ug/l					5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	ug/l					10	U	10	U	10	U	10	U	10	U
4-Methylphenol	ug/l					5	U	10	U	5	U	5	U	5	U
4-Nitroaniline	ug/l					5	U	10	U	5	U	5	U	5	U
4-Nitrophenol	ug/l					30	U	60	U	30	U	31	U	29	U
4-Nitrotoluene	ug/l	1.2	U	1.2	U			1.2	U	1.2	U	1.2	U		
Acenaphthene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Acenaphthylene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Acetone	ug/l					20	U	20	U	20	U	20	U	20	U
Aldrin	ug/l														
Alpha-BHC	ug/l														
Aluminum	mg/l					0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Aniline	ug/l					5	U	10	U	5	UJ	5	U	5	U
Anthracene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Antimony	mg/l					0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Aroclor 1016	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 1221	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 1232	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 1242	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 1248	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 1254	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 1260	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 1262	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 1268	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 5432	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 5442	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Aroclor 5460	ug/l					0.49	U	0.5	U	0.49	U	0.48	U	0.49	U
Arsenic	mg/l					0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Barium	mg/l					0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Benzene	ug/l					5	U	5	U	5	U	5	U	5	U
Benzidine	ug/l					59	U	120	U	59	UJ	62	U	59	U
Benzo(a)anthracene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Benzo(a)pyrene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Benzo(b)fluoranthene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Benzo(g,h,i)perylene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Benzo(k)fluoranthene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Benzoic Acid	ug/l					15	U	30	U	15	UJ	15	U	15	UJ

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB15-SA5DN-SB-060711		EB16-SA5DN-SB-060911		EB17-SA5DN-SB-061411		EB18-SA5DN-SB-061511		EB19-SA5DN-SB-062211		EB20-SA5DN-SB-062911		EB21-SA5DN-SB-070711	
	Location:	EB15-SA5DN		EB16-SA5DN		EB17-SA5DN		EB18-SA5DN		EB19-SA5DN		EB20-SA5DN		EB21-SA5DN	
	Sample Date:	06/07/2011		06/09/2011		06/14/2011		06/15/2011		06/22/2011		06/29/2011		07/07/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Benzyl Alcohol	ug/l					15	U	30	U	15	U	15	U	15	U
Beryllium	mg/l					0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Beta-BHC	ug/l														
Bis(2-Chloroethoxy) methane	ug/l					5	U	10	U	5	U	5	U	5	U
Bis(2-Chloroethyl) ether	ug/l					5	U	10	U	5	U	5	U	5	U
bis(2-Chloroisopropyl) ether	ug/l					5	U	10	U	5	U	5	U	5	U
Bis(2-Ethylhexyl) phthalate	ug/l					0.2	J	1	U	0.97	U	2	UJ	1	U
Boron	mg/l					0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Bromobenzene	ug/l					5	U	5	U	5	U	5	U	5	U
Bromochloromethane	ug/l					5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	ug/l					5	U	5	U	5	U	5	U	5	U
Bromoform	ug/l					5	U	5	U	5	U	5	U	5	U
Bromomethane	ug/l					5	U	5	U	5	U	5	U	5	U
Butylbenzylphthalate	ug/l					1	U	1	U	0.97	U	0.18	J	1	U
Cadmium	mg/l					0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Calcium	mg/l					0.2	U	0.2	U	0.2	U	0.2	U	0.0768	J
Carbazole	ug/l					5	U	10	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l					5	U	5	U	5	U	5	U	5	U
Chlordane	ug/l														
Chlorobenzene	ug/l					5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l					5	U	5	U	5	U	5	U	5	U
Chloroform	ug/l					5	U	5	U	5	U	5	U	5	U
Chloromethane	ug/l					5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethene	ug/l					5	U	5	U	5	U	5	U	5	U
Chromium	mg/l					0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Chromium VI	ug/l					10	U	10	U	10	R	10	UJ	10	U
Chrysene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
cis-1,2-Dichloroethene	ug/l					5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l					5	U	5	U	5	U	5	U	5	U
Cobalt	mg/l					0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Copper	mg/l					0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Cyanide	mg/l	0.01	U	0.01	U			0.01	U	0.01	U	0.01	U		
Delta-BHC	ug/l														
Dibenzo(a,h)anthracene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Dibenzofuran	ug/l					5	U	10	U	5	U	5	U	5	U
Dibromochloromethane	ug/l					5	U	5	U	5	U	5	U	5	U
Dibromomethane	ug/l					5	U	5	U	5	U	5	U	5	U
Dicamba	ug/l														
Dichlorodifluoromethane	ug/l					5	U	5	U	5	U	5	U	5	U
Dichlorprop	ug/l														
Dieldrin	ug/l														
Diethylene Glycol	mg/l	100	U	100	U			100	U	100	U	200	U		
Diethylphthalate	ug/l					1	U	1	U	0.97	U	2	U	1	U
Dimethylphthalate	ug/l					1	U	1	UJ	0.97	U	2	U	1	U
Di-n-Butylphthalate	ug/l					0.081	J	0.11	J	0.97	U	0.2	J	1	U
Dinitrobutyl Phenol	ug/l														
Di-N-Octyl Phthalate	ug/l					1	U	1	U	0.97	U	0.35	J	1	U
EFH (C12-C14)	mg/l	0.61	U	0.6	U			0.6	U	0.6	U	0.61	UJ		
EFH (C15-C20)	mg/l	0.61	U	0.6	U			0.6	U	0.6	U	0.61	UJ		
EFH (C21-C30)	mg/l	0.61	U	0.6	U			0.6	U	0.6	U	0.61	UJ		
EFH (C30-C40)	mg/l	0.61	U	0.6	U			0.6	U	0.6	U	0.61	UJ		
EFH (C8-C11)	mg/l	0.61	U	0.6	UJ			0.6	U	0.6	U	0.61	UJ		
Endosulfan I	ug/l														
Endosulfan II	ug/l														
Endosulfan Sulfate	ug/l														
Endrin	ug/l														
Endrin Aldehyde	ug/l														
Endrin Ketone	ug/l														
Ethanol	ug/l	1000	U	1000	U			1000	U	1000	U	1000	U		
Ethylbenzene	ug/l					5	U	5	U	5	U	5	U	5	U
Ethylene Glycol	mg/l	100	U	100	U			100	U	100	U	200	UJ		
Fluoranthene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Fluorene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Fluoride	mg/l					0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Formaldehyde	ug/l	50	U	50	U			50	U	50	U	50	U		
Freon 113	ug/l					10	U	10	U	10	U	10	U	10	U

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB15-SA5DN-SB-060711		EB16-SA5DN-SB-060911		EB17-SA5DN-SB-061411		EB18-SA5DN-SB-061511		EB19-SA5DN-SB-062211		EB20-SA5DN-SB-062911		EB21-SA5DN-SB-070711	
	Location:	EB15-SA5DN		EB16-SA5DN		EB17-SA5DN		EB18-SA5DN		EB19-SA5DN		EB20-SA5DN		EB21-SA5DN	
	Sample Date:	06/07/2011		06/09/2011		06/14/2011		06/15/2011		06/22/2011		06/29/2011		07/07/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Freon 113a	ug/l					5	U	5	U	5	U	5	U	5	UJ
Gamma-BHC (Lindane)	ug/l														
GRO (C5-C12)	ug/l	50	U	50	U			50	U	50	U	50	U		
Heptachlor	ug/l														
Heptachlor Epoxide	ug/l														
Hexachlorobenzene	ug/l					5	U	10	U	5	U	5	U	5	U
Hexachlorobutadiene	ug/l					5 5	U U	5 10	U U	5 5	U U	5 5	U U	5 5	U U
Hexachlorocyclopentadiene	ug/l					15	U	30	U	15	U	15	U	15	U
Hexachloroethane	ug/l					5	U	10	U	5	U	5	U	5	U
HMX	ug/l	2	U	2	U			2	U	2	U	2	U		
Indeno(1,2,3-Cd)Pyrene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Iron	mg/l					0.2	U	0.2	U	0.2	U	0.2	U	0.0221	J
Isophorone	ug/l					5	U	10	U	5	U	5	U	5	U
Isopropylbenzene	ug/l					5	U	5	U	5	U	5	U	5	U
Isopropyltoluene	ug/l					5	U	5	U	5	U	5	U	5	U
Lead	mg/l					0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Lithium	mg/l					0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
m,p-Xylene	ug/l					5	U	5	U	5	U	5	U	5	U
Magnesium	mg/l					0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Manganese	mg/l					0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
MCPA	ug/l														
MCPP	ug/l														
m-Dinitrobenzene	ug/l	0.6	U	0.6	U			0.6	U	0.6	U	0.6	U		
Mercury	mg/l					0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Methanol	ug/l	230	J	210	J			1000	U	1000	U	1000	U		
Methoxychlor	ug/l														
Methyl tert-Butyl Ether	ug/l					5	U	5	U	5	U	5	U	5	U
Methylene chloride	ug/l					10		9		7		5		3	J
Mirex	ug/l														
Molybdenum	mg/l					0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
m-Terphenyl	mg/l	0.25	U	0.25	U			0.25	U	0.24	U	0.24	U		
Naphthalene	ug/l					0.12		0.11		0.096		0.2		0.084	
N-Butylbenzene	ug/l					5	U	5	U	5	U	5	U	5	U
Nickel	mg/l					0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Nitrate	mg/l	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U		
Nitrobenzene	ug/l	0.6	U	0.6	U	5	U	10 0.60	U U	5 0.60	U U	5 0.60	U U	5	U
Nitroglycerin	ug/l	15	U	15	U			15	U	15	U	15	U		
N-Nitrosodimethylamine	ng/l	1.05	UJ	0.995	UJ			3.37		3.39		3.67			
N-Nitrosodimethylamine	ug/l					0.05	U	0.05	U	0.048	U	0.1		0.051	U
N-Nitroso-Di-N-Propylamine	ug/l					5	U	10	U	5	U	5	U	5	U
N-Nitrosodiphenylamine	ug/l					5	U	10	U	5	U	5	U	5	U
N-Propylbenzene	ug/l					5	U	5	U	5	U	5	U	5	U
OCDD	pg/l					20.5	U	20.2	U	20.4	U	20.4	U	20.4	U
OCDF	pg/l					20.5	U	20.2	U	20.4	U	20.4	U	20.4	U
o-Terphenyl	mg/l	0.25	U	0.25	U			0.25	U	0.24	U	0.24	U		
o-Xylene	ug/l					5	U	5	U	5	U	5	U	5	U
Pentachlorophenol	ug/l					15	U	30	U	15	U	15	U	15	U
Perchlorate	ug/l					2	UJ	2	UJ	2	U	2	U	2	U
PETN	ug/l	18	U	18	U			18	U	18	U	18	U		
Phenanthrene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
Phenol	ug/l					5	U	10	U	5	U	5	U	5	U
Phosphorus	mg/l					0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Potassium	mg/l					0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Propylene glycol	mg/l	100	U	100	U			100	U	100	U	200	UJ		
p-Terphenyl	mg/l	0.25	U	0.25	U			0.25	U	0.24	U	0.24	U		
Pyrene	ug/l					0.05	U	0.05	U	0.048	U	0.099	U	0.051	U
RDX	ug/l	0.6		2.3				0.95		2.1		1	U		
sec-Butylbenzene	ug/l					5	U	5	U	5	U	5	U	5	U
Selenium	mg/l					0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Silver	mg/l					0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Sodium	mg/l					1	U	1	U	1	U	1	U	1	U
Strontium	mg/l					0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB15-SA5DN-SB-060711		EB16-SA5DN-SB-060911		EB17-SA5DN-SB-061411		EB18-SA5DN-SB-061511		EB19-SA5DN-SB-062211		EB20-SA5DN-SB-062911		EB21-SA5DN-SB-070711	
	Location:	EB15-SA5DN		EB16-SA5DN		EB17-SA5DN		EB18-SA5DN		EB19-SA5DN		EB20-SA5DN		EB21-SA5DN	
	Sample Date:	06/07/2011		06/09/2011		06/14/2011		06/15/2011		06/22/2011		06/29/2011		07/07/2011	
	Sample Type	EB		EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Styrene	ug/l					5	U	5	U	5	U	5	U	5	U
tert-Butylbenzene	ug/l					5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	ug/l					5	U	5	U	5	U	5	U	5	U
Tetryl	ug/l	0.6	U	0.6	U			0.6	UJ	0.6	U	0.6	UJ		
Thallium	mg/l					0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Tin	mg/l					0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Titanium	mg/l					0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Toluene	ug/l					1	J	0.8	J	5	U	5	U	5	U
Toxaphene	ug/l														
trans-1,2-Dichloroethene	ug/l					5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l					5	U	5	U	5	U	5	U	5	U
Trichloroethene	ug/l					5	U	5	U	5	U	5	U	5	U
Trichlorofluoromethane	ug/l					5	U	5	U	5	U	5	U	5	U
Vanadium	mg/l					0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Vinyl Chloride	ug/l					5	U	5	U	5	U	5	U	5	U
Zinc	mg/l					0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
Zirconium	mg/l					0.05	U	0.05	U	0.0078	J	0.05	U	0.05	U

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

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

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB22-SA5DN-SB-070811		EB23-SA5DN-SB-080311		EB-SA5DN-SB-081111	
	Location:	EB22-SA5DN		EB23-SA5DN		EB-SA5DN	
	Sample Date:	07/08/2011		08/03/2011		08/11/2011	
	Sample Type	EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l			5	U	5	U
1,1,1-Trichloroethane	ug/l			5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l			5	U	5	U
1,1,2-Trichloroethane	ug/l			5	U	5	U
1,1-Dichloroethane	ug/l			5	U	5	U
1,1-Dichloroethene	ug/l			5	U	5	U
1,1-Dichloropropene	ug/l			5	U	5	U
1,2,3,4,6,7,8-HpCDD	pg/l			11.2	U	10.6	U
1,2,3,4,6,7,8-HpCDF	pg/l			11.2	U	10.6	U
1,2,3,4,7,8,9-HpCDF	pg/l			11.2	U	10.6	U
1,2,3,4,7,8-HxCDD	pg/l			0.216	J	10.6	U
1,2,3,4,7,8-HxCDF	pg/l			11.2	U	10.6	U
1,2,3,6,7,8-HxCDD	pg/l			11.2	U	10.6	U
1,2,3,6,7,8-HxCDF	pg/l			0.263	J	10.6	U
1,2,3,7,8,9-HxCDD	pg/l			11.2	U	10.6	U
1,2,3,7,8,9-HxCDF	pg/l			11.2	U	10.6	U
1,2,3,7,8-PeCDD	pg/l			11.2	U	10.6	U
1,2,3,7,8-PeCDF	pg/l			11.2	U	10.6	U
1,2,3-Trichlorobenzene	ug/l			5	U	5	U
1,2,3-Trichloropropane	ug/l			5	U	5	U
1,2,4-Trichlorobenzene	ug/l			5 5	U U	5 5	U U
1,2,4-Trimethylbenzene	ug/l			5	U	5	U
1,2-Dibromo-3-chloropropane	ug/l			5	U	5	U
1,2-Dibromoethane	ug/l			5	U	5	U
1,2-Dichlorobenzene	ug/l			5 5	U U	5 5	U U
1,2-Dichloroethane	ug/l			5	U	5	U
1,2-Dichloropropane	ug/l			5	U	5	U
1,2-Diphenylhydrazine	ug/l			5	U	5	U
1,3,5-Trimethylbenzene	ug/l			5	U	5	U
1,3,5-Trinitrobenzene	ug/l	0.6	U	0.6	U	0.6	U
1,3-Dichlorobenzene	ug/l			5 5	U U	5 5	U U
1,3-Dichloropropane	ug/l			5	U	5	U
1,4-Dichlorobenzene	ug/l			5 5	U U	5 5	U U
1,4-Dioxane	ug/l			2	U	2	U
1-Methylnaphthalene	ug/l			0.055	U	0.054	UJ
2,2-Dichloropropane	ug/l			5	U	5	U
2,2-Dichlor-Propionic Acid	ug/l						
2,3,4,6,7,8-HxCDF	pg/l			11.2	U	10.6	U
2,3,4,7,8-PeCDF	pg/l			11.2	U	10.6	U
2,3,7,8-TCDD	pg/l			2.24	U	2.11	U
2,3,7,8-TCDF	pg/l			2.24	U	2.11	U
2,4 DB	ug/l						
2,4,5-T	ug/l						
2,4,5-TP	ug/l						
2,4,5-Trichlorophenol	ug/l			5	U	5	U
2,4,6-Trichlorophenol	ug/l			5	U	5	U
2,4,6-Trinitrotoluene	ug/l	0.6	U	0.6	U	0.6	U
2,4-D	ug/l						
2,4-Diamino-6-nitrotoluene	ug/l	0.6	U	0.6	U	0.6	U
2,4-Dichlorophenol	ug/l			5	U	5	U
2,4-Dimethylphenol	ug/l			10	U	10	U
2,4-Dinitrophenol	ug/l			29	UJ	30	U
2,4-Dinitrotoluene	ug/l	0.6	U	5 0.60	U U	5 0.60	U U
2,6-Diamino-4-nitrotoluene	ug/l	0.6	U	0.6	U	0.6	U

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB22-SA5DN-SB-070811		EB23-SA5DN-SB-080311		EB-SA5DN-SB-081111	
	Location:	EB22-SA5DN		EB23-SA5DN		EB-SA5DN	
	Sample Date:	07/08/2011		08/03/2011		08/11/2011	
	Sample Type	EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
2,6-Dinitrotoluene	ug/l	0.6	U	5 0.60	U U	5 0.60	U U
2-Amino-4,6-Dinitrotoluene	ug/l	0.6	U	0.6	U	0.6	U
2-Butanone	ug/l			10	U	10	U
2-Chloroethyl Vinyl Ether	ug/l			10	U	10	U
2-Chloronaphthalene	ug/l			5	U	5	U
2-Chlorophenol	ug/l			5	U	5	U
2-Chlorotoluene	ug/l			5	U	5	U
2-Hexanone	ug/l			10	U	10	U
2-Methylnaphthalene	ug/l			0.055	U	0.054	UJ
2-Methylphenol	ug/l			5	U	5	U
2-Nitroaniline	ug/l			5	U	5	U
2-Nitrophenol	ug/l			5	U	5	U
2-Nitrotoluene	ug/l	0.6	U	0.6	U	0.6	U
2-Propanol	ug/l	1000	U	1000	U	1000	U
3,3`-Dichlorobenzidine	ug/l			5	U	5	U
3,5-Dimethylphenol	ug/l			10	U	10	R
3-Nitroaniline	ug/l			5	U	5	U
3-Nitrotoluene	ug/l	1.2	U	1.2	U	1.2	U
4,4'-DDD	ug/l						
4,4'-DDE	ug/l						
4,4'-DDT	ug/l						
4,6-Dinitro-2-Methylphenol	ug/l			15	UJ	15	U
4-Amino-2,6-Dinitrotoluene	ug/l	0.6	U	0.54	J	0.41	J
4-Bromophenyl Phenyl Ether	ug/l			5	U	5	U
4-Chloro-3-Methylphenol	ug/l			5	U	5	U
4-Chloroaniline	ug/l			5	U	5	U
4-Chlorophenyl Phenylether	ug/l			5	U	5	U
4-Chlorotoluene	ug/l			5	U	5	U
4-Methyl-2-Pentanone	ug/l			10	U	10	U
4-Methylphenol	ug/l			5	U	5	U
4-Nitroaniline	ug/l			5	U	5	U
4-Nitrophenol	ug/l			29	U	30	U
4-Nitrotoluene	ug/l	1.2	U	1.2	U	1.2	U
Acenaphthene	ug/l			0.055	U	0.054	UJ
Acenaphthylene	ug/l			0.055	U	0.054	UJ
Acetone	ug/l			20	U	20	U
Aldrin	ug/l						
Alpha-BHC	ug/l						
Aluminum	mg/l			0.2	U	0.2	U
Aniline	ug/l			5	U	5	U
Anthracene	ug/l			0.055	U	0.054	UJ
Antimony	mg/l			0.001	U	0.001	U
Aroclor 1016	ug/l			0.52	U	0.51	U
Aroclor 1221	ug/l			0.52	U	0.51	U
Aroclor 1232	ug/l			0.52	U	0.51	U
Aroclor 1242	ug/l			0.52	U	0.51	U
Aroclor 1248	ug/l			0.52	U	0.51	U
Aroclor 1254	ug/l			0.52	U	0.51	U
Aroclor 1260	ug/l			0.52	U	0.51	U
Aroclor 1262	ug/l			0.52	U	0.51	U
Aroclor 1268	ug/l			0.52	U	0.51	U
Aroclor 5432	ug/l			0.52	U	0.51	U
Aroclor 5442	ug/l			0.52	U	0.51	U
Aroclor 5460	ug/l			0.52	U	0.51	U
Arsenic	mg/l			0.002	U	0.002	U
Barium	mg/l			0.002	U	0.002	U
Benzene	ug/l			5	U	5	U
Benzidine	ug/l			59	U	59	U
Benzo(a)anthracene	ug/l			0.055	U	0.054	UJ
Benzo(a)pyrene	ug/l			0.055	U	0.054	UJ
Benzo(b)fluoranthene	ug/l			0.055	U	0.054	UJ
Benzo(g,h,i)perylene	ug/l			0.055	U	0.054	UJ
Benzo(k)fluoranthene	ug/l			0.055	U	0.054	UJ
Benzoic Acid	ug/l			15	UJ	15	UJ

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB22-SA5DN-SB-070811		EB23-SA5DN-SB-080311		EB-SA5DN-SB-081111	
	Location:	EB22-SA5DN		EB23-SA5DN		EB-SA5DN	
	Sample Date:	07/08/2011		08/03/2011		08/11/2011	
	Sample Type	EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Benzyl Alcohol	ug/l			15	U	15	U
Beryllium	mg/l			0.0005	U	0.0005	U
Beta-BHC	ug/l						
Bis(2-Chloroethoxy) methane	ug/l			5	U	5	U
Bis(2-Chloroethyl) ether	ug/l			5	U	5	U
bis(2-Chloroisopropyl) ether	ug/l			5	U	5	U
Bis(2-Ethylhexyl) phthalate	ug/l			0.11	J	1.1	UJ
Boron	mg/l			0.05	U	0.05	U
Bromobenzene	ug/l			5	U	5	U
Bromochloromethane	ug/l			5	U	5	U
Bromodichloromethane	ug/l			5	U	5	U
Bromoform	ug/l			5	U	5	U
Bromomethane	ug/l			5	U	5	U
Butylbenzylphthalate	ug/l			0.14	J	0.14	J
Cadmium	mg/l			0.0005	U	0.0005	U
Calcium	mg/l			0.2	U	0.2	U
Carbazole	ug/l			5	U	5	U
Carbon tetrachloride	ug/l			5	U	5	U
Chlordane	ug/l						
Chlorobenzene	ug/l			5	U	5	U
Chloroethane	ug/l			5	U	5	U
Chloroform	ug/l			5	U	5	U
Chloromethane	ug/l			5	U	5	U
Chlorotrifluoroethene	ug/l			5	U	5	U
Chromium	mg/l			0.002	U	0.002	U
Chromium VI	ug/l			10	U	10	U
Chrysene	ug/l			0.055	U	0.054	UJ
cis-1,2-Dichloroethene	ug/l			5	U	5	U
cis-1,3-Dichloropropene	ug/l			5	U	5	U
Cobalt	mg/l			0.0005	U	0.0005	U
Copper	mg/l			0.002	U	0.002	U
Cyanide	mg/l	0.01	U	0.01	U	0.01	U
Delta-BHC	ug/l						
Dibenzo(a,h)anthracene	ug/l			0.055	U	0.054	UJ
Dibenzofuran	ug/l			5	U	5	U
Dibromochloromethane	ug/l			5	U	5	U
Dibromomethane	ug/l			5	U	5	U
Dicamba	ug/l						
Dichlorodifluoromethane	ug/l			5	U	5	U
Dichlorprop	ug/l						
Dieldrin	ug/l						
Diethylene Glycol	mg/l	200	U	200	U	200	U
Diethylphthalate	ug/l			0.091	J	0.13	J
Dimethylphthalate	ug/l			1.1	U	1.1	UJ
Di-n-Butylphthalate	ug/l			0.32	J	0.71	J
Dinitrobutyl Phenol	ug/l						
Di-N-Octyl Phthalate	ug/l			0.22	J	1.1	U
EFH (C12-C14)	mg/l	0.6	U	0.6	UJ	0.57	U
EFH (C15-C20)	mg/l	0.6	U	0.6	UJ	0.57	U
EFH (C21-C30)	mg/l	0.6	U	0.6	UJ	0.57	U
EFH (C30-C40)	mg/l	0.6	U	0.6	UJ	0.57	U
EFH (C8-C11)	mg/l	0.6	U	0.6	UJ	0.57	U
Endosulfan I	ug/l						
Endosulfan II	ug/l						
Endosulfan Sulfate	ug/l						
Endrin	ug/l						
Endrin Aldehyde	ug/l						
Endrin Ketone	ug/l						
Ethanol	ug/l	1000	U	1000	U	1000	U
Ethylbenzene	ug/l			5	U	5	U
Ethylene Glycol	mg/l	200	U	200	U	200	U
Fluoranthene	ug/l			0.055	U	0.054	UJ
Fluorene	ug/l			0.055	U	0.054	UJ
Fluoride	mg/l			0.1	U	0.1	U
Formaldehyde	ug/l	50	U	50	U	50	U
Freon 113	ug/l			10	U	10	U

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB22-SA5DN-SB-070811		EB23-SA5DN-SB-080311		EB-SA5DN-SB-081111	
	Location:	EB22-SA5DN		EB23-SA5DN		EB-SA5DN	
	Sample Date:	07/08/2011		08/03/2011		08/11/2011	
	Sample Type	EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Freon 113a	ug/l			5	U	5	U
Gamma-BHC (Lindane)	ug/l						
GRO (C5-C12)	ug/l	50	U	50	U	50	U
Heptachlor	ug/l						
Heptachlor Epoxide	ug/l						
Hexachlorobenzene	ug/l			5	U	5	U
Hexachlorobutadiene	ug/l			5 5	U U	5 5	U U
Hexachlorocyclopentadiene	ug/l			15	U	15	U
Hexachloroethane	ug/l			5	U	5	U
HMX	ug/l	2	U	2	U	2	U
Indeno(1,2,3-Cd)Pyrene	ug/l			0.055	U	0.054	UJ
Iron	mg/l			0.2	U	0.2	U
Isophorone	ug/l			5	U	5	U
Isopropylbenzene	ug/l			5	U	5	U
Isopropyltoluene	ug/l			5	U	5	U
Lead	mg/l			0.001	U	0.00011	J
Lithium	mg/l			0.02	U	0.02	U
m,p-Xylene	ug/l			5	U	5	U
Magnesium	mg/l			0.1	U	0.1	U
Manganese	mg/l			0.005	U	0.005	U
MCPA	ug/l						
MCPP	ug/l						
m-Dinitrobenzene	ug/l	0.6	U	0.6	U	0.6	U
Mercury	mg/l			0.0002	U	0.0002	U
Methanol	ug/l	1000	U	1000	U	1000	U
Methoxychlor	ug/l						
Methyl tert-Butyl Ether	ug/l			5	U	5	U
Methylene chloride	ug/l			5	U	5	U
Mirex	ug/l						
Molybdenum	mg/l			0.0005	U	0.0005	U
m-Terphenyl	mg/l	0.25	U	0.25	U	0.26	U
Naphthalene	ug/l			0.063		0.097	J
N-Butylbenzene	ug/l			5	U	5	U
Nickel	mg/l			0.002	U	0.002	U
Nitrate	mg/l	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/l	0.6	U	5 0.60	U U	5 0.60	U U
Nitroglycerin	ug/l	15	U	15	U	15	U
N-Nitrosodimethylamine	ng/l	6.16		4.4	J	1.01	UJ
N-Nitrosodimethylamine	ug/l			0.055	U	0.054	UJ
N-Nitroso-Di-N-Propylamine	ug/l			5	U	5	U
N-Nitrosodiphenylamine	ug/l			5	U	5	U
N-Propylbenzene	ug/l			5	U	5	U
OCDD	pg/l			22.4	U	21.1	U
OCDF	pg/l			22.4	U	21.1	U
o-Terphenyl	mg/l	0.25	U	0.25	U	0.26	U
o-Xylene	ug/l			5	U	5	U
Pentachlorophenol	ug/l			15	U	15	U
Perchlorate	ug/l			2	U	2	UJ
PETN	ug/l	18	U	18	U	18	U
Phenanthrene	ug/l			0.055	U	0.054	UJ
Phenol	ug/l			5	U	5	U
Phosphorus	mg/l			0.1	U	0.1	U
Potassium	mg/l			0.5	U	0.5	U
Propylene glycol	mg/l	200	U	200	U	200	U
p-Terphenyl	mg/l	0.25	U	0.25	U	0.26	U
Pyrene	ug/l			0.055	U	0.054	UJ
RDX	ug/l	1.5	U	1.7		1.2	
sec-Butylbenzene	ug/l			5	U	5	U
Selenium	mg/l			0.002	U	0.002	U
Silver	mg/l			0.0005	U	0.0005	U
Sodium	mg/l			1	U	1	U
Strontium	mg/l			0.005	U	0.005	U

Table C-2 - Subarea 5D North Equipment Rinsate Blank Results

	Sample Name:	EB22-SA5DN-SB-070811		EB23-SA5DN-SB-080311		EB-SA5DN-SB-081111	
	Location:	EB22-SA5DN		EB23-SA5DN		EB-SA5DN	
	Sample Date:	07/08/2011		08/03/2011		08/11/2011	
	Sample Type	EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Styrene	ug/l			5	U	5	U
tert-Butylbenzene	ug/l			5	U	5	U
Tetrachloroethene	ug/l			5	U	5	U
Tetryl	ug/l	0.6	U	0.6	UJ	0.6	U
Thallium	mg/l			0.0005	U	0.0005	U
Tin	mg/l			0.02	U	0.02	U
Titanium	mg/l			0.01	U	0.01	U
Toluene	ug/l			5	U	5	U
Toxaphene	ug/l						
trans-1,2-Dichloroethene	ug/l			5	U	5	U
trans-1,3-Dichloropropene	ug/l			5	U	5	U
Trichloroethene	ug/l			5	U	5	U
Trichlorofluoromethane	ug/l			5	U	5	U
Vanadium	mg/l			0.0005	U	0.0005	U
Vinyl Chloride	ug/l			5	U	5	U
Zinc	mg/l			0.0172		0.015	U
Zirconium	mg/l			0.05	U	0.05	U

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

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

Table C-3 - Subarea 5D South Equipment Rinsate Blank Results

	Sample Name:	EB-SA5DS-SB-101711		EB-SA5DS-SB-101811		EB-SA5DS-SB-110811		EB-SA5DS-SB-110911		EB-SA5DS-SB-111011		EB-SA5DS-SS-092811	
	Location:	EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS	
	Sample Date:	10/17/2011		10/18/2011		11/08/2011		11/09/2011		11/10/2011		09/28/2011	
	Sample Type	EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,2,3,4,6,7,8-HpCDD	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,4,6,7,8-HpCDF	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,4,7,8,9-HpCDF	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,4,7,8-HxCDD	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,4,7,8-HxCDF	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,6,7,8-HxCDD	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,6,7,8-HxCDF	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,7,8,9-HxCDD	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,7,8,9-HxCDF	pg/l			10.2	U					10.1	U	9.69	U
1,2,3,7,8-PeCDD	pg/l			0.332	J					10.1	U	9.69	U
1,2,3,7,8-PeCDF	pg/l			10.2	U					10.1	U	9.69	U
1,2,4-Trichlorobenzene	ug/l			5	U					5	U	5	U
1,2-Dichlorobenzene	ug/l			5	U					5	U	5	U
1,2-Diphenylhydrazine	ug/l			5	U					5	U	5	U
1,3,5-Trinitrobenzene	ug/l			0.6	U					0.6	U		
1,3-Dichlorobenzene	ug/l			5	U					5	U	5	U
1,4-Dichlorobenzene	ug/l			5	U					5	U	5	U
1-Methylnaphthalene	ug/l			0.1	U					0.05	U	0.053	U
2,2-Dichlor-Propionic Acid	ug/l											1.2	U
2,3,4,6,7,8-HxCDF	pg/l			10.2	U					10.1	U	9.69	U
2,3,4,7,8-PeCDF	pg/l			10.2	U					10.1	U	9.69	U
2,3,7,8-TCDD	pg/l			2.04	U					2.01	U	1.94	U
2,3,7,8-TCDF	pg/l			2.04	U					0.363	J	1.94	U
2,4 DB	ug/l											0.99	U
2,4,5-T	ug/l											0.049	U
2,4,5-TP	ug/l											0.049	U
2,4,5-Trichlorophenol	ug/l			5	U					5	U	5	U
2,4,6-Trichlorophenol	ug/l			5	U					5	U	5	U
2,4,6-Trinitrotoluene	ug/l			0.6	U					0.6	U		
2,4-D	ug/l											0.49	U
2,4-Diamino-6-nitrotoluene	ug/l			0.6	U					0.6	U		
2,4-Dichlorophenol	ug/l			5	U					5	U	5	U
2,4-Dimethylphenol	ug/l			10	U					10	U	10	U
2,4-Dinitrophenol	ug/l			30	U					30	U	30	U
2,4-Dinitrotoluene	ug/l			5 0.60	U U					5 0.60	U U	5	U
2,6-Diamino-4-nitrotoluene	ug/l			0.6	U					0.6	U		
2,6-Dinitrotoluene	ug/l			5 0.60	U U					5 0.60	U U	5	U
2-Amino-4,6-Dinitrotoluene	ug/l			0.6	U					0.6	U		
2-Chloronaphthalene	ug/l			5	U					5	U	5	U
2-Chlorophenol	ug/l			5	U					5	U	5	U
2-Methylnaphthalene	ug/l			0.1	U					0.05	U	0.053	U
2-Methylphenol	ug/l			5	U					5	U	5	U
2-Nitroaniline	ug/l			5	U					5	U	5	U
2-Nitrophenol	ug/l			5	U					5	U	5	U
2-Nitrotoluene	ug/l			0.6	U					0.6	U		
2-Propanol	ug/l			1000	U					1000	U		
3,3`-Dichlorobenzidine	ug/l			5	U					5	U	5	U
3,5-Dimethylphenol	ug/l			10	U					10	U	10	U
3-Nitroaniline	ug/l			5	U					5	U	5	U
3-Nitrotoluene	ug/l			1.2	U					1.2	U		
4,4'-DDD	ug/l											0.019	U
4,4'-DDE	ug/l											0.019	U
4,4'-DDT	ug/l											0.019	U
4,6-Dinitro-2-Methylphenol	ug/l			15	U					15	U	15	U
4-Amino-2,6-Dinitrotoluene	ug/l			0.6	U					0.6	U		
4-Bromophenyl Phenyl Ether	ug/l			5	U					5	U	5	U
4-Chloro-3-Methylphenol	ug/l			5	U					5	U	5	U
4-Chloroaniline	ug/l			5	U					5	U	5	U
4-Chlorophenyl Phenylether	ug/l			5	U					5	U	5	U
4-Methylphenol	ug/l			5	U					5	U	5	U
4-Nitroaniline	ug/l			5	U					5	U	5	U
4-Nitrophenol	ug/l			30	U					30	U	30	U

Table C-3 - Subarea 5D South Equipment Rinsate Blank Results

	Sample Name:	EB-SA5DS-SB-101711		EB-SA5DS-SB-101811		EB-SA5DS-SB-110811		EB-SA5DS-SB-110911		EB-SA5DS-SB-111011		EB-SA5DS-SS-092811	
	Location:	EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS	
	Sample Date:	10/17/2011		10/18/2011		11/08/2011		11/09/2011		11/10/2011		09/28/2011	
	Sample Type	EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
4-Nitrotoluene	ug/l			1.2	U					1.2	U		
Acenaphthene	ug/l			0.1	U					0.05	U	0.053	U
Acenaphthylene	ug/l			0.1	U					0.05	U	0.053	U
Aldrin	ug/l											0.0097	U
Alpha-BHC	ug/l											0.0097	U
Aluminum	mg/l			0.2	U					0.2	U	0.2	U
Aniline	ug/l			5	U					5	U	5	U
Anthracene	ug/l			0.1	U					0.05	U	0.053	U
Antimony	mg/l			0.001	U					0.001	U	0.001	U
Aroclor 1016	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 1221	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 1232	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 1242	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 1248	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 1254	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 1260	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 1262	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 1268	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 5432	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 5442	ug/l			0.52	U					0.61	U	0.49	U
Aroclor 5460	ug/l			0.52	U					0.61	U	0.49	U
Arsenic	mg/l			0.002	U					0.002	U	0.002	U
Barium	mg/l			0.002	U					0.002	U	0.002	U
Benzidine	ug/l			60	U					60	U	59	U
Benzo(a)anthracene	ug/l			0.1	U					0.05	U	0.053	U
Benzo(a)pyrene	ug/l			0.1	U					0.05	U	0.053	U
Benzo(b)fluoranthene	ug/l			0.1	U					0.05	U	0.053	U
Benzo(g,h,i)perylene	ug/l			0.1	U					0.05	U	0.053	U
Benzo(k)fluoranthene	ug/l			0.1	U					0.05	U	0.053	U
Benzoic Acid	ug/l			15	U					15	U	15	UJ
Benzyl Alcohol	ug/l			15	U					15	U	15	U
Beryllium	mg/l			0.0005	U					0.0005	U	0.0005	U
Beta-BHC	ug/l											0.0097	U
Bis(2-Chloroethoxy) methane	ug/l			5	U					5	U	5	U
Bis(2-Chloroethyl) ether	ug/l			5	U					5	U	5	U
bis(2-Chloroisopropyl) ether	ug/l			5	U					5	U	5	U
Bis(2-Ethylhexyl) phthalate	ug/l			2	U					1	U	0.11	J
Boron	mg/l			0.0034	J					0.05	U	0.0025	J
Butylbenzylphthalate	ug/l			2	UJ					1	U	1.1	U
Cadmium	mg/l			0.0005	U					0.0005	U	0.00022	J
Calcium	mg/l			0.2	U					0.2	U	0.2	U
Carbazole	ug/l			5	U					5	U	5	U
Chlordane	ug/l											0.49	U
Chromium	mg/l			0.002	U					0.002	U	0.002	U
Chromium VI	ug/l			10	U					10	U	10	U
Chrysene	ug/l			0.1	U					0.05	U	0.053	U
Cobalt	mg/l			0.0005	U					0.0005	U	0.0005	U
Copper	mg/l			0.002	U					0.002	U	0.002	U
Cyanide	mg/l			0.01	U					0.01	U		
Delta-BHC	ug/l											0.0097	U
Dibenzo(a,h)anthracene	ug/l			0.1	U					0.05	U	0.053	U
Dibenzofuran	ug/l			5	U					5	U	5	U
Dicamba	ug/l											0.3	U
Dichlorprop	ug/l											0.49	U
Dieldrin	ug/l											0.019	U
Diethylene Glycol	mg/l			200	U					200	U		
Diethylphthalate	ug/l			2	U					0.097	J	0.36	J
Dimethylphthalate	ug/l			2	UJ					1	U	1.1	U
Di-n-Butylphthalate	ug/l			0.14	J					0.36	J	0.74	J
Dinitrobutyl Phenol	ug/l											0.49	U
Di-N-Octyl Phthalate	ug/l			2	U					1	U	0.12	J
EFH (C12-C14)	mg/l			0.64	U					0.64	U		
EFH (C15-C20)	mg/l			0.64	U					0.64	U		
EFH (C21-C30)	mg/l			0.64	U					0.64	U		
EFH (C30-C40)	mg/l			0.64	U					0.64	U		
EFH (C8-C11)	mg/l			0.64	U					0.64	U		

Table C-3 - Subarea 5D South Equipment Rinsate Blank Results

	Sample Name:	EB-SA5DS-SB-101711		EB-SA5DS-SB-101811		EB-SA5DS-SB-110811		EB-SA5DS-SB-110911		EB-SA5DS-SB-111011		EB-SA5DS-SS-092811	
	Location:	EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS	
	Sample Date:	10/17/2011		10/18/2011		11/08/2011		11/09/2011		11/10/2011		09/28/2011	
	Sample Type	EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Endosulfan I	ug/l											0.0097	U
Endosulfan II	ug/l											0.019	U
Endosulfan Sulfate	ug/l											0.019	U
Endrin	ug/l											0.019	U
Endrin Aldehyde	ug/l											0.097	U
Endrin Ketone	ug/l											0.019	U
Ethanol	ug/l			1000	U					1000	U		
Ethylene Glycol	mg/l			200	U					200	U		
Fluoranthene	ug/l			0.1	U					0.05	U	0.053	U
Fluorene	ug/l			0.1	U					0.05	U	0.053	U
Fluoride	mg/l			0.1	U					0.1	U	0.1	U
Formaldehyde	ug/l			50	U					78			
Gamma-BHC (Lindane)	ug/l											0.0097	U
GRO (C5-C12)	ug/l			50	U					50	U		
Heptachlor	ug/l											0.0097	U
Heptachlor Epoxide	ug/l											0.0097	U
Hexachlorobenzene	ug/l			5	U					5	U	5	U
Hexachlorobutadiene	ug/l			5	U					5	U	5	U
Hexachlorocyclopentadiene	ug/l			15	U					15	U	15	U
Hexachloroethane	ug/l			5	U					5	U	5	U
HMX	ug/l			2	U					2	U		
Indeno(1,2,3-Cd)Pyrene	ug/l			0.1	U					0.05	U	0.053	U
Iron	mg/l			0.2	U					0.2	U	0.2	U
Isophorone	ug/l			5	U					5	U	5	U
Lead	mg/l			0.001	U					0.001	U	0.0026	
Lithium	mg/l			0.02	U					0.02	U	0.02	U
Magnesium	mg/l			0.1	U					0.1	U	0.1	U
Manganese	mg/l			0.005	U					0.005	U	0.005	U
MCPA	ug/l											990	U
MCPP	ug/l											200	U
m-Dinitrobenzene	ug/l			0.6	U					0.6	U		
Mercury	mg/l			0.0002	U					0.0002	U	0.0002	U
Methanol	ug/l			1000	U					1000	U		
Methoxychlor	ug/l											0.097	U
Mirex	ug/l											0.24	U
Molybdenum	mg/l			0.0005	U					0.0005	U	0.0005	U
m-Terphenyl	mg/l			0.25	U					0.26	U		
Naphthalene	ug/l			0.1	U					0.05	U	0.057	
Nickel	mg/l			0.002	U					0.002	U	0.002	U
Nitrate	mg/l			0.1	U					0.1	U		
Nitrobenzene	ug/l			5 0.60	U U					5 0.60	U U	5	U
Nitroglycerin	ug/l			15	U					15	U		
N-Nitrosodimethylamine	ng/l	1.06	U	4.42		1.57	J	1.96		2.12			
N-Nitrosodimethylamine	ug/l			0.1	U					0.05	U	0.053	U
N-Nitroso-Di-N-Propylamine	ug/l			5	U					5	U	5	U
N-Nitrosodiphenylamine	ug/l			5	U					5	U	5	U
OCDD	pg/l			20.4	U					20.1	U	19.4	U
OCDF	pg/l			20.4	U					20.1	U	19.4	U
o-Terphenyl	mg/l			0.25	U					0.26	U		
Pentachlorophenol	ug/l			15	U					15	U	15	U
Perchlorate	ug/l			2	U					2	U	2	U
PETN	ug/l			18	U					18	U		
Phenanthrene	ug/l			0.1	U					0.05	U	0.053	U
Phenol	ug/l			5	U					5	U	5	U
Phosphorus	mg/l			0.1	U					0.1	U	0.1	U
Potassium	mg/l			0.5	U					0.5	U	0.5	U
Propylene glycol	mg/l			200	U					200	U		
p-Terphenyl	mg/l			0.25	U					0.26	U		
Pyrene	ug/l			0.1	U					0.05	U	0.053	U
RDX	ug/l			1.6						0.76			
Selenium	mg/l			0.002	U					0.002	U	0.002	U
Silver	mg/l			0.0005	U					0.0005	U	0.0005	U
Sodium	mg/l			1	U					1	U	1	U
Strontium	mg/l			0.005	U					0.005	U	0.005	U

Table C-3 - Subarea 5D South Equipment Rinsate Blank Results

	Sample Name:	EB-SA5DS-SB-101711		EB-SA5DS-SB-101811		EB-SA5DS-SB-110811		EB-SA5DS-SB-110911		EB-SA5DS-SB-111011		EB-SA5DS-SS-092811	
	Location:	EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS		EB-SA5DS	
	Sample Date:	10/17/2011		10/18/2011		11/08/2011		11/09/2011		11/10/2011		09/28/2011	
	Sample Type	EB		EB		EB		EB		EB		EB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
Tetryl	ug/l			0.6	U					0.6	U		
Thallium	mg/l			0.0005	U					0.0005	U	0.0005	U
Tin	mg/l			0.02	U					0.02	U	0.02	U
Titanium	mg/l			0.01	U					0.01	U	0.01	U
Toxaphene	ug/l											2.9	U
Vanadium	mg/l			0.0005	U					0.0005	U	0.0005	U
Zinc	mg/l			0.015	U					0.015	U	0.015	U
Zirconium	mg/l			0.05	U					0.05	U	0.05	U

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

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

Table C-4 - Subarea 5D North Trip Blank Results

Sample Name:		TB-051611		TB-051711		TB-051911		TB-052011		TB-052311		TB-052411		TB-052511	
Sample Date:		05/16/2011		05/17/2011		05/19/2011		05/20/2011		05/23/2011		05/24/2011		05/25/2011	
Sample Type		TB		TB		TB		TB		TB		TB		TB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dioxane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloroethyl Vinyl Ether	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Benzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromoform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Freon 113	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Freon 113a	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GRO (C5-C12)	ug/l	50	U			50	U	50	U	50	UJ	50	U	50	U
Hexachlorobutadiene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropyltoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl tert-Butyl Ether	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methylene chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Propylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
o-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
sec-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
tert-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichlorofluoromethane	ug/l	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U
Vinyl Chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-4 - Subarea 5D North Trip Blank Results

Sample Name:		TB-052611		TB-052711		TB-053111		TB-060111		TB-060211		TB-060311		TB-060611	
Sample Date:		05/26/2011		05/27/2011		05/31/2011		06/01/2011		06/02/2011		06/03/2011		06/06/2011	
Sample Type		TB		TB		TB		TB		TB		TB		TB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dioxane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloroethyl Vinyl Ether	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Benzene	ug/l	5	U	1	J	0.9	J	5	U	5	U	5	U	5	U
Bromobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromoform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Freon 113	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Freon 113a	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GRO (C5-C12)	ug/l					50	U	50	U	50	U	50	U	50	U
Hexachlorobutadiene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropyltoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl tert-Butyl Ether	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methylene chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Propylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
o-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
sec-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
tert-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	ug/l	5	U	0.7	J	5	U	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichlorofluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Vinyl Chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-4 - Subarea 5D North Trip Blank Results

Sample Name:		TB-060711		TB-060811		TB-060911		TB-061011		TB-061311		TB-061411		TB-061511	
Sample Date:		06/07/2011		06/08/2011		06/09/2011		06/10/2011		06/13/2011		06/14/2011		06/15/2011	
Sample Type		TB		TB		TB		TB		TB		TB		TB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dioxane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloroethyl Vinyl Ether	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Benzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromoform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Freon 113	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Freon 113a	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GRO (C5-C12)	ug/l	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Hexachlorobutadiene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropyltoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl tert-Butyl Ether	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methylene chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Propylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
o-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
sec-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
tert-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichlorofluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Vinyl Chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-4 - Subarea 5D North Trip Blank Results

Sample Name:		TB-061611		TB-062011		TB-062111		TB-062211		TB-062311		TB-062411		TB-062711	
Sample Date:		06/16/2011		06/20/2011		06/21/2011		06/22/2011		06/23/2011		06/24/2011		06/27/2011	
Sample Type		TB		TB		TB		TB		TB		TB		TB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dioxane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloroethyl Vinyl Ether	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Benzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromoform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Freon 113	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Freon 113a	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
GRO (C5-C12)	ug/l			50	U	50	U	50	U	50	U	50	U		
Hexachlorobutadiene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropyltoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl tert-Butyl Ether	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methylene chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Propylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
o-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
sec-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
tert-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichlorofluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Vinyl Chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-4 - Subarea 5D North Trip Blank Results

Sample Name:		TB-062811		TB-062911		TB-063011		TB-070511		TB-070611		TB-070711		TB-070811	
Sample Date:		06/28/2011		06/29/2011		06/30/2011		07/05/2011		07/06/2011		07/07/2011		07/08/2011	
Sample Type		TB		TB		TB		TB		TB		TB		TB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2,4-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromo-3-chloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dibromoethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3,5-Trimethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,3-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dichlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
1,4-Dioxane	ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chloroethyl Vinyl Ether	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorotoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-Pentanone	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	ug/l	20	U	20	U	20	U	20	U	20	U	20	U	20	U
Benzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromoform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloroform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Chlorotrifluoroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromochloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dibromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Dichlorodifluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Freon 113	ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Freon 113a	ug/l	5	U	5	U	5	U	5	U	5	UJ	5	UJ	5	UJ
GRO (C5-C12)	ug/l	50	U			50	U	50	U	50	U				
Hexachlorobutadiene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Isopropyltoluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
m,p-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methyl tert-Butyl Ether	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Methylene chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
N-Propylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
o-Xylene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
sec-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
tert-Butylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Trichlorofluoromethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Vinyl Chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-4 - Subarea 5D North Trip Blank Results

Sample Name:		TB-070911		TB-072711		TB-072811		TB-072911		TB-080111		TB-080211		TB-080511	
Sample Date:		07/11/2011		07/27/2011		07/28/2011		07/29/2011		08/01/2011		08/02/2011		08/05/2011	
Sample Type		TB		TB		TB		TB		TB		TB		TB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l	5	U												
1,1,1-Trichloroethane	ug/l	5	U												
1,1,2,2-Tetrachloroethane	ug/l	5	U												
1,1,2-Trichloroethane	ug/l	5	U												
1,1-Dichloroethane	ug/l	5	U												
1,1-Dichloroethene	ug/l	5	U												
1,1-Dichloropropene	ug/l	5	U												
1,2,3-Trichlorobenzene	ug/l	5	U												
1,2,3-Trichloropropane	ug/l	5	U												
1,2,4-Trichlorobenzene	ug/l	5	U												
1,2,4-Trimethylbenzene	ug/l	5	U												
1,2-Dibromo-3-chloropropane	ug/l	5	U												
1,2-Dibromoethane	ug/l	5	U												
1,2-Dichlorobenzene	ug/l	5	U												
1,2-Dichloroethane	ug/l	5	U												
1,2-Dichloropropane	ug/l	5	U												
1,3,5-Trimethylbenzene	ug/l	5	U												
1,3-Dichlorobenzene	ug/l	5	U												
1,3-Dichloropropane	ug/l	5	U												
1,4-Dichlorobenzene	ug/l	5	U												
1,4-Dioxane	ug/l	2	U												
2,2-Dichloropropane	ug/l	5	U												
2-Butanone	ug/l	10	U												
2-Chloroethyl Vinyl Ether	ug/l	10	U												
2-Chlorotoluene	ug/l	5	U												
2-Hexanone	ug/l	10	U												
4-Chlorotoluene	ug/l	5	U												
4-Methyl-2-Pentanone	ug/l	10	U												
Acetone	ug/l	20	U												
Benzene	ug/l	5	U												
Bromobenzene	ug/l	5	U												
Bromochloromethane	ug/l	5	U												
Bromodichloromethane	ug/l	5	U												
Bromoform	ug/l	5	U												
Bromomethane	ug/l	5	U												
Carbon tetrachloride	ug/l	5	U												
Chlorobenzene	ug/l	5	U												
Chloroethane	ug/l	5	U												
Chloroform	ug/l	5	U												
Chloromethane	ug/l	5	U												
Chlorotrifluoroethene	ug/l	5	U												
cis-1,2-Dichloroethene	ug/l	5	U												
cis-1,3-Dichloropropene	ug/l	5	U												
Dibromochloromethane	ug/l	5	U												
Dibromomethane	ug/l	5	U												
Dichlorodifluoromethane	ug/l	5	U												
Ethylbenzene	ug/l	5	U												
Freon 113	ug/l	10	U												
Freon 113a	ug/l	5	U												
GRO (C5-C12)	ug/l	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Hexachlorobutadiene	ug/l	5	U												
Isopropylbenzene	ug/l	5	U												
Isopropyltoluene	ug/l	5	U												
m,p-Xylene	ug/l	5	U												
Methyl tert-Butyl Ether	ug/l	5	U												
Methylene chloride	ug/l	5	U												
N-Butylbenzene	ug/l	5	U												
N-Propylbenzene	ug/l	5	U												
o-Xylene	ug/l	5	U												
sec-Butylbenzene	ug/l	5	U												
Styrene	ug/l	5	U												
tert-Butylbenzene	ug/l	5	U												
Tetrachloroethene	ug/l	5	U												
Toluene	ug/l	5	U												
trans-1,2-Dichloroethene	ug/l	5	U												
trans-1,3-Dichloropropene	ug/l	5	U												
Trichloroethene	ug/l	5	U												
Trichlorofluoromethane	ug/l	5	U												
Vinyl Chloride	ug/l	5	U												

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-4 - Subarea 5D North Trip Blank Results

Sample Name:		TB-080811		TB-080911		TB-081111		TB-082211	
Sample Date:		08/08/2011		08/09/2011		08/11/2011		08/22/2011	
Sample Type		TB		TB		TB		TB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l							5	U
1,1,1-Trichloroethane	ug/l							5	U
1,1,2,2-Tetrachloroethane	ug/l							5	U
1,1,2-Trichloroethane	ug/l							5	U
1,1-Dichloroethane	ug/l							5	U
1,1-Dichloroethene	ug/l							5	U
1,1-Dichloropropene	ug/l							5	U
1,2,3-Trichlorobenzene	ug/l							5	U
1,2,3-Trichloropropane	ug/l							5	U
1,2,4-Trichlorobenzene	ug/l							5	U
1,2,4-Trimethylbenzene	ug/l							5	U
1,2-Dibromo-3-chloropropane	ug/l							5	U
1,2-Dibromoethane	ug/l							5	U
1,2-Dichlorobenzene	ug/l							5	U
1,2-Dichloroethane	ug/l							5	U
1,2-Dichloropropane	ug/l							5	U
1,3,5-Trimethylbenzene	ug/l							5	U
1,3-Dichlorobenzene	ug/l							5	U
1,3-Dichloropropane	ug/l							5	U
1,4-Dichlorobenzene	ug/l							5	U
1,4-Dioxane	ug/l							2	U
2,2-Dichloropropane	ug/l							5	U
2-Butanone	ug/l							10	U
2-Chloroethyl Vinyl Ether	ug/l							10	U
2-Chlorotoluene	ug/l							5	U
2-Hexanone	ug/l							10	U
4-Chlorotoluene	ug/l							5	U
4-Methyl-2-Pentanone	ug/l							10	U
Acetone	ug/l							20	U
Benzene	ug/l							5	U
Bromobenzene	ug/l							5	U
Bromochloromethane	ug/l							5	U
Bromodichloromethane	ug/l							5	U
Bromoform	ug/l							5	U
Bromomethane	ug/l							5	U
Carbon tetrachloride	ug/l							5	U
Chlorobenzene	ug/l							5	U
Chloroethane	ug/l							5	U
Chloroform	ug/l							5	U
Chloromethane	ug/l							5	U
Chlorotrifluoroethene	ug/l							5	U
cis-1,2-Dichloroethene	ug/l							5	U
cis-1,3-Dichloropropene	ug/l							5	U
Dibromochloromethane	ug/l							5	U
Dibromomethane	ug/l							5	U
Dichlorodifluoromethane	ug/l							5	U
Ethylbenzene	ug/l							5	U
Freon 113	ug/l							10	U
Freon 113a	ug/l							5	U
GRO (C5-C12)	ug/l	50	U	50	U	50	U	50	U
Hexachlorobutadiene	ug/l							5	U
Isopropylbenzene	ug/l							5	U
Isopropyltoluene	ug/l							5	U
m,p-Xylene	ug/l							5	U
Methyl tert-Butyl Ether	ug/l							5	U
Methylene chloride	ug/l							5	U
N-Butylbenzene	ug/l							5	U
N-Propylbenzene	ug/l							5	U
o-Xylene	ug/l							5	U
sec-Butylbenzene	ug/l							5	U
Styrene	ug/l							5	U
tert-Butylbenzene	ug/l							5	U
Tetrachloroethene	ug/l							5	U
Toluene	ug/l							5	U
trans-1,2-Dichloroethene	ug/l							5	U
trans-1,3-Dichloropropene	ug/l							5	U
Trichloroethene	ug/l							5	U
Trichlorofluoromethane	ug/l							5	U
Vinyl Chloride	ug/l							5	U

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-5 - Subarea 5D South Trip Blank Results

Sample Name:		TB-092711		TB-101411		TB-101711		TB-101811		TB-101911		TB-102011		TB-110811	
Sample Date:		09/27/2011		10/14/2011		10/17/2011		10/18/2011		10/19/2011		10/20/2011		11/08/2011	
Sample Type		TB		TB		TB		TB		TB		TB		TB	
Analyte	Units	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l	5	U							5	U				
1,1,1-Trichloroethane	ug/l	5	U							5	U				
1,1,2,2-Tetrachloroethane	ug/l	5	U							5	U				
1,1,2-Trichloroethane	ug/l	5	U							5	U				
1,1-Dichloroethane	ug/l	5	U							5	U				
1,1-Dichloroethene	ug/l	5	U							5	U				
1,1-Dichloropropene	ug/l	5	U							5	U				
1,2,3-Trichlorobenzene	ug/l	5	U							5	U				
1,2,3-Trichloropropane	ug/l	5	U							5	U				
1,2,4-Trichlorobenzene	ug/l	5	U							5	U				
1,2,4-Trimethylbenzene	ug/l	5	U							5	U				
1,2-Dibromo-3-chloropropane	ug/l	5	U							5	U				
1,2-Dibromoethane	ug/l	5	U							5	U				
1,2-Dichlorobenzene	ug/l	5	U							5	U				
1,2-Dichloroethane	ug/l	5	U							5	U				
1,2-Dichloropropane	ug/l	5	U							5	U				
1,3,5-Trimethylbenzene	ug/l	5	U							5	U				
1,3-Dichlorobenzene	ug/l	5	U							5	U				
1,3-Dichloropropane	ug/l	5	U							5	U				
1,4-Dichlorobenzene	ug/l	5	U							5	U				
1,4-Dioxane	ug/l	2	U							2	U				
2,2-Dichloropropane	ug/l	5	U							5	U				
2-Butanone	ug/l	10	U							10	U				
2-Chloroethyl Vinyl Ether	ug/l	10	U							10	U				
2-Chlorotoluene	ug/l	5	U							5	U				
2-Hexanone	ug/l	10	U							10	U				
4-Chlorotoluene	ug/l	5	U							5	U				
4-Methyl-2-Pentanone	ug/l	10	U							10	U				
Acetone	ug/l	20	U							20	U				
Benzene	ug/l	5	U							5	U				
Bromobenzene	ug/l	5	U							5	U				
Bromochloromethane	ug/l	5	U							5	U				
Bromodichloromethane	ug/l	5	U							5	U				
Bromoform	ug/l	5	U							5	U				
Bromomethane	ug/l	5	U							5	U				
Carbon tetrachloride	ug/l	5	U							5	U				
Chlorobenzene	ug/l	5	U							5	U				
Chloroethane	ug/l	5	U							5	U				
Chloroform	ug/l	5	U							5	U				
Chloromethane	ug/l	5	U							5	U				
Chlorotrifluoroethene	ug/l	5	U							5	U				
cis-1,2-Dichloroethene	ug/l	5	U							5	U				
cis-1,3-Dichloropropene	ug/l	5	U							5	U				
Dibromochloromethane	ug/l	5	U							5	U				
Dibromomethane	ug/l	5	U							5	U				
Dichlorodifluoromethane	ug/l	5	U							5	U				
Ethylbenzene	ug/l	5	U							5	U				
Freon 113	ug/l	10	U							10	U				
Freon 113a	ug/l	5	U							5	U				
GRO (C5-C12)	ug/l	50 50	U U			50	U	50	U	50	U	50	U	50	U
Hexachlorobutadiene	ug/l	5	U							5	U				
Isopropylbenzene	ug/l	5	U							5	U				
Isopropyltoluene	ug/l	5	U							5	U				
m,p-Xylene	ug/l	5	U							5	U				
Methyl tert-Butyl Ether	ug/l	5	U							5	U				
Methylene chloride	ug/l	5	U							5	U				
N-Butylbenzene	ug/l	5	U							5	U				
N-Nitrosodimethylamine	ng/kg			33.3	U	105		33.3	U	33.1	U			33	U
N-Nitrosodimethylamine	ng/l			1.07	U	0.978	U	0.999	U	0.99	U			0.954	U
N-Propylbenzene	ug/l	5	U							5	U				
o-Xylene	ug/l	5	U							5	U				
Percent Moisture	%			0.5	U	0.5	U	0.5	U	0.5	U			0.5	U
sec-Butylbenzene	ug/l	5	U							5	U				
Styrene	ug/l	5	U							5	U				
tert-Butylbenzene	ug/l	5	U							5	U				
Tetrachloroethene	ug/l	5	U							5	U				
Toluene	ug/l	5	U							5	U				
trans-1,2-Dichloroethene	ug/l	5	U							5	U				
trans-1,3-Dichloropropene	ug/l	5	U							5	U				
Trichloroethene	ug/l	5	U							5	U				
Trichlorofluoromethane	ug/l	5	U							5	U				
Vinyl Chloride	ug/l	5	U							5	U				

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-5 - Subarea 5D South Trip Blank Results

	Sample Name:	TB-110911	
	Sample Date:	11/09/2011	
	Sample Type	TB	
Analyte	Units	Concentration	Final Qualifer
1,1,1,2-Tetrachloroethane	ug/l		
1,1,1-Trichloroethane	ug/l		
1,1,2,2-Tetrachloroethane	ug/l		
1,1,2-Trichloroethane	ug/l		
1,1-Dichloroethane	ug/l		
1,1-Dichloroethene	ug/l		
1,1-Dichloropropene	ug/l		
1,2,3-Trichlorobenzene	ug/l		
1,2,3-Trichloropropane	ug/l		
1,2,4-Trichlorobenzene	ug/l		
1,2,4-Trimethylbenzene	ug/l		
1,2-Dibromo-3-chloropropane	ug/l		
1,2-Dibromoethane	ug/l		
1,2-Dichlorobenzene	ug/l		
1,2-Dichloroethane	ug/l		
1,2-Dichloropropane	ug/l		
1,3,5-Trimethylbenzene	ug/l		
1,3-Dichlorobenzene	ug/l		
1,3-Dichloropropane	ug/l		
1,4-Dichlorobenzene	ug/l		
1,4-Dioxane	ug/l		
2,2-Dichloropropane	ug/l		
2-Butanone	ug/l		
2-Chloroethyl Vinyl Ether	ug/l		
2-Chlorotoluene	ug/l		
2-Hexanone	ug/l		
4-Chlorotoluene	ug/l		
4-Methyl-2-Pentanone	ug/l		
Acetone	ug/l		
Benzene	ug/l		
Bromobenzene	ug/l		
Bromochloromethane	ug/l		
Bromodichloromethane	ug/l		
Bromoform	ug/l		
Bromomethane	ug/l		
Carbon tetrachloride	ug/l		
Chlorobenzene	ug/l		
Chloroethane	ug/l		
Chloroform	ug/l		
Chloromethane	ug/l		
Chlorotrifluoroethene	ug/l		
cis-1,2-Dichloroethene	ug/l		
cis-1,3-Dichloropropene	ug/l		
Dibromochloromethane	ug/l		
Dibromomethane	ug/l		
Dichlorodifluoromethane	ug/l		
Ethylbenzene	ug/l		
Freon 113	ug/l		
Freon 113a	ug/l		
GRO (C5-C12)	ug/l	50	U
Hexachlorobutadiene	ug/l		
Isopropylbenzene	ug/l		
Isopropyltoluene	ug/l		
m,p-Xylene	ug/l		
Methyl tert-Butyl Ether	ug/l		
Methylene chloride	ug/l		
N-Butylbenzene	ug/l		
N-Nitrosodimethylamine	ng/kg	33.3	U
N-Nitrosodimethylamine	ng/l	0.955	U
N-Propylbenzene	ug/l		
o-Xylene	ug/l		
Percent Moisture	%	0.5	U
sec-Butylbenzene	ug/l		
Styrene	ug/l		
tert-Butylbenzene	ug/l		
Tetrachloroethene	ug/l		
Toluene	ug/l		
trans-1,2-Dichloroethene	ug/l		
trans-1,3-Dichloropropene	ug/l		
Trichloroethene	ug/l		
Trichlorofluoromethane	ug/l		
Vinyl Chloride	ug/l		

ug/L - microgram per liter

U - Compound not detected above the reporting limit

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-072-SA5DN	SL-072-SA5DN	RPD	SL-089-SA5DN	SL-089-SA5DN	RPD	SL-076-SA5DN	SL-076-SA5DN	RPD	SL-043-SA5DN	SL-043-SA5DN	RPD
				Sample Name:	DUP-01-SA5DN-QC-051711	SL-072-SA5DN-SS-0.0-0.5		DUP-02-SA5DN-QC-051811	SL-089-SA5DN-SS-0.0-0.5		DUP-03-SA5DN-QC-051811	SL-076-SA5DN-SB-4.0-5.0		DUP-04-SA5DN-QC-051911	SL-043-SA5DN-SS-0.0-0.5	
				Sample Date	05/17/2011	05/17/2011		05/18/2011	05/18/2011		05/18/2011	05/18/2011		05/19/2011	05/19/2011	
				Start Depth:	0	0		0	0		4	4		0	0	
				End Depth:	0.5	0.5		0.5	0.5		5	5		0.5	0.5	
				Area:	5DN	5DN		5DN	5DN		5DN	5DN		5DN	5DN	
				Matrix:	SO	SO		SO	SO		SO	SO		SO	SO	
				Sample Type:	FD	N		FD	N		FD	N		FD	N	
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit												
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	21200	19600	7.84	25100	26700	-6.18	33300	27900	17.65	30100	30200	-0.33
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.379 J	0.9 J	-81.47	0.279	0.274	1.81	0.235 J	0.134 J	54.74	0.31 J	0.442 J	-35.11
Inorganic	Arsenic	7440-38-2	6020	mg/kg	5.41 J	5.98 J	-10.01	5.6 J	6.06 J	-7.89	6.4 J	4.54 J	34.00	9.29 J	10.5 J	-12.23
Inorganic	Barium	7440-39-3	6020	mg/kg	95.3 J	125 J	-26.96	141	141	--	115 J	120 J	-4.26	196 J	126 J	43.48
Inorganic	Beryllium	7440-41-7	6020	mg/kg	0.62 J	0.727 J	-15.89	0.807 J	0.881 J	-8.77	1.1 J	0.785 J	33.42	1.25	1.22	2.43
Inorganic	Boron	7440-42-8	6010B	mg/kg	20.8	20.2	2.93	20.3	23	-12.47	5.57 U	5.31 U	--	12.6	13.6	-7.63
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.349 J	0.307 J	12.80	0.278 J	0.348 J	-22.36	0.12 J	0.0913 J	27.17	0.497 J	0.465 J	6.65
Inorganic	Calcium	7440-70-2	6010B	mg/kg	24400	28100	-14.10	4480	4690	-4.58	44400 J	5820 J	153.64	13300 J	11000 J	18.93
Inorganic	Chromium	7440-47-3	6020	mg/kg	23.8 J	28.1 J	-16.57	30.6 J	31.1 J	-1.62	39.8 J	27 J	38.32	43.4 J	44 J	-1.37
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	0.79 J	0.7 J	12.08	0.54 J	1.2 UJ	200.00	1.1 U	1.1 U	--	1.2 UJ	0.76 J	200.00
Inorganic	Cobalt	7440-48-4	6020	mg/kg	7.74 J	10.1 J	-26.46	10.7 J	10.1 J	5.77	15 J	6.37 J	80.77	14.4 J	16.4 J	-12.99
Inorganic	Copper	7440-50-8	6020	mg/kg	16 J	17.8 J	-10.65	15.4 J	17.1 J	-10.46	16.2 J	12.5 J	25.78	24.8 J	27.9 J	-11.76
Inorganic	Cyanide	57-12-5	9012B	mg/kg				0.58 U	0.55 U	--				0.56 U	0.55 U	--
Inorganic	Fluoride	16984-48-8	300	mg/kg	2.4	1.9	23.26	2.3 J	2.3 J	--	13.2	18.2	-31.85	2.3 J	1.2 UJ	200.00
Inorganic	Iron	7439-89-6	6010B	mg/kg	28100	26200	7.00	27800	29700	-6.61	31800	29700	6.83	32400	31900	1.56
Inorganic	Lead	7439-92-1	6020	mg/kg	10.8 J	12.8 J	-16.95	10.8 J	10.4 J	3.77	13 J	7.87 J	49.16	16.5 J	17.2 J	-4.15
Inorganic	Lithium	7439-93-2	6010B	mg/kg	21.9	19.7	10.58	21	21.9	-4.20	33.6	31.9	5.19	25.8	26	-0.77
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	6200	5740	7.71	5720	5860	-2.42	6910	6470	6.58	6770	6850	-1.17
Inorganic	Manganese	7439-96-5	6010B	mg/kg	345	335	2.94	454	398	13.15	317	269	16.38	386	358	7.53
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.0053 J	0.112 UJ	200.00	0.116 U	0.112 U	--	0.0211 J	0.0068 J	102.51	0.0197 J	0.0092 J	72.66
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	2.41 J	0.655 J	114.52	0.563 J	0.584 J	-3.66	0.183 J	0.149 J	20.48	0.829 J	0.845 J	-1.91
Inorganic	Nickel	7440-02-0	6020	mg/kg	20.6 J	19.8 J	3.96	18.1 J	20.4 J	-11.95	24.7 J	16.8 J	38.07	30.4 J	34.4 J	-12.35
Inorganic	Nitrate	14797-55-8	300	mg/kg				3.4	2.2	42.86				3.6	2.5	36.07
Inorganic	Percent Moisture	MOIST	160.3M	%	9.3	10.5	-12.12	14.1	13.8	2.15	11.2	9.5	16.43	14.3	13.3	7.25
Inorganic	Perchlorate	14797-73-0	314	ug/kg	33.1 U	33.5 U	--	34.9 U	34.8 U	--	33.8 U	33.1 U	--	35 U	34.6 U	--
Inorganic	Perchlorate	14797-73-0	6850	ug/kg					5.8 U							
Inorganic	pH	pH	9045M	pH unit	8.04	7.96	1.00	6.52	6.56	-0.61	8.53	8.49	0.47	8.03	7.95	1.00
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	617	634	-2.72	252	254	-0.79	124 J	155 J	-22.22	428 J	380 J	11.88
Inorganic	Potassium	9/7/7440	6010B	mg/kg	4640 J	4330 J	6.91	4080 J	4190 J	-2.66	2430 J	2720 J	-11.26	4500 J	4060 J	10.28
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.227 J	0.209 J	8.26	0.152 J	0.177 J	-15.20	0.0596 J	0.0846 J	-34.67	0.145 J	0.225 J	-43.24
Inorganic	Silver	7440-22-4	6020	mg/kg	0.0382 J	0.0349 J	9.03	0.0415 J	0.0556 J	-29.04	0.0355 J	0.0403 J	-12.66	0.48 J	0.0937 J	134.67
Inorganic	Sodium	7440-23-5	6010B	mg/kg	154	124	21.58	100 J	106 J	-5.83	862	738	15.50	132	137	-3.72
Inorganic	Strontium	7440-24-6	6010B	mg/kg	62.8	61.2	2.58	30	31.3	-4.24	69.9	57	20.33	40.3	40.1	0.50
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.27 J	0.297 J	-9.52	0.451 J	0.459 J	-1.76	0.241	0.293	-19.48	0.517 J	0.439 J	16.32
Inorganic	Tin	7440-31-5	6010B	mg/kg	10.8 U	11.1 U	--	11.5 U	11.5 U	--	11.1 U	10.6 U	--	11.3 U	11.4 U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	1180	1050	11.66	1150	1170	-1.72	1040 J	715 J	37.04	1280	1220	4.80
Inorganic	Vanadium	7440-62-2	6020	mg/kg	48.4 J	57.1 J	-16.49	58 J	58.6 J	-1.03	60.1 J	38.8 J	43.07	82.3 J	81.2 J	1.35
Inorganic	Zinc	7440-66-6	6020	mg/kg	112 J	153 J	-30.94	75.1 J	77.8 J	-3.53	67.7 J	51.7 J	26.80	124 J	131 J	-5.49
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	2.15 J	2.74 J	-24.13	2.2 J	3.06 J	-32.70	6.27	3.85 J	47.83	3.58 J	4.23 J	-16.65
Misc. Organics	1,3,5-Trinitrobenzene	99-35-4	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	2,4,6-Trinitrotoluene	118-96-7	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	2,4-Diamino-6-nitrotoluene	6629-29-4	8330A	ug/kg				260 U	280 U	--				280 U	280 U	--
Misc. Organics	2,4-Dinitrotoluene	121-14-2	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	2,6-Diamino-4-nitrotoluene	59229-75-3	8330A	ug/kg				260 U	280 U	--				280 U	280 U	--
Misc. Organics	2,6-Dinitrotoluene	606-20-2	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	2-Amino-4,6-Dinitrotoluene	35572-78-2	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	2-Nitrotoluene	88-72-2	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	2-Propanol	67-63-0	8015B	ug/kg				580 U	580 U	--				580 U	580 U	--
Misc. Organics	3-Nitrotoluene	99-08-1	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	4-Amino-2,6-Dinitrotoluene	19406-51-0	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	4-Nitrotoluene	99-99-0	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	Diethylene Glycol	111-46-6	8015M	mg/kg				12 U	12 UJ	--				12 U	12 UJ	--
Misc. Organics	Ethanol	64-17-5	8015B	ug/kg				580 U	580 UJ	--				580 U	580 R	--
Misc. Organics	Ethylene Glycol	107-21-1	8015M	mg/kg				12 U	12 UJ	--				12 U	12 U	--
Misc. Organics	Formaldehyde	50-00-0	8315A	ug/kg				1700 U	1700 U	--				1800 U	1700 U	--
Misc. Organics	HMX	2691-41-0	8330A	ug/kg				330 U	350 U	--				350 U	350 U	--
Misc. Organics	m-Dinitrobenzene	99-65-0	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	Methanol	67-56-1	8015B	ug/kg				580 U	580 U	--				580 U	580 U	--
Misc. Organics	m-Terphenyl	92-06-8	8015B	mg/kg				4.1 U	4.1 UJ	--				8.1 U	8 UJ	--
Misc. Organics	Nitrobenzene	98-95-3	8330A	ug/kg				130 U	140 U	--				140 U	140 U	--
Misc. Organics	Nitroglycerin	55-63-0	8330A	ug/kg				2600 U	2800 U	--				2800 U	2800 U	--
Misc. Organics	o-Terphenyl	84-15-1	8015B	mg/kg				4.1 U	4.1 U	--				8.1 U	8 U	--
Misc. Organics	PETN	78-11-5	8330A	ug/kg				2600 U	2800 U	--				2800 U	2800 U	--
Misc. Organics	Propylene glycol	57-55-6	8015M	mg/kg				12 U	12 UJ	--				12 U	12 U	--
Misc. Organics	p-Terphenyl	92-94-4	8015B	mg/kg				4.1 U	4.1 U	--				8.1 U	8 U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-072-SA5DN		SL-072-SA5DN		RPD	SL-089-SA5DN		SL-089-SA5DN		RPD	SL-076-SA5DN		SL-076-SA5DN		RPD	SL-043-SA5DN		SL-043-SA5DN		RPD
				Sample Name:	DUP-01-SA5DN-QC-051711		SL-072-SA5DN-SS-0.0-0.5			DUP-02-SA5DN-QC-051811		SL-089-SA5DN-SS-0.0-0.5			DUP-03-SA5DN-QC-051811		SL-076-SA5DN-SB-4.0-5.0			DUP-04-SA5DN-QC-051911		SL-043-SA5DN-SS-0.0-0.5		
				Sample Date	05/17/2011		05/17/2011			05/18/2011		05/18/2011			05/18/2011		05/18/2011			05/19/2011		05/19/2011		
				Start Depth:	0		0			0		0			4		4			0		0		
				End Depth:	0.5		0.5			0.5		0.5			5		5			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																			
Misc. Organics	RDX	121-82-4	8330A	ug/kg						130	U	140	U	--						140	U	140	U	--
Misc. Organics	Tetryl	479-45-8	8330A	ug/kg						130	U	140	U	--						140	U	140	U	--
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	140		112	J	22.22	964		864	J	10.94	1.56	J	5.12	J	-106.59	69.9		68.7		1.73
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	27.4		19		36.21	55.8		52.7	J	5.71	5.51	UJ	5.45	UJ	--	4.79	J	4.81	J	-0.42
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	1.55	J	1.1	J	33.96	2.32	J	2.17	J	6.68	5.51	U	5.45	U	--	5.75	U	5.67	U	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	2.29	J	2.42	J	-5.52	16.8		16.9		-0.59	5.51	U	5.45	U	--	0.614	J	0.58	J	5.70
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	2	J	1.52	J	27.27	2.87	J	2.47	J	14.98	5.51	UJ	5.45	UJ	--	0.639	J	0.522	J	20.16
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	4.96	J	4.53	J	9.06	39.2		33.8	J	14.79	5.51	UJ	5.45	UJ	--	1.79	J	1.77	J	1.12
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	1.34	J	1.39	J	-3.66	1.37	J	1.72	J	-22.65	5.51	UJ	5.45	UJ	--	0.235	J	5.67	U	200.00
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	3.53	J	3.36	J	4.93	37.4		36.3	J	2.99	5.51	U	5.45	U	--	1.41	J	1.49	J	-5.52
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	1.08	J	5.51	U	200.00	1.27	J	1.38	J	-8.30	5.51	UJ	5.45	UJ	--	0.393	J	5.67	U	200.00
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	0.995	J	1.23	J	-21.12	9.81		9.62		1.96	5.51	UJ	5.45	UJ	--	0.32	J	5.67	U	200.00
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	0.711	J	0.662	J	7.14	0.651	J	0.521	J	22.18	5.51	UJ	0.571	J	200.00	5.75	U	5.67	U	--
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	1.21	J	1.02	J	17.04	1.87	J	2.05	J	-9.18	5.51	U	5.45	U	--	0.307	J	5.67	U	200.00
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	0.965	J	1.11	J	-13.98	0.644	J	0.623	J	3.31	5.51	UJ	5.45	UJ	--	5.75	U	5.67	U	--
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.112	J	0.242	J	-73.45	0.967	J	1.08	J	-11.04	1.1	U	1.09	U	--	0.0532	J	1.13	U	200.00
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	0.249	J	0.483	J	-63.93	0.109	J	1.16	U	200.00	1.1	UJ	0.194	J	200.00	1.15	UJ	0.196	J	200.00
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--	2	U	1.9	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--	2	U	1.9	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--	2	U	1.9	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--	2	U	1.9	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--	2	U	1.9	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--	2	U	1.9	U	--
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	2	J	4.7	J	-80.60	2	J	2	UJ	200.00	1.9	U	1.9	U	--	1.1	J	2.5	J	-77.78
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--	2	U	1.9	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--	2	U	1.9	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.6	U	3.7	U	-2.74	3.8	U	3.8	U	--	3.7	U	3.6	U	--	3.8	U	3.8	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.6	U	3.7	U	-2.74	3.8	U	3.8	U	--	3.7	U	3.6	U	--	3.8	U	3.8	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	3.6	UJ	1.8	J	200.00	3.8	UJ	3.4	J	200.00	3.7	U	3.6	U	--	3.8	UJ	1.8	J	200.00
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	2150		1480		36.91	21100	J	16400	J	25.07	23.6	J	78.7	J	-107.72	1010		947		6.44
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	35.5		26.9		27.56	200		167	J	17.98	11	UJ	10.9	UJ	--	13.1		13.1		--
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg	9.9	U	10	U	--	10	U	10	U	--						11	U	10	R	--
Pesticides	2,4 DB	94-82-6	8151A	ug/kg	3	J	2.6		14.29	2	UJ	2.1	J	200.00						2	U	1.9	U	--
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg	0.1	J	0.19	UJ	200.00	0.2	U	0.2	U	--						0.2	U	0.19	U	--
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg	0.19	U	0.19	U	--	0.2	U	0.2	U	--						0.17	J	0.19	UJ	200.00
Pesticides	2,4-D	94-75-7	8151A	ug/kg	4	U	4	U	--	4.2	U	4.2	U	--						4.2	U	4.1	U	--
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg	4.2	U	0.38	U	--	0.42	UJ	0.26	J	200.00						0.99	U	0.39	U	--
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg	1.9	U	0.38	U	--	0.47	J	0.39	J	18.60						0.99	UJ	0.23	J	200.00
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg	2.4	U	1.1	U	--	0.4	UJ	1.2	J	200.00						1.4	J	1.2	J	15.38
Pesticides	Aldrin	309-00-2	8081A	ug/kg	0.92	U	0.19	U	--	0.19	UJ	0.19	U	--						0.48	U	0.19	U	--
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg	0.92	UJ	0.04	J	200.00	0.19	UJ	0.19	U	--						0.48	U	0.19	U	--
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg	0.92	U	0.19	R	--	0.19	UJ	0.19	R	--						0.48	U	0.19	U	--
Pesticides	Chlordane	57-74-9	8081A	ug/kg	19	U	3.8	U	--	4	UJ	3.9	U	--						2.5	J	4.6	J	-59.15
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg	0.92	UJ	0.18	J	200.00	0.19	UJ	0.19	U	--						0.48	U	0.19	U	--
Pesticides	Dicamba	1918-00-9	8151A	ug/kg	1.3	U	1.3	U	--	1.4	U	1.4	U	--						1.4	U	1.4	U	--
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg	1.9	UJ	1.3	J	200.00	2	U	2	U	--						2	U	1.9	U	--
Pesticides	Dieldrin	60-57-1	8081A	ug/kg	1.9	U	0.38	U	--	0.4	UJ	0.39	U	--						0.99	U	0.39	UJ	--
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg	2.6	U	2.7	U	--	2.8	U	2.8	U	--						2.8	U	2.7	R	--
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg	0.92	U	0.19	U	--	0.19	UJ	0.19	U	--						0.48	U	0.19	R	--
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg	1.9	U	0.38	U	--	0.4	UJ	0.39	U	--						0.99	U	0.39	UJ	--
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg	12	U	0.38	U	--	0.4	UJ	0.39	U	--						0.99	U	0.39	U	--
Pesticides	Endrin	72-20-8	8081A	ug/kg	1.9	U	0.38	U	--	0.4	UJ	0.39	U	--						0.99	U	0.39	U	--
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg	1.9	U	0.38	U	--	0.4	UJ	0.39	U	--						0.99	U	0.39	U	--
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg	1.9	U	0.38	U	--	0.49	UJ	0.32	J	200.00						0.99	U	0.39	R	--
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg	0.92	U	0.19	U	--	0.19	UJ	0.19	U	--						0.48	U	0.19	U	--
Pesticides	Heptachlor	76-44-8	8081A	ug/kg	0.92	U	0.19	U	--	0.19	UJ	0.1	J	200.00						0.48	U	0.19	U	--
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg	0.92	U	0.19	U	--	0.19	UJ	0.19	U	--						0.48	U	0.19	U	--
Pesticides	MCPA	94-74-6	8151A	ug/kg	340	J	480	UJ	200.00	290	U	290	U	--						290	U	290	U	--
Pesticides	MCPP	93-65-2	8151A	ug/kg	270	U	280	U	--	290	U	290	U	--						290	U	290	U	--
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg	9.2	U	1.9	U	--	1.9	UJ	1.9	U	--						4.8	U	1.9	UJ	--
Pesticides	Mirex	2385-85-5	8081A	ug/kg	1.9	U	0.38	U	--	0.4	UJ	0.39	U	--						0.99	U	0.39	U	--
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg	36	U	7.4	U	--	7.7	UJ	7.7	U	--						19	U	7.6	U	--
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	9.1	UJ	0.8	J	200.00	1.9	U	1.9	U	--	1.8	U	1.8	UJ	--	9.7	U	1.9	U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg	1100	U	1100	U	--	1200	U	1100	UJ	--	1100	UJ	1100	R	--	1200	UJ	1200	UJ	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	9.1	UJ	0.84	J	200.00	1.9	U	1.9	U	--	1.8	U	1.8	UJ	--	9.7	U	1.9	U	--
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-072-SA5DN		SL-072-SA5DN		RPD	SL-089-SA5DN		SL-089-SA5DN		RPD	SL-076-SA5DN		SL-076-SA5DN		RPD	SL-043-SA5DN		SL-043-SA5DN		RPD
				Sample Name:	DUP-01-SA5DN-QC-051711		SL-072-SA5DN-SS-0.0-0.5			DUP-02-SA5DN-QC-051811		SL-089-SA5DN-SS-0.0-0.5			DUP-03-SA5DN-QC-051811		SL-076-SA5DN-SB-4.0-5.0			DUP-04-SA5DN-QC-051911		SL-043-SA5DN-SS-0.0-0.5		
				Sample Date	05/17/2011		05/17/2011			05/18/2011		05/18/2011			05/18/2011		05/18/2011			05/19/2011		05/19/2011		
				Start Depth:	0		0			0		0			4		4			0		0		
				End Depth:	0.5		0.5			0.5		0.5			5		5			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	370	U	370	U	--	390	U	380	U	--	370	U	360	U	--	390	U	380	U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	550	U	560	U	--	580	U	570	U	--	560	UJ	550	UJ	--	580	U	580	U	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg	550	U	560	U	--	580	U	570	U	--	560	U	550	U	--	580	U	580	U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg	5.6	J	3.5	J	46.15	1.9	U	1.9	U	--	1.8	U	1.8	UJ	--	9.7	U	1.9	U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg	9.1	UJ	0.59	J	200.00	0.42	J	1.9	UJ	200.00	1.8	U	1.8	UJ	--	9.7	U	1.9	U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg	550	U	560	U	--	580	U	570	U	--	560	U	550	U	--	580	U	580	U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg	5.9	J	4.5	J	26.92	1.4	J	1.7	J	-19.35	1.8	U	1.8	UJ	--	9.7	U	1.9	U	--
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg	3700	U	3700	R	--	3900	U	3800	UJ	200.00	3700	U	3600	U	--	3900	U	3800	UJ	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	27		19		34.78	1.3	J	2.8	J	-73.17	1.8	U	1.8	UJ	--	4.1	J	1.3	J	103.70
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	33		23		35.71	1.4	J	3.8	J	-92.31	1.8	U	1.8	UJ	--	4.8	J	1.9	J	86.57
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	48		38		23.26	3.7	J	12	J	-105.73	1.8	U	1.8	U	--	5.4	J	3.1	J	54.12
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	18	J	8.2	J	74.81	0.95	J	1.6	J	-50.98	1.8	U	1.8	UJ	--	9.7	UJ	1.2	J	200.00
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	15		18		-18.18	3.1	J	1.9	UJ	200.00	1.8	U	1.8	U	--	9.7	J	1.1	J	159.26
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg	550	U	560	U	--	580	U	570	U	--	560	U	550	U	--	580	U	580	U	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg	550	U	560	U	--	580	U	570	U	--	560	U	550	U	--	580	U	580	U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg	33	J	29	J	12.90			21	J		19	J	21	J	-10.00	22	J			200.00
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg						9.4	J			200.00								9.9	J	
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C	ug/kg	51	J			200.00											190	U			200.00
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg			7.3	J		21	U	21	U	--	20	U	20	UJ	--			21	U	
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Chrysene	218-01-9	8270C	ug/kg																				
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	46		30		42.11	5	J	10	J	-66.67	1.8	UJ	0.39	J	200.00	6.6	J	1.8	J	114.29
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	9.7	J	2.5	J	118.03	1.9	U	1.9	U	--	1.8	U	1.8	U	--	9.7	U	1.9	U	--
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C	ug/kg	180	U			200.00											190	U			200.00
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg			20	UJ		21	U	21	U	--	20	U	20	UJ	--			21	U	
Semivolatiles	Dimethylphthalate	131-11-3	8270C	ug/kg	180	U			200.00											190	U			200.00
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg			14	J		21	U	21	U	--	20	U	20	UJ	--			21	U	
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C	ug/kg	180	U			200.00											190	U			200.00
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg			20	UJ		21	U	21	U	--	20	U	20	UJ	--			7	J	
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C	ug/kg																190	U			200.00
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg	42	J	9.3	J	127.49	21	U	21	U	--	20	U	20	U	--			9.6	J	
Semivolatiles	Fluoranthene	206-44-0	8270C	ug/kg								25	J											
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	84		66	J	24.00	15				200.00	1.8	U	1.8	U	--	8.2	J	2.3	J	112.38
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	9.1	UJ	2.3	J	200.00	1.9	U	1.9	U	--	1.8	U	1.8	UJ	--	9.7	U	1.9	U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	550	U	560	U	--	580	U	570	U	1.74	560	U	550	U	--	580	U	580	U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	11		7.5		37.84	1.9	UJ	1.5	J	200.00	1.8	U	1.8	U	--	9.7	U	1.9	U	--
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	9.1	UJ	1.5	J	200.00	1.9	U	1.9	U	--	1.8	U	1.8	UJ	--	9.7	U	1.9	U	--
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	1625C	ng/kg						44		49.9		-12.57						242	J	57.4	J	123.31
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	9.1	U	1.8	U	--	1.9	U	1.9	U	--	1.8	U	1.8	UJ	--	9.7	U	1.9	U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	550	U	560	U	--	580	U	570	U	--	560	U	550	U	--	580	U	580	U	--
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	57	J	33	J	53.33	6.8	J	13	J	-62.63	1.8	U	1.8	U	--	9.7	U	1.9	U	--
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	180	U	190	U	--	190	U	190	U	--	190	U	180	U	--	190	U	190	U	--
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	63		54	J	15.38	6.5	J	13	J	-66.67	1.8	U	1.8	U	--	6.7	J	1.6	J	122.89
Volatiles	1,1,1,2-Tetrachloroethane	630-20-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,1,1-Trichloroethane	71-55-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,1,2,2-Tetrachloroethane	79-34-5	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,1,2-Trichloroethane	79-00-5	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,1-Dichloroethane	75-34-3	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,1-Dichloroethene	75-35-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,1-Dichloropropene	563-58-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,2,3-Trichlorobenzene	87-61-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,2,3-Trichloropropane	96-18-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,2,4-Trichlorobenzene	120-82-1	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,2,4-Trimethylbenzene	95-63-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,2-Dibromo-3-chloropropane	96-12-8	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,2-Dibromoethane	106-93-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,2-Dichlorobenzene	95-50-1	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,2-Dichloroethane	107-06-2	8260B	ug/kg											4.2	U	4.1	U	--					

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-072-SA5DN		SL-072-SA5DN		RPD	SL-089-SA5DN		SL-089-SA5DN		RPD	SL-076-SA5DN		SL-076-SA5DN		RPD	SL-043-SA5DN		SL-043-SA5DN		RPD
				Sample Name:	DUP-01-SA5DN-QC-051711		SL-072-SA5DN-SS-0.0-0.5			DUP-02-SA5DN-QC-051811		SL-089-SA5DN-SS-0.0-0.5			DUP-03-SA5DN-QC-051811		SL-076-SA5DN-SB-4.0-5.0			DUP-04-SA5DN-QC-051911		SL-043-SA5DN-SS-0.0-0.5		
				Sample Date	05/17/2011		05/17/2011			05/18/2011		05/18/2011			05/18/2011		05/18/2011			05/19/2011		05/19/2011		
				Start Depth:	0		0			0		0			4		4			0		0		
				End Depth:	0.5		0.5			0.5		0.5			5		5			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Volatiles	1,2-Dichloropropane	78-87-5	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,3,5-Trimethylbenzene	108-67-8	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,3-Dichlorobenzene	541-73-1	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,3-Dichloropropane	142-28-9	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,4-Dichlorobenzene	106-46-7	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	1,4-Dioxane	123-91-1	8260B SIM	ug/kg											17	U	16	U	--					
Volatiles	2,2-Dichloropropane	594-20-7	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	2-Butanone	78-93-3	8260B	ug/kg											8.3	U	8.2	U	--					
Volatiles	2-Chloroethyl Vinyl Ether	110-75-8	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	2-Chlorotoluene	95-49-8	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	2-Hexanone	591-78-6	8260B	ug/kg											8.3	U	8.2	U	--					
Volatiles	4-Chlorotoluene	106-43-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	4-Methyl-2-Pentanone	108-10-1	8260B	ug/kg											8.3	U	8.2	U	--					
Volatiles	Acetone	67-64-1	8260B	ug/kg											9.1		8.9		2.22					
Volatiles	Benzene	71-43-2	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Bromobenzene	108-86-1	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Bromochloromethane	74-97-5	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Bromodichloromethane	75-27-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Bromoform	75-25-2	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Bromomethane	74-83-9	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Carbon tetrachloride	56-23-5	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Chlorobenzene	108-90-7	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Chloroethane	75-00-3	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Chloroform	67-66-3	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Chloromethane	74-87-3	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Chlorotrifluoroethene	79-38-9	8260B	ug/kg											5.2	U	5.1	U	--					
Volatiles	cis-1,2-Dichloroethene	156-59-2	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	cis-1,3-Dichloropropene	10061-01-5	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Dibromochloromethane	124-48-1	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Dibromomethane	74-95-3	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Dichlorodifluoromethane	75-71-8	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	EFH (C12-C14)	PHCC12C14	8015M	mg/kg						1.4	U	1.4	U	--						14	U	28	U	--
Volatiles	EFH (C15-C20)	PHCC15C20	8015M	mg/kg						2.3		3.6		-44.07						6.5	J	28	UJ	200.00
Volatiles	EFH (C21-C30)	PHCC21C30	8015M	mg/kg						9.3		10		-7.25						54		67		-21.49
Volatiles	EFH (C30-C40)	PHCC30C40	8015M	mg/kg						36		28		25.00						230		370		-46.67
Volatiles	EFH (C8-C11)	PHCC8C11	8015M	mg/kg						1.4	U	1.4	U	--						14	U	28	U	--
Volatiles	Ethylbenzene	100-41-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Freon 113	76-13-1	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Freon 113a	75-88-7	8260B	ug/kg											5.2	UJ	5.1	UJ	--					
Volatiles	GRO (C5-C12)	GROC5C12	8015M	mg/kg																				
Volatiles	Hexachlorobutadiene	87-68-3	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Isopropylbenzene	98-82-8	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Isopropyltoluene	99-87-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	m,p-Xylene	179601-23-1	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Methyl tert-Butyl Ether	1634-04-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Methylene chloride	75-09-2	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	N-Butylbenzene	104-51-8	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	N-Propylbenzene	103-65-1	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	o-Xylene	95-47-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	sec-Butylbenzene	135-98-8	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Styrene	100-42-5	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	tert-Butylbenzene	98-06-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Tetrachloroethene	127-18-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Toluene	108-88-3	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	trans-1,2-Dichloroethene	156-60-5	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	trans-1,3-Dichloropropene	10061-02-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Trichloroethene	79-01-6	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Trichlorofluoromethane	75-69-4	8260B	ug/kg											4.2	U	4.1	U	--					
Volatiles	Vinyl Chloride	75-01-4	8260B	ug/kg											4.2	U	4.1	U	--					

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

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

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

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-022-SA5DN		SL-022-SA5DN		RPD	SL-057-SA5DN		SL-057-SA5DN		RPD	SL-144-SA5DN		SL-144-SA5DN		RPD	SL-201-SA5DN		SL-201-SA5DN		RPD
				Sample Name:	DUP05-SA5DN-QC-052311		SL-022-SA5DN-SS-0.0-0.5			DUP06-SA5DN-QC-052411		SL-057-SA5DN-SS-0.0-0.5			DUP07-SA5DN-QC-052511		SL-144-SA5DN-SB-2.0-3.0			DUP08-SA5DN-QC-052411		SL-201-SA5DN-SS-0.0-0.5		
				Sample Date	05/23/2011		05/23/2011			05/24/2011		05/24/2011			05/25/2011		05/25/2011			05/25/2011		05/25/2011		
				Start Depth:	0		0			0		0			2		2			0		0		
				End Depth:	0.5		0.5			0.5		0.5			3		3			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	29900		30200		-1.00	34800		33200		4.71	18800	J	19900	J	-5.68	27200		27600		-1.46
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.457	J	0.51	J	-10.96	0.106	J	0.0992	J	6.63	0.105	J	0.117	J	-10.81	0.3	J	0.291	J	3.05
Inorganic	Arsenic	7440-38-2	6020	mg/kg	8.68	J	8.16	J	6.18	6.49	J	5.68	J	13.31	10.6	J	12.1	J	-13.22	6.34	J	6.4	J	-0.94
Inorganic	Barium	7440-39-3	6020	mg/kg	145	J	199	J	-31.40	140		122		13.74	113	J	165	J	-37.41	119		118		0.84
Inorganic	Beryllium	7440-41-7	6020	mg/kg	1.07	J	1.01	J	5.77	0.841		0.743		12.37	0.602	J	0.842	J	-33.24	0.694		0.724		-4.23
Inorganic	Boron	7440-42-8	6010B	mg/kg	2.14	J	2.82	J	-27.42	9.41		8.53		9.81	5.19	U	26.8	U	--	21.4		21.9		-2.31
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.573	J	0.727	J	-23.69	0.351		0.314		11.13	0.0534	J	0.083	J	-43.40	0.393		0.387		1.54
Inorganic	Calcium	7440-70-2	6010B	mg/kg	9310	J	18500	J	-66.09	6710	J	6930	J	-3.23	3950	J	5500	J	-32.80	32900		34400		-4.46
Inorganic	Chromium	7440-47-3	6020	mg/kg	29.7	J	30.1	J	-1.34	31.7	J	27.4	J	14.55	24.2	J	23.1	J	4.65	29.5	J	29.4	J	0.34
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	1	J	0.74	J	29.89	0.58	J	0.95	J	-48.37	1.1	UJ	1.1	UJ	--	0.6	J	1.2	UJ	200.00
Inorganic	Cobalt	7440-48-4	6020	mg/kg	9.39	J	13	J	-32.25	11.9		10.7		10.62	6.6	J	13.9	J	-71.22	10.4		10.7		-2.84
Inorganic	Copper	7440-50-8	6020	mg/kg	25.7	J	22.8	J	11.96	18.7	J	22.8	J	-19.76	13.9	J	18.7	J	-29.45	18.5		18.5		--
Inorganic	Cyanide	57-12-5	9012B	mg/kg	0.56	U	0.55	U	--															
Inorganic	Fluoride	16984-48-8	300	mg/kg	3.7	J	4.7	J	-23.81	3	J	2.4	J	22.22	3.4	J	8.3	J	-83.76	1.3	J	1.2	UJ	200.00
Inorganic	Iron	7439-89-6	6010B	mg/kg	31500		32000		-1.57	35300		34800		1.43	28300		41200		-37.12	33000		33800		-2.40
Inorganic	Lead	7439-92-1	6020	mg/kg	22.5		20		11.76	19.1	J	13	J	38.01	7.73	J	9.3	J	-18.44	13.7	J	13.9	J	-1.45
Inorganic	Lithium	7439-93-2	6010B	mg/kg	26		26.1		-0.38	28.9		28.4		1.75	32.7		44.1		-29.69	23.7		23.2		2.13
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	6720		6650		1.05	8260		8400		-1.68	6270	J	7180	J	-13.53	7980		8020		-0.50
Inorganic	Manganese	7439-96-5	6010B	mg/kg	427		451		-5.47	440		477		-8.07	277	J	443	J	-46.11	418		440		-5.13
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.0303	J	0.0463	J	-41.78	0.0319	J	0.0185	J	53.17	0.106	UJ	0.0041	J	200.00	0.0166	J	0.0165	J	0.60
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	1.32	J	1.5	J	-12.77	0.341		0.329		3.58	0.427		0.475		-10.64	0.504	J	0.483	J	4.26
Inorganic	Nickel	7440-02-0	6020	mg/kg	30.8	J	28.9	J	6.37	22.5	J	20.5	J	9.30	16.1	J	17.3	J	-7.19	21		20.9		0.48
Inorganic	Nitrate	14797-55-8	300	mg/kg	1.2	J	1.6	J	-28.57															
Inorganic	Percent Moisture	MOIST	160.3M	%	13.1		12.9		1.54	15.7		13.4		15.81	6.5		9.3		-35.44	14.8		15.5		-4.62
Inorganic	Perchlorate	14797-73-0	314	ug/kg	34.5	U	34.4	U	--	35.6	U	34.6	U	--	32.1	U	33.1	U	--	35.2	U	35.5	U	--
Inorganic	Perchlorate	14797-73-0	6850	ug/kg	5.8	U			200.00															
Inorganic	pH	pH	9045M	pH unit	8.05		8.04		0.12	7.47		7.28		2.58	6.64 6.64		7.89		-17.21	8.02		8.09		-0.87
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	333	J	357	J	-6.96	447	J	523	J	-15.67	446		706		-45.14	694		694		--
Inorganic	Potassium	9/7/7440	6010B	mg/kg	4320	J	4400	J	-1.83	5110		5370		-4.96	2410	J	3420	J	-34.65	7370		7380		-0.14
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.21	J	0.232	J	-9.95	0.122	J	0.133	J	-8.63	0.145	J	0.104	J	32.93	0.314	J	0.316	J	-0.63
Inorganic	Silver	7440-22-4	6020	mg/kg	0.0939	J	0.0712	J	27.50	0.041	J	0.0417	J	-1.69	0.0155	J	0.0284	J	-58.77	0.0348	J	0.0461	J	-27.94
Inorganic	Sodium	7440-23-5	6010B	mg/kg	139		143		-2.84	98.5	J	104	J	-5.43	216	J	400	J	-59.74	116		121		-4.22
Inorganic	Strontium	7440-24-6	6010B	mg/kg	38		41.8		-9.52	37.2	J	36.3	J	2.45	27.3	J	33.9	J	-21.57	69.6		73.6		-5.59
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.494	J	0.491	J	0.61	0.348		0.342		1.74	0.267		0.394		-38.43	0.38		0.401		-5.38
Inorganic	Tin	7440-31-5	6010B	mg/kg	11.5	U	11.3	U	--	11.6	U	11.3	U	--	10.4	U	10.7	U	--	11.4	U	11.6	U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	1590		1660		-4.31	1470		1480		-0.68	1330		1830		-31.65	1180		1210		-2.51
Inorganic	Vanadium	7440-62-2	6020	mg/kg	102	J	91.4	J	10.96	59.1	J	52.4	J	12.02	45.3	J	45.7	J	-0.88	55.1	J	55.1	J	--
Inorganic	Zinc	7440-66-6	6020	mg/kg	195	J	162	J	18.49	78.2		69.7		11.49	60.2	J	98.9	J	-48.65	78.8		81.4		-3.25
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	6.81		6.98		-2.47	4.13	J	4.02	J	2.70	6		6.83		-12.94	1.06	J	2.13	J	-67.08
Misc. Organics	1,3,5-Trinitrobenzene	99-35-4	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	2,4,6-Trinitrotoluene	118-96-7	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	2,4-Diamino-6-nitrotoluene	6629-29-4	8330A	ug/kg	270	U	270	U	--															
Misc. Organics	2,4-Dinitrotoluene	121-14-2	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	2,6-Diamino-4-nitrotoluene	59229-75-3	8330A	ug/kg	270	U	270	U	--															
Misc. Organics	2,6-Dinitrotoluene	606-20-2	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	2-Amino-4,6-Dinitrotoluene	35572-78-2	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	2-Nitrotoluene	88-72-2	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	2-Propanol	67-63-0	8015B	ug/kg	580	U	570	U	1.74															
Misc. Organics	3-Nitrotoluene	99-08-1	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	4-Amino-2,6-Dinitrotoluene	19406-51-0	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	4-Nitrotoluene	99-99-0	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	Diethylene Glycol	111-46-6	8015M	mg/kg	12	U	11	UJ	--															
Misc. Organics	Ethanol	64-17-5	8015B	ug/kg	580	U	570	U	--															
Misc. Organics	Ethylene Glycol	107-21-1	8015M	mg/kg	12	U	11	UJ	--															
Misc. Organics	Formaldehyde	50-00-0	8315A	ug/kg	1700	UJ	1700	UJ	--															
Misc. Organics	HMX	2691-41-0	8330A	ug/kg	340	U	340	U	--															
Misc. Organics	m-Dinitrobenzene	99-65-0	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	Methanol	67-56-1	8015B	ug/kg	580	U	570	U	--															
Misc. Organics	m-Terphenyl	92-06-8	8015B	mg/kg	4	U	4	U	--															
Misc. Organics	Nitrobenzene	98-95-3	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	Nitroglycerin	55-63-0	8330A	ug/kg	2700	U	2700	U	--															
Misc. Organics	o-Terphenyl	84-15-1	8015B	mg/kg	4	U	4	U	--															
Misc. Organics	PETN	78-11-5	8330A	ug/kg	2700	U	2700	U	--															
Misc. Organics	Propylene glycol	57-55-6	8015M	mg/kg	12	U	11	U	--															
Misc. Organics	p-Terphenyl	92-94-4	8015B	mg/kg	4	U	4	U	--															

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-022-SA5DN		SL-022-SA5DN		RPD	SL-057-SA5DN		SL-057-SA5DN		RPD	SL-144-SA5DN		SL-144-SA5DN		RPD	SL-201-SA5DN		SL-201-SA5DN		RPD
				Sample Name:	DUP05-SA5DN-QC-052311		SL-022-SA5DN-SS-0.0-0.5			DUP06-SA5DN-QC-052411		SL-057-SA5DN-SS-0.0-0.5			DUP07-SA5DN-QC-052511		SL-144-SA5DN-SB-2.0-3.0			DUP08-SA5DN-QC-052411		SL-201-SA5DN-SS-0.0-0.5		
				Sample Date	05/23/2011		05/23/2011			05/24/2011		05/24/2011			05/25/2011		05/25/2011			05/25/2011		05/25/2011		
				Start Depth:	0		0			0		0			2		2			0		0		
				End Depth:	0.5		0.5			0.5		0.5			3		3			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Misc. Organics	RDX	121-82-4	8330A	ug/kg	140	U	140	U	--															
Misc. Organics	Tetryl	479-45-8	8330A	ug/kg	140	U	140	U	--															
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	73.8		81.1		-9.43	3.07	J	4.9	J	-45.92	5.23	U	5.4	U	--	3.44	J	3.71	J	-7.55
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	4.16	J	5.13	J	-20.88	5.8	U	0.876	J	200.00	5.23	UJ	5.4	UJ	--	0.782	J	0.831	J	-6.08
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	5.61	U	5.65	U	--	5.8	U	5.67	U	--	5.23	UJ	5.4	UJ	--	5.85	U	5.81	U	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	0.416	J	0.625	J	-40.15	5.8	U	5.67	U	--	5.23	UJ	5.4	UJ	--	5.85	U	5.81	U	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	0.581	J	0.673	J	-14.67	5.8	UJ	0.333	J	200.00	5.23	UJ	5.4	UJ	--	0.848	J	0.743	J	13.20
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	1.82	J	1.99	J	-8.92	0.243	J	0.382	J	-44.48	5.23	UJ	5.4	UJ	--	0.257	J	0.237	J	8.10
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	5.61	U	5.65	U	--	5.8	UJ	5.67	UJ	--	5.23	UJ	5.4	UJ	--	5.85	U	5.81	U	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	1.22	J	1.42	J	-15.15	0.248	J	0.404	J	-47.85	5.23	UJ	5.4	UJ	--	0.241	J	0.22	J	9.11
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	5.61	U	5.65	U	--	5.8	U	5.67	U	--	5.23	UJ	5.4	UJ	--	5.85	U	5.81	U	--
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	0.284	J	0.285	J	-0.35	0.0722	J	0.126	J	-54.29	5.23	UJ	5.4	UJ	--	5.85	U	5.81	U	--
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	0.676	J	0.673	J	0.44	0.135	J	0.152	J	-11.85	5.23	UJ	5.4	UJ	--	0.179	J	0.948	J	-136.47
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	5.61	U	5.65	U	--	5.8	U	5.67	U	--	5.23	UJ	5.4	UJ	--	5.85	U	5.81	U	--
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	0.88	J	0.641	J	31.43	5.8	U	5.67	U	--	5.23	UJ	5.4	UJ	--	0.591	J	0.634	J	-7.02
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.0422	J	0.0446	J	-5.53	0.0306	J	1.13	UJ	200.00	1.05	U	1.08	U	--	1.17	UJ	1.16	UJ	--
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	1.12	UJ	0.246	J	200.00	1.16	UJ	0.0807	J	200.00	1.05	UJ	1.08	UJ	--	0.73	J	0.654	J	10.98
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.8	U	1.9	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.8	U	1.9	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.8	U	1.9	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.8	U	1.9	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.8	U	1.9	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.8	U	1.9	U	--	4.7		3.1		41.03
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	2.3	J	1.9	UJ	200.00	2	UJ	1.3	J	200.00	1.8	U	1.9	U	--	2.8		2.3		19.61
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.8	U	1.9	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	1.9	U	1.9	U	--	2	U	2	U	--	1.8	U	1.9	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.8	U	3.8	U	--	3.9	U	3.8	U	--	3.5	U	3.6	U	--	3.9	U	3.9	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.8	U	3.8	U	--	3.9	U	3.8	U	--	3.5	U	3.6	U	--	3.9	U	3.9	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	1.9	J	3.8	UJ	200.00	3.9	UJ	1.6	J	200.00	3.5	U	3.6	U	--	3.9	U	3.9	U	--
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	782		786	J	-0.51	34.9		44.8		-24.84	10.5	UJ	10.8	UJ	--	29.3		31.5		-7.24
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	13		15		-14.29	11.6	U	11.3	U	--	10.5	UJ	10.8	UJ	--	11.7	U	11.6	U	--
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg	10	U	10	U	--	11	U	10	U	--						11	U	11	U	--
Pesticides	2,4 DB	94-82-6	8151A	ug/kg	2	U	2	U	--	2	U	8.1	U	--						2	U	2	U	--
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg	0.2	U	0.2	U	--	0.2	U	0.2	U	--						0.2	U	0.2	U	--
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg	0.16	J	0.16	J	--	0.2	UJ	0.18	J	200.00						0.2	U	0.2	U	--
Pesticides	2,4-D	94-75-7	8151A	ug/kg	4.1	U	4.1	U	--	4.3	U	4.2	U	--						4.2	U	4.2	U	--
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg	0.39	U	0.39	U	--	0.4	UJ	0.39	U	--						0.4	U	0.4	U	--
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg	0.39	U	0.39	U	--	0.4	UJ	0.39	U	--						1		1.1		-9.52
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg	0.65		0.52		22.22	0.4	UJ	0.54	U	--						1.3		1.3		--
Pesticides	Aldrin	309-00-2	8081A	ug/kg	0.19	U	0.19	U	--	0.2	UJ	0.19	U	--						0.19	U	0.2	U	--
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg	0.19	U	0.19	U	--	0.2	UJ	0.19	U	--						0.19	U	0.2	U	--
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg	0.19	U	0.19	U	--	0.2	UJ	0.19	U	--						0.19	U	0.2	U	--
Pesticides	Chlordane	57-74-9	8081A	ug/kg	3.9	UJ	0.98	J	200.00	4	UJ	1.9	J	200.00						1.8	J	1.9	J	-5.41
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg	0.19	U	0.19	U	--	0.2	UJ	0.19	U	--						0.14	J	0.14	J	--
Pesticides	Dicamba	1918-00-9	8151A	ug/kg	1.4	U	1.4	U	--	1.4	U	1.4	U	--						1.4	U	1.4	U	--
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg	2	U	2	U	--	2	U	2	U	--						2	U	2	U	--
Pesticides	Dieldrin	60-57-1	8081A	ug/kg	0.39	UJ	0.11	J	200.00	0.4	UJ	0.39	U	--						0.4	U	0.4	U	--
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg	2.8	R	2.8	R	--	2.8	U	2.8	U	--						2.8	U	2.8	U	--
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg	0.19	U	0.19	U	--	0.2	UJ	0.19	U	--						0.19	U	0.2	U	--
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg	0.39	U	0.39	U	--	0.4	UJ	0.39	U	--						0.2	J	0.4	UJ	200.00
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg	0.39	U	0.39	U	--	0.4	UJ	0.39	U	--						0.4	U	0.4	U	--
Pesticides	Endrin	72-20-8	8081A	ug/kg	0.39	U	0.39	U	--	0.4	UJ	0.39	U	--						0.4	U	0.4	U	--
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg	0.39	U	0.39	U	--	0.4	UJ	0.39	U	--						0.14	J	0.4	UJ	200.00
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg	0.39	U	0.39	U	--	0.4	UJ	0.39	U	--						0.4	U	0.4	U	--
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg	0.19	U	0.19	U	--	0.2	UJ	0.19	U	--						0.19	U	0.2	U	--
Pesticides	Heptachlor	76-44-8	8081A	ug/kg	0.19	U	0.19	U	--	0.2	UJ	0.19	U	--						0.19	U	0.2	U	--
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg	0.19	U	0.19	U	--	0.2	UJ	0.19	U	--						0.19	U	0.2	U	--
Pesticides	MCPA	94-74-6	8151A	ug/kg	290	U	290	U	--	320	U	400	U	--						970	UJ	110	J	200.00
Pesticides	MCPP	93-65-2	8151A	ug/kg	290	U	290	U	--	570	J	290	UJ	200.00						290	U	290	U	--
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg	1.9	U	1.9	U	--	2	UJ	1.9	U	--						1.9	U	2	U	--
Pesticides	Mirex	2385-85-5	8081A	ug/kg	0.39	UJ	0.12	J	200.00	0.4	UJ	0.39	U	--						0.4	U	0.4	U	--
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg	7.6	U	7.6	U	--	7.8	UJ	7.6	U	--						7.7	U	7.8	U	--
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	UJ	--	200	U	200	U	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	U	2	U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg	1200	U	1100	U	--	1200	U	1200	U	--	1100	U	1100	U	--	1200	U	1200	U	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	UJ	0.93	J	200.00
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-022-SA5DN		SL-022-SA5DN		RPD	SL-057-SA5DN		SL-057-SA5DN		RPD	SL-144-SA5DN		SL-144-SA5DN		RPD	SL-201-SA5DN		SL-201-SA5DN		RPD
				Sample Name:	DUP05-SA5DN-QC-052311		SL-022-SA5DN-SS-0.0-0.5			DUP06-SA5DN-QC-052411		SL-057-SA5DN-SS-0.0-0.5			DUP07-SA5DN-QC-052511		SL-144-SA5DN-SB-2.0-3.0			DUP08-SA5DN-QC-052411		SL-201-SA5DN-SS-0.0-0.5		
				Sample Date	05/23/2011		05/23/2011			05/24/2011		05/24/2011			05/25/2011		05/25/2011			05/25/2011		05/25/2011		
				Start Depth:	0		0			0		0			2		2			0		0		
				End Depth:	0.5		0.5			0.5		0.5			3		3			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg	190	UJ	190	UJ	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	380	U	380	U	--	400	U	380	U	--	360	U	370	U	--	390	U	390	U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	580	U	570	U	--	590	U	580	U	--	530	U	550	U	--	590	U	590	U	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	190	UJ	190	UJ	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg	580	U	570	U	--	590	U	580	U	--	530	U	550	U	--	590	U	590	U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	U	2	U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	U	2	U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg	580	U	570	U	--	590	U	580	U	--	530	U	550	U	--	590	U	590	U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	U	2	U	--
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg	3800	U	3800	UJ	--	4000	U	3800	R	--	3600	U	3700	UJ	--	3900	U	3900	UJ	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	9.5	U	1.9	U	--	4.3	J	8.2	J	-62.40	1.8	U	1.8	U	--	2	UJ	0.87	J	200.00
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	5.7	J	1.9	UJ	200.00	5	J	9.2	J	-59.15	1.8	U	1.8	U	--	0.81	J	1.1	J	-30.37
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	5.1	J	2	J	87.32	7.9	J	14	J	-55.71	1.8	U	1.8	U	--	4		4.9		-20.22
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	4.1	J	1.9	UJ	200.00	4.4	J	4.7	J	-6.59	1.8	U	1.8	U	--	2	UJ	0.99	J	200.00
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	11	J	1.9	UJ	200.00	4.1	J	9.2	J	-76.69	1.8	U	1.8	U	--	2	U	2	U	--
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg	580	U	570	U	--	590	U	580	U	--	530	U	550	U	--	590	U	590	U	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg	580	U	570	U	--	590	U	580	U	--	530	U	550	U	--	590	U	590	U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg	380	UJ	27	J	200.00	400	U	380	U	--						390	U	390	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg											19	U	20	U	--					
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C	ug/kg	190	U			200.00	200	U	190	U	5.13										
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg			21	U							19	U	20	U	--	11	J	21	UJ	200.00
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	190	U	190	U	--	200	U	190	U	5.13	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Chrysene	218-01-9	8270C	ug/kg																				
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	6.9	J	0.96	J	151.15	4.8	J	8.9	J	-59.85	1.8	U	1.8	U	--	1.4	J	1.7	J	-19.35
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	U	2	U	--
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C	ug/kg	190	U			200.00	200	U	190	U	--										
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg			21	U							19	U	20	U	--	21	U	21	U	--
Semivolatiles	Dimethylphthalate	131-11-3	8270C	ug/kg	190	U			200.00	200	U	190	U	--										
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg			21	U							19	U	20	U	--	21	U	21	U	--
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C	ug/kg	190	U			200.00	200	U	190	U	--										
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg			21	U							19	U	20	U	--	21	U	21	U	--
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C	ug/kg	190	U			200.00	200	U	190	U	--										
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg			21	U							19	U	20	U	--	21	U	21	U	--
Semivolatiles	Fluoranthene	206-44-0	8270C	ug/kg																				
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	16	J	1.9	UJ	200.00	6.7	J	12	J	-56.68	1.8	U	1.8	U	--	1.3	J	2.4	J	-59.46
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	U	2	U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	190	UJ	190	UJ	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	190	UJ	190	UJ	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	580	U	570	U	--	590	U	580	U	--	530	U	550	U	--	590	U	590	U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	UJ	0.82	J	200.00
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	0.89	J	1.4	J	-44.54
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	1625C	ng/kg	38.4	U	38.3	UJ	--															
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	9.5	U	1.9	U	--	9.9	U	9.6	U	--	1.8	U	1.8	U	--	2	U	2	U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	UJ	--	200	U	200	U	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	580	U	570	U	--	590	U	580	U	--	530	U	550	U	--	590	U	590	U	--
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	11	J	1.9	UJ	200.00	9.9	UJ	4.4	J	200.00	1.8	U	1.8	U	--	1	J	2	J	-66.67
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	190	U	190	U	--	200	U	190	U	--	180	U	180	U	--	200	U	200	U	--
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	11	J	1.9	UJ	200.00	6.6	J	11		-50.00	1.8	U	1.8	U	--	0.97	J	1.9	J	-64.81
Volatiles	1,1,1,2-Tetrachloroethane	630-20-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,1,1-Trichloroethane	71-55-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,1,2,2-Tetrachloroethane	79-34-5	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,1,2-Trichloroethane	79-00-5	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,1-Dichloroethane	75-34-3	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,1-Dichloroethene	75-35-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,1-Dichloropropene	563-58-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,2,3-Trichlorobenzene	87-61-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,2,3-Trichloropropane	96-18-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,2,4-Trichlorobenzene	120-82-1	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,2,4-Trimethylbenzene	95-63-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,2-Dibromo-3-chloropropane	96-12-8	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,2-Dibromoethane	106-93-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,2-Dichlorobenzene	95-50-1	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,2-Dichloroethane	107-06-2	8260B	ug/kg											4.2	U	4.2	U	--					

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-022-SA5DN		SL-022-SA5DN		RPD	SL-057-SA5DN		SL-057-SA5DN		RPD	SL-144-SA5DN		SL-144-SA5DN		RPD	SL-201-SA5DN		SL-201-SA5DN		RPD
				Sample Name:	DUP05-SA5DN-QC-052311		SL-022-SA5DN-SS-0.0-0.5			DUP06-SA5DN-QC-052411		SL-057-SA5DN-SS-0.0-0.5			DUP07-SA5DN-QC-052511		SL-144-SA5DN-SB-2.0-3.0			DUP08-SA5DN-QC-052411		SL-201-SA5DN-SS-0.0-0.5		
				Sample Date	05/23/2011		05/23/2011			05/24/2011		05/24/2011			05/25/2011		05/25/2011			05/25/2011		05/25/2011		
				Start Depth:	0		0			0		0			2		2			0		0		
				End Depth:	0.5		0.5			0.5		0.5			3		3			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Volatiles	1,2-Dichloropropane	78-87-5	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,3,5-Trimethylbenzene	108-67-8	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,3-Dichlorobenzene	541-73-1	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,3-Dichloropropane	142-28-9	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,4-Dichlorobenzene	106-46-7	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	1,4-Dioxane	123-91-1	8260B SIM	ug/kg											17	U	18	U	--					
Volatiles	2,2-Dichloropropane	594-20-7	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	2-Butanone	78-93-3	8260B	ug/kg											8.4	U	8.4	U	--					
Volatiles	2-Chloroethyl Vinyl Ether	110-75-8	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	2-Chlorotoluene	95-49-8	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	2-Hexanone	591-78-6	8260B	ug/kg											8.4	U	8.4	U	--					
Volatiles	4-Chlorotoluene	106-43-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	4-Methyl-2-Pentanone	108-10-1	8260B	ug/kg											8.4	U	8.4	U	--					
Volatiles	Acetone	67-64-1	8260B	ug/kg											8.4	U	8.4	U	--					
Volatiles	Benzene	71-43-2	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Bromobenzene	108-86-1	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Bromochloromethane	74-97-5	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Bromodichloromethane	75-27-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Bromoform	75-25-2	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Bromomethane	74-83-9	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Carbon tetrachloride	56-23-5	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Chlorobenzene	108-90-7	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Chloroethane	75-00-3	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Chloroform	67-66-3	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Chloromethane	74-87-3	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Chlorotrifluoroethene	79-38-9	8260B	ug/kg											5.2	U	5.3	U	--					
Volatiles	cis-1,2-Dichloroethene	156-59-2	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	cis-1,3-Dichloropropene	10061-01-5	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Dibromochloromethane	124-48-1	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Dibromomethane	74-95-3	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Dichlorodifluoromethane	75-71-8	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	5.6	J	14	UJ	200.00															
Volatiles	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	30	J	6.4	J	129.67															
Volatiles	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	81		60		29.79															
Volatiles	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	250		290		-14.81															
Volatiles	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	14	U	14	U	--															
Volatiles	Ethylbenzene	100-41-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Freon 113	76-13-1	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Freon 113a	75-88-7	8260B	ug/kg											5.2	U	5.3	U	--					
Volatiles	GRO (C5-C12)	GROC5C12	8015M	mg/kg																				
Volatiles	Hexachlorobutadiene	87-68-3	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Isopropylbenzene	98-82-8	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Isopropyltoluene	99-87-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	m,p-Xylene	179601-23-1	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Methyl tert-Butyl Ether	1634-04-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Methylene chloride	75-09-2	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	N-Butylbenzene	104-51-8	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	N-Propylbenzene	103-65-1	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	o-Xylene	95-47-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	sec-Butylbenzene	135-98-8	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Styrene	100-42-5	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	tert-Butylbenzene	98-06-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Tetrachloroethene	127-18-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Toluene	108-88-3	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	trans-1,2-Dichloroethene	156-60-5	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	trans-1,3-Dichloropropene	10061-02-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Trichloroethene	79-01-6	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Trichlorofluoromethane	75-69-4	8260B	ug/kg											4.2	U	4.2	U	--					
Volatiles	Vinyl Chloride	75-01-4	8260B	ug/kg											4.2	U	4.2	U	--					

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

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

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

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-117-SA5DN		SL-117-SA5DN		RPD	SL-014-SA5DN		SL-014-SA5DN		RPD	SL-108-SA5DN		SL-108-SA5DN		RPD	SL-138-SA5DN		SL-138-SA5DN		RPD
				Sample Name:	DUP09-SA5DN-QC-052711		SL-117-SA5DN-SS-0.0-0.5			DUP-10-SA5DN-QC-053111		SL-014-SA5DN-SB-4.0-5.0			DUP-11-SA5DN-QC-060111		SL-108-SA5DN-SS-0.0-0.5			DUP-12-SA5DN-QC-060211		SL-138-SA5DN-SS-0.0-0.5		
				Sample Date	05/27/2011		05/27/2011			05/31/2011		05/31/2011			06/01/2011		06/01/2011			06/02/2011		06/02/2011		
				Start Depth:	0		0			4		4			0		0			0		0		
				End Depth:	0.5		0.5			5		5			0.5		0.5			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	30000		30100		-0.33	38900		30300		24.86	17500		20500		-15.79	16200		16800		-3.64
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.101	J	0.135	J	-28.81	0.245	J	0.135	J	57.89	0.127	J	0.157	J	-21.13	0.231	J	0.237	J	-2.56
Inorganic	Arsenic	7440-38-2	6020	mg/kg	5.39		5.24		2.82	7.25		5.63	J	25.16	6.89	J	6.41	J	7.22	32	J	33.9	J	-5.77
Inorganic	Barium	7440-39-3	6020	mg/kg	134		138		-2.94	142		148		-4.14	142	J	151	J	-6.14	140	J	153	J	-8.87
Inorganic	Beryllium	7440-41-7	6020	mg/kg	0.897	J	0.889	J	0.90	0.863	J	0.867		-0.46	0.788	J	0.796	J	-1.01	0.744	J	0.923	J	-21.48
Inorganic	Boron	7440-42-8	6010B	mg/kg	5.31	U	5.42	U	--	15.4	J	5.54	UJ	200.00	9.83	J	5.28	UJ	200.00	5.09	U	4.99	U	--
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.489		0.5		-2.22	0.115		0.148		-25.10	0.384	J	0.435	J	-12.45	0.297	J	0.383	J	-25.29
Inorganic	Calcium	7440-70-2	6010B	mg/kg	5290		5500		-3.89	90600	J	6810	J	172.04	4830		5100		-5.44	3640		3740		-2.71
Inorganic	Chromium	7440-47-3	6020	mg/kg	29.3		31		-5.64	31.9	J	26.9	J	17.01	29.6	J	33.6	J	-12.66	27.6	J	28.7	J	-3.91
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	0.78	J	1.5	J	-63.16	0.32	J	1.2	J	-115.79	0.6	J	0.64	J	-6.45	0.58	J	0.39	J	39.18
Inorganic	Cobalt	7440-48-4	6020	mg/kg	9.49		9.33		1.70	13.1		12.6		3.89	9.46	J	9.66	J	-2.09	9.31	J	11.4	J	-20.18
Inorganic	Copper	7440-50-8	6020	mg/kg	16.6		16.4		1.21	14.7		13.5		8.51	17	J	17.9	J	-5.16	14.7	J	17	J	-14.51
Inorganic	Cyanide	57-12-5	9012B	mg/kg	0.53	U	0.54	U	--	0.54	U	0.56	U	--						0.48	U	0.51	U	--
Inorganic	Fluoride	16984-48-8	300	mg/kg	2		1.6		22.22	7.5	J	18.2	J	-83.27	2.1	J	2.4	J	-13.33	2.2	J	2.2	J	--
Inorganic	Iron	7439-89-6	6010B	mg/kg	32300		31800		1.56	28600		34300		-18.12	22400		25600		-13.33	22500		24100		-6.87
Inorganic	Lead	7439-92-1	6020	mg/kg	13.6	J	12.6	J	7.63	10.6	J	9.75		8.35	15.3		18.6		-19.47	9.65	J	10.3	J	-6.52
Inorganic	Lithium	7439-93-2	6010B	mg/kg	23.2		24.1		-3.81	25.3		28.5		-11.90	18.9		21.2		-11.47	30.9		32.6		-5.35
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	6500		6580		-1.22	6400		6890		-7.37	4630		5240		-12.36	5260		5570		-5.72
Inorganic	Manganese	7439-96-5	6010B	mg/kg	503	J	464	J	8.07	273	J	1370	J	-133.54	327	J	387	J	-16.81	314		344		-9.12
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.0407	J	0.0644	J	-45.10	0.0067	J	0.111	UJ	200.00	0.427	J	0.653	J	-41.85	0.0994	UJ	0.0985	UJ	--
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	0.519		0.536		-3.22	0.481		0.311		42.93	0.692	J	0.809	J	-15.59	0.74	J	0.843	J	-13.01
Inorganic	Nickel	7440-02-0	6020	mg/kg	21		21.1		-0.48	20		18.2	J	9.42	21.9	J	25.1	J	-13.62	22.5	J	26.1	J	-14.81
Inorganic	Nitrate	14797-55-8	300	mg/kg	3		2.4		22.22	1.6	J	1.6	J	--						2.5		2.4		4.08
Inorganic	Percent Moisture	MOIST	160.3M	%	9.5		9.5		--	11.6		12.3		-5.86	5.5		5.3		3.70	2.7		2.7		--
Inorganic	Perchlorate	14797-73-0	314	ug/kg	33.1	U	33.1	U	--	33.9	U	34.2	U	--	31.7	U	31.7	U	--	30.8	U	30.8	U	--
Inorganic	Perchlorate	14797-73-0	6850	ug/kg																				
Inorganic	pH	pH	9045M	pH unit	6.84		6.85		-0.15	8.62		8.95		-3.76	7.57		7.16		5.57	7.53		7.59		-0.79
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	396		387		2.30	174		169		2.92	366	J	408	J	-10.85	485		499		-2.85
Inorganic	Potassium	9/7/7440	6010B	mg/kg	5660		5780		-2.10	2930	J	2520	J	15.05	3680		4200		-13.20	2800		3180		-12.71
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.193	J	0.195	J	-1.03	0.452	UJ	0.064	J	200.00	0.145	J	0.164	J	-12.30	0.176	J	0.156	J	12.05
Inorganic	Silver	7440-22-4	6020	mg/kg	0.0556	J	0.0643	J	-14.51	0.0446	J	0.0847	J	-62.03	0.0667	J	0.151	J	-77.45	0.0402	J	0.0512	J	-24.07
Inorganic	Sodium	7440-23-5	6010B	mg/kg	92.8	J	101	J	-8.46	597		741		-21.52	87.2	J	103	J	-16.61	110		114		-3.57
Inorganic	Strontium	7440-24-6	6010B	mg/kg	30.6		31.7		-3.53	69.4		49.7		33.08	25.3		28.6		-12.24	19.6		18.9		3.64
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.354		0.362		-2.23	0.305		0.301		1.32	0.328	J	0.356	J	-8.19	0.391	J	0.388	J	0.77
Inorganic	Tin	7440-31-5	6010B	mg/kg	10.6	U	10.8	U	--	11.2	U	11.1	U	--	10.4	U	10.3	U	--	10.2	U	9.98	U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	1350		1420		-5.05	1410		963		37.67	1210		1150		5.08	1390		1480		-6.27
Inorganic	Vanadium	7440-62-2	6020	mg/kg	54.9		56.6		-3.05	63.9	J	42.9	J	39.33	52.4	J	50.3	J	4.09	47.5	J	51.3	J	-7.69
Inorganic	Zinc	7440-66-6	6020	mg/kg	78.8		80.2		-1.76	59.5		59.7		-0.34	83.2		88.4		-6.06	83.7	J	95.2	J	-12.86
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	3.46	J	4.09	J	-16.69	3.36	J	2.09	J	46.61	2.74	J	3.89	J	-34.69	5.18		5.95		-13.84
Misc. Organics	1,3,5-Trinitrobenzene	99-35-4	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	2,4,6-Trinitrotoluene	118-96-7	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	2,4-Diamino-6-nitrotoluene	6629-29-4	8330A	ug/kg	260	U	270	U	--	270	U	270	U	--						250	U	230	U	--
Misc. Organics	2,4-Dinitrotoluene	121-14-2	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	2,6-Diamino-4-nitrotoluene	59229-75-3	8330A	ug/kg	260	U	270	U	--	270	U	270	U	--						250	U	230	U	--
Misc. Organics	2,6-Dinitrotoluene	606-20-2	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	2-Amino-4,6-Dinitrotoluene	35572-78-2	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	2-Nitrotoluene	88-72-2	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	2-Propanol	67-63-0	8015B	ug/kg	550	U	550	U	--	570	U	570	U	--						510	U	510	U	--
Misc. Organics	3-Nitrotoluene	99-08-1	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	4-Amino-2,6-Dinitrotoluene	19406-51-0	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	4-Nitrotoluene	99-99-0	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	Diethylene Glycol	111-46-6	8015M	mg/kg	11	U	11	UJ	--	11	U	11	UJ	--						10	U	10	UJ	--
Misc. Organics	Ethanol	64-17-5	8015B	ug/kg	550	U	550	U	--	570	U	570	U	--						510	U	510	U	--
Misc. Organics	Ethylene Glycol	107-21-1	8015M	mg/kg	11	U	11	UJ	--	11	U	11	UJ	--						10	U	10	UJ	--
Misc. Organics	Formaldehyde	50-00-0	8315A	ug/kg	1700	U	1700	U	--	1700 1700	U U	1700	U	--						1700		2100		-21.05
Misc. Organics	HMX	2691-41-0	8330A	ug/kg	320	U	330	U	--	340	U	340	U	--						310	U	290	U	--
Misc. Organics	m-Dinitrobenzene	99-65-0	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	Methanol	67-56-1	8015B	ug/kg	550	U	550	U	--	190	J	570	UJ	200.00						510	U	510	U	--
Misc. Organics	m-Terphenyl	92-06-8	8015B	mg/kg	3.9	U	3.9	U	--	3.9	U	4	UJ	--						3.6	U	3.6	U	--
Misc. Organics	Nitrobenzene	98-95-3	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	Nitroglycerin	55-63-0	8330A	ug/kg	2600	U	2700	U	--	2700	U	2700	U	--						2500	U	2300	U	--
Misc. Organics	o-Terphenyl	84-15-1	8015B	mg/kg	3.9	U	3.9	U	--	3.9	U	4	U	--						3.6	U	3.6	U	--
Misc. Organics	PETN	78-11-5	8330A	ug/kg	2600	U	2700	U	--	2700	U	2700	U	--						2500	U	2300	U	--
Misc. Organics	Propylene glycol	57-55-6	8015M	mg/kg	11	U	11	UJ	--	11	U	11	UJ	--						10	U	10	UJ	--
Misc. Organics	p-Terphenyl	92-94-4	8015B	mg/kg	1.7	J	2.2	J	-25.64	3.9	U	4	U	--						3.6	U	3.6	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-117-SA5DN		SL-117-SA5DN		RPD	SL-014-SA5DN		SL-014-SA5DN		RPD	SL-108-SA5DN		SL-108-SA5DN		RPD	SL-138-SA5DN		SL-138-SA5DN		RPD
				Sample Name:	DUP09-SA5DN-QC-052711		SL-117-SA5DN-SS-0.0-0.5			DUP-10-SA5DN-QC-053111		SL-014-SA5DN-SB-4.0-5.0			DUP-11-SA5DN-QC-060111		SL-108-SA5DN-SS-0.0-0.5			DUP-12-SA5DN-QC-060211		SL-138-SA5DN-SS-0.0-0.5		
				Sample Date	05/27/2011		05/27/2011			05/31/2011		05/31/2011			06/01/2011		06/01/2011			06/02/2011		06/02/2011		
				Start Depth:	0		0			4		4			0		0			0		0		
				End Depth:	0.5		0.5			5		5			0.5		0.5			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																			
Misc. Organics	RDX	121-82-4	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
Misc. Organics	Tetryl	479-45-8	8330A	ug/kg	130	U	130	U	--	140	U	130	U	--						120	U	110	U	--
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	95.1	J	15.6	J	143.63	5.51	U	5.58	U	--	123		108		12.99	27.1		31.6		-15.33
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	7.1	J	2.47	J	96.76	5.51	UJ	5.58	UJ	--	10.3		9.73		5.69	2.51	J	2.55	J	-1.58
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	0.544	J	5.5	UJ	200.00	5.51	UJ	5.58	UJ	--	1.39	J	0.827	J	50.79	5.12	UJ	5.13	UJ	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	0.817	J	0.18	J	127.78	5.51	UJ	5.58	UJ	--	0.859	J	0.761	J	12.10	0.544	J	0.467	J	15.23
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	0.633	J	5.5	UJ	200.00	5.51	UJ	5.58	UJ	--	0.872	J	0.802	J	8.36	0.389	J	0.236	J	48.96
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	3.25	J	0.855	J	116.69	5.51	UJ	5.58	UJ	--	4.09	J	3.62	J	12.19	1.19	J	1.18	J	0.84
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	0.454	J	5.5	UJ	200.00	5.51	UJ	5.58	UJ	--	0.564	J	0.475	J	17.13	0.317	J	0.171	J	59.84
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	2.34	J	0.693	J	108.61	5.51	UJ	5.58	UJ	--	2.11	J	2.11	J	--	1.12	J	1.16	J	-3.51
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	1.25	J	0.642	J	64.27	5.51	UJ	5.58	UJ	--	0.773	J	0.646	J	17.90	5.12	UJ	5.13	UJ	--
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	0.526	J	5.5	UJ	200.00	5.51	UJ	5.58	UJ	--	0.457	J	0.39	J	15.82	0.41	J	0.307	J	28.73
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	0.56	J	0.757	J	-29.92	5.51	UJ	5.58	UJ	--	0.989	J	1.05	J	-5.98	0.364	J	0.231	J	44.71
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	0.727	J	5.5	UJ	200.00	5.51	U	5.58	U	--	0.665	J	0.586	J	12.63	0.301	J	0.166	J	57.82
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	1.07	J	5.5	UJ	200.00	5.51	UJ	5.58	UJ	--	0.478	J	0.722	J	-40.67	0.31	J	5.13	UJ	200.00
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.1	UJ	1.1	UJ	--	1.1	U	1.12	U	--	1.06	UJ	1.05	UJ	--	1.02	U	1.03	U	--
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	0.255	J	0.219	J	15.19	1.1	U	1.12	U	--	0.344	J	0.36	J	-4.55	0.102	J	1.03	U	200.00
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	9	U	9	U	--	1.7	U	8.7	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	9	U	9	U	--	1.7	U	8.7	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	9	U	9	U	--	1.7	U	8.7	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	9	U	9	U	--	1.7	U	8.7	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	9	U	9	U	--	1.7	U	8.7	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	9	U	9	U	--	1.7	U	8.7	U	--
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	6.1		4		41.58	1.9	U	1.9	U	--	4.5	J	4.7	J	-4.35	1.7	UJ	2.1	J	200.00
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	9	U	9	U	--	1.7	U	8.7	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	9	U	9	U	--	1.7	U	8.7	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.6	U	3.6	U	--	3.7	U	3.7	U	--	17	U	17	U	--	3.4	U	17	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.6	U	3.6	U	--	3.7	U	3.7	U	--	17	U	17	U	--	3.4	U	17	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	5	J	1.9	J	89.86	3.7	U	3.7	U	--	17	UJ	6.3	J	200.00	3.4	UJ	5.8	J	200.00
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	1510	J	180	J	157.40	11	UJ	11.2	UJ	--	1950		1790		8.56	512		592	J	-14.49
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	25.7	J	7.02	J	114.18	11	UJ	11.2	UJ	--	37		35		5.56	6.99	J	7.72	J	-9.93
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg	9.9	U	9.9	U	--						9.5	U	9.4	U	--	9.2	U	9.2	U	--
Pesticides	2,4 DB	94-82-6	8151A	ug/kg	1.9	U	1.9	U	--						1.8	U	1.8	U	--	1.7	U	1.7	U	--
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg	0.19	U	0.19	U	--						0.18	U	0.18	U	--	0.17	U	0.17	U	--
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg	0.19	U	0.19	U	--						0.18	UJ	0.11	J	200.00	0.17	U	0.17	U	--
Pesticides	2,4-D	94-75-7	8151A	ug/kg	4	U	4	U	--						3.8	U	3.8	U	--	3.7	U	3.7	U	--
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg	0.38	UJ	0.38	U	--						0.71	U	0.42	U	--	0.35	U	0.35	U	--
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg	0.47	J	0.52	J	-10.10						9.9		9.8		1.02	2.5	J	0.35	UJ	200.00
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg	0.97	J	1.1	J	-12.56						3.5	J	4.1	J	-15.79	5.8	J	0.35	UJ	200.00
Pesticides	Aldrin	309-00-2	8081A	ug/kg	0.18	UJ	0.18	U	--						0.18	U	0.18	R	--	0.17	U	0.17	U	--
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg	0.18	UJ	0.18	U	--						0.18	U	0.18	U	--	0.17	U	0.17	U	--
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg	0.18	UJ	0.18	U	--						0.18	U	0.18	R	--	0.17	U	0.17	U	--
Pesticides	Chlordane	57-74-9	8081A	ug/kg	2.1	J	2.3	J	-9.09						2.3	J	3.3	J	-35.71	4.3	J	3.5	UJ	200.00
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg	0.18	UJ	0.18	U	--						0.18	U	0.18	R	--	0.17	U	0.17	U	--
Pesticides	Dicamba	1918-00-9	8151A	ug/kg	1.3	U	1.3	U	--						1.3	UJ	0.56	J	200.00	1.2	U	1.2	U	--
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg	1.9	U	1.9	U	--						1.8	U	1.8	U	--	1.7	U	1.7	U	--
Pesticides	Dieldrin	60-57-1	8081A	ug/kg	0.38	UJ	0.38	U	--						0.37	U	0.39	U	--	0.47	J	0.35	UJ	200.00
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg	2.6	U	2.6	U	--						2.5	U	2.5	U	--	2.5	R	2.5	R	--
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg	0.18	UJ	0.18	U	--						0.18	U	0.18	U	--	0.17	U	0.17	U	--
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg	0.38	UJ	0.38	U	--						0.36	U	0.36	UJ	--	0.35	U	0.35	U	--
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg	0.38	UJ	0.38	U	--						0.36	U	0.36	U	--	0.35	U	0.35	U	--
Pesticides	Endrin	72-20-8	8081A	ug/kg	0.38	UJ	0.38	U	--						0.36	U	0.36	U	--	0.35	U	0.35	U	--
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg	0.38	UJ	0.38	U	--						0.36	U	0.36	U	--	0.17	J	0.35	UJ	200.00
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg	0.38	UJ	0.38	U	--						0.36	U	0.36	UJ	--	0.35	U	0.35	U	--
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg	0.18	UJ	0.18	U	--						0.18	U	0.18	U	--	0.17	U	0.17	U	--
Pesticides	Heptachlor	76-44-8	8081A	ug/kg	0.18	UJ	0.18	U	--						0.18	U	0.18	U	--	0.17	U	0.17	U	--
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg	0.18	UJ	0.095	J	200.00						0.18	U	0.18	U	--	0.87	U	0.17	U	--
Pesticides	MCPA	94-74-6	8151A	ug/kg	400	J	490	UJ	200.00						460	J	820	J	-56.25	260	UJ	290	J	200.00
Pesticides	MCPP	93-65-2	8151A	ug/kg	270	U	280	U	--						260	U	260	U	--	260	U	260	U	--
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg	1.8	UJ	1.8	U	--						1.8	U	1.8	U	--	1.7	U	1.7	U	--
Pesticides	Mirex	2385-85-5	8081A	ug/kg	0.26	J	0.38	UJ	200.00						0.36	U	0.36	U	--	0.16	J	0.35	UJ	200.00
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg	7.3	UJ	7.3	U	--						7	U	7	U	--	6.8	U	6.8	U	--
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	9.2	U	9.2	U	--	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.7	U	1.7	U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg	1100	UJ	1100	UJ	--	1100	U	1100	UJ	--	1000	U	1100	UJ	--	1000	U	1000	U	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	9.2	U	9.2	U	--	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.7	U	1.7	U	--
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-117-SA5DN		SL-117-SA5DN		RPD	SL-014-SA5DN		SL-014-SA5DN		RPD	SL-108-SA5DN		SL-108-SA5DN		RPD	SL-138-SA5DN		SL-138-SA5DN		RPD
				Sample Name:	DUP09-SA5DN-QC-052711		SL-117-SA5DN-SS-0.0-0.5			DUP-10-SA5DN-QC-053111		SL-014-SA5DN-SB-4.0-5.0			DUP-11-SA5DN-QC-060111		SL-108-SA5DN-SS-0.0-0.5			DUP-12-SA5DN-QC-060211		SL-138-SA5DN-SS-0.0-0.5		
				Sample Date	05/27/2011		05/27/2011			05/31/2011		05/31/2011			06/01/2011		06/01/2011			06/02/2011		06/02/2011		
				Start Depth:	0		0			4		4			0		0			0		0		
				End Depth:	0.5		0.5			5		5			0.5		0.5			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	370	U	370	U	--	380	U	380	U	--	350	U	350	U	--	340	U	340	U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	550	U	550	U	--	570	U	570	U	--	520	U	530	U	--	510	U	510	U	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg	550	U	550	U	--	570	U	570	U	--	520	U	530	U	--	510	U	510	U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg	9.2	U	9.2	U	--	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.7	U	1.7	U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg	9.2	U	9.2	U	--	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.7	U	1.7	U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg	550	U	550	U	--	570	U	570	U	--	520	U	530	U	--	510	U	510	U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg	5	J	4.5	J	10.53	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.7	U	1.7	U	--
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg	3700	U	3700	R	--	3800	U	3800	U	--	3500	U	3500	UJ	--	3400	U	3400	R	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	47	J	6.7	J	150.09	1.9	U	1.9	U	--	0.86	J	8.8	UJ	200.00	0.96	J	1.7	UJ	200.00
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	40	J	7.2	J	138.98	1.9	U	1.9	U	--	1	J	8.8	UJ	200.00	2.2	J	1.7	UJ	200.00
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	67	J	13	J	135.00	1.9	U	1.9	U	--	1.8	J	4.6	J	-87.50	4.4	J	1.7	UJ	200.00
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	13	J	7.6	J	52.43	1.9	U	1.9	U	--	4.1		3.5	J	15.79	1.5	J	1.7	UJ	200.00
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	36	J	6	J	142.86	1.9	U	1.9	U	--	1.2	J	5.3	J	-126.15	6.2	J	1.7	UJ	200.00
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg	550	U	550	U	--	570	U	570	U	--	520	U	530	U	--	510	U	510	U	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg	550	U	550	U	--	570	U	570	U	--	520	U	530	U	--	510	U	510	U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg			51	J							35	J			200.00					
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg	68	J			200.00	20	UJ	20	UJ	--			73	J		42	J	18	J	80.00
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C	ug/kg	180	U	180	U	--								180	U						
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg						20	U	20	U	--	19	U			200.00	19	U	19	U	--
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	Chrysene	218-01-9	8270C	ug/kg			130	J																
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	46				200.00	1.9	U	1.9	U	--	4		5.2	J	-26.09	5.8	J	1.7	UJ	200.00
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	5.3	J	9.2	UJ	200.00	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.2	J	1.7	UJ	200.00
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C	ug/kg	180	U	180	U	--								180	U						
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg						20	U	20	U	--	19	U			200.00	19	U	19	U	--
Semivolatiles	Dimethylphthalate	131-11-3	8270C	ug/kg	180	U	180	U	--								180	U						
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg						20	U	20	U	--	19	U			200.00	19	U	19	U	--
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C	ug/kg	180	U	180	U	--								180	U						
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg						20	UJ	20	U	--	19	U			200.00	19	U	19	U	--
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C	ug/kg	180	U	180	U	--								180	U						
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg						20	U	20	U	--	19	U			200.00	19	U	19	U	--
Semivolatiles	Fluoranthene	206-44-0	8270C	ug/kg																				
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	96	J	10	J	162.26	1.9	UJ	1.9	U	--	1.5	J	5.8	J	-117.81	2.9	J	1.7	UJ	200.00
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	9.2	U	9.2	U	--	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.7	U	1.7	U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	550	U	550	U	--	570	U	570	U	--	520	U	530	U	--	510	U	510	U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	14	J	3.9	J	112.85	1.9	U	1.9	U	--	0.91	J	8.8	UJ	200.00	1.1	J	1.7	UJ	200.00
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	9.2	U	9.2	U	--	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.7	U	1.7	U	--
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	1625C	ng/kg	368	U	368	U	--	68.1	J	21.4	J	104.36						340	U	337	U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	9.2	U	9.2	U	--	1.9	U	1.9	U	--	1.8	U	8.8	U	--	1.7	U	1.7	U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	UJ	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	550	U	550	U	--	570	U	570	U	--	520	U	530	U	--	510	U	510	U	--
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	25	J	4.8	J	135.57	1.9	U	1.9	U	--	0.9	J	8.8	UJ	200.00	1.4	J	1.7	UJ	200.00
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	180	U	180	U	--	190	U	190	U	--	170	U	180	U	--	170	U	170	U	--
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	76	J	13	J	141.57	1.9	U	1.9	U	--	1.5	J	5	J	-107.69	2.9	J	1.7	UJ	200.00
Volatiles	1,1,1,2-Tetrachloroethane	630-20-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,1,1-Trichloroethane	71-55-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,1,2,2-Tetrachloroethane	79-34-5	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,1,2-Trichloroethane	79-00-5	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,1-Dichloroethane	75-34-3	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,1-Dichloroethene	75-35-4	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,1-Dichloropropene	563-58-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,2,3-Trichlorobenzene	87-61-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,2,3-Trichloropropane	96-18-4	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,2,4-Trichlorobenzene	120-82-1	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,2,4-Trimethylbenzene	95-63-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,2-Dibromo-3-chloropropane	96-12-8	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,2-Dibromoethane	106-93-4	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,2-Dichlorobenzene	95-50-1	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	1,2-Dichloroethane	107-06-2	8260B	ug/kg						4.1	U	4	U	--										

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-117-SA5DN		SL-117-SA5DN			SL-014-SA5DN		SL-014-SA5DN			SL-108-SA5DN		SL-108-SA5DN			SL-138-SA5DN		SL-138-SA5DN		
				Sample Name:	DUP09-SA5DN-QC-052711		SL-117-SA5DN-SS-0.0-0.5			DUP-10-SA5DN-QC-053111		SL-014-SA5DN-SB-4.0-5.0			DUP-11-SA5DN-QC-060111		SL-108-SA5DN-SS-0.0-0.5			DUP-12-SA5DN-QC-060211		SL-138-SA5DN-SS-0.0-0.5		
				Sample Date	05/27/2011		05/27/2011			05/31/2011		05/31/2011			06/01/2011		06/01/2011			06/02/2011		06/02/2011		
				Start Depth:	0		0			4		4			0		0			0		0		
				End Depth:	0.5		0.5			5		5			0.5		0.5			0.5		0.5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					RPD					RPD				RPD					RPD
Volatiles	1,2-Dichloropropane	78-87-5	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	1,3,5-Trimethylbenzene	108-67-8	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	1,3-Dichlorobenzene	541-73-1	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	1,3-Dichloropropane	142-28-9	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	1,4-Dichlorobenzene	106-46-7	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	1,4-Dioxane	123-91-1	8260B SIM	ug/kg						18	U	18	U	--									
Volatiles	2,2-Dichloropropane	594-20-7	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	2-Butanone	78-93-3	8260B	ug/kg						8.2	U	8	U	--									
Volatiles	2-Chloroethyl Vinyl Ether	110-75-8	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	2-Chlorotoluene	95-49-8	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	2-Hexanone	591-78-6	8260B	ug/kg						8.2	U	8	U	--									
Volatiles	4-Chlorotoluene	106-43-4	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	4-Methyl-2-Pentanone	108-10-1	8260B	ug/kg						8.2	U	8	U	--									
Volatiles	Acetone	67-64-1	8260B	ug/kg						8.2	U	8	U	--									
Volatiles	Benzene	71-43-2	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Bromobenzene	108-86-1	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Bromochloromethane	74-97-5	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Bromodichloromethane	75-27-4	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Bromoform	75-25-2	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Bromomethane	74-83-9	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Carbon tetrachloride	56-23-5	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Chlorobenzene	108-90-7	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Chloroethane	75-00-3	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Chloroform	67-66-3	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Chloromethane	74-87-3	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Chlorotrifluoroethene	79-38-9	8260B	ug/kg						5.1	U	5	UJ	--									
Volatiles	cis-1,2-Dichloroethene	156-59-2	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	cis-1,3-Dichloropropene	10061-01-5	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Dibromochloromethane	124-48-1	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Dibromomethane	74-95-3	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	Dichlorodifluoromethane	75-71-8	8260B	ug/kg						4.1	U	4	U	--									
Volatiles	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	2.7	U	6.6	U	--	1.4	U	1.4	U	--						6.1	U	6.1	U	--
Volatiles	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	9.8		9.8		--	1.4	U	1.4	U	--						6.1	U	6.1	U	--
Volatiles	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	30	J	67	J	-76.29	1.4	U	1.4	U	--						9.5		13		-31.11
Volatiles	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	72	J	210	J	-97.87	1.4	UJ	0.71	J	200.00						53		49		7.84
Volatiles	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	2.7	U	6.6	U	--	1.4	U	1.4	U	--						6.1	U	6.1	U	--
Volatiles	Ethylbenzene	100-41-4	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Freon 113	76-13-1	8260B	ug/kg						4.1	UJ	0.19	J	200.00										
Volatiles	Freon 113a	75-88-7	8260B	ug/kg						5.1	U	5	U	--										
Volatiles	GRO (C5-C12)	GROC5C12	8015M	mg/kg						1.1	U	1.1	U	--										
Volatiles	Hexachlorobutadiene	87-68-3	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Isopropylbenzene	98-82-8	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Isopropyltoluene	99-87-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	m,p-Xylene	179601-23-1	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Methyl tert-Butyl Ether	1634-04-4	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Methylene chloride	75-09-2	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	N-Butylbenzene	104-51-8	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	N-Propylbenzene	103-65-1	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	o-Xylene	95-47-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	sec-Butylbenzene	135-98-8	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Styrene	100-42-5	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	tert-Butylbenzene	98-06-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Tetrachloroethene	127-18-4	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Toluene	108-88-3	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	trans-1,2-Dichloroethene	156-60-5	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	trans-1,3-Dichloropropene	10061-02-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Trichloroethene	79-01-6	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Trichlorofluoromethane	75-69-4	8260B	ug/kg						4.1	U	4	U	--										
Volatiles	Vinyl Chloride	75-01-4	8260B	ug/kg						4.1	U	4	U	--										

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

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

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

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-155-SA5DN		SL-155-SA5DN			SL-155-SA5DN		SL-024-SA5DN			SL-033-SA5DN		SL-033-SA5DN			SL-030-SA5DN		SL-030-SA5DN		
				Sample Name:	DUP-13-SA5DN-QC-060311		SL-155-SA5DN-SS-0.0-0.5			DUP13-SA5DN-QC-060711		SL-024-SA5DN-SB-4.0-5.0			DUP14-SA5DN-QC-061411		SL-033-SA5DN-SB-4.0-5.0			DUP15-SA5DN-QC-061511		SL-030-SA5DN-SB-4.0-5.0		
				Sample Date	06/03/2011		06/03/2011			06/07/2011		06/07/2011			06/14/2011		06/14/2011			06/15/2011		06/15/2011		
				Start Depth:	0		0			0		4			4		4			4		4		
				End Depth:	0.5		0.5			0.5		5			5		5			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					RPD					RPD				RPD					RPD
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	20400		19800		2.99	27800		25300		9.42	28600		29000		-1.39	20100		30100		-39.84
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.206	UJ	0.203	UJ	--	0.271	J	0.255	J	6.08	0.233	UJ	0.0937	J	200.00	0.225	UJ	0.228	UJ	--
Inorganic	Arsenic	7440-38-2	6020	mg/kg	6.29	J	7.79	J	-21.31	7.52	J	7.61	J	-1.19	4.97		5.9		-17.11	6.78	J	6.2	J	8.94
Inorganic	Barium	7440-39-3	6020	mg/kg	116	J	144	J	-21.54	180		201		-11.02	161		145		10.46	101	J	118	J	-15.53
Inorganic	Beryllium	7440-41-7	6020	mg/kg	0.636	J	0.815	J	-24.67	0.931	J	0.987	J	-5.84	0.85		0.816		4.08	0.793	J	0.982	J	-21.30
Inorganic	Boron	7440-42-8	6010B	mg/kg	5.04	U	5.18	U	--	15.1		12.7		17.27	3.66	J	5.81	U	200.00	6.15		8.77		-35.12
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.365	J	0.423	J	-14.72	0.344	J	0.429	J	-21.99	0.348		0.288		18.87	0.151	J	0.138	J	9.00
Inorganic	Calcium	7440-70-2	6010B	mg/kg	4440		4280		3.67	8480	J	13800	J	-47.76	11400	J	15300	J	-29.21	4520	J	22100	J	-132.08
Inorganic	Chromium	7440-47-3	6020	mg/kg	27.8	J	33	J	-17.11	32.9	J	34.4	J	-4.46	28.1	J	30	J	-6.54	24.2	J	30	J	-21.40
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	1	UJ	0.32	J	200.00	1.1	UJ	0.44	J	200.00	0.6	J	0.79	J	-27.34	1.1	U	1.1	U	--
Inorganic	Cobalt	7440-48-4	6020	mg/kg	9.72	J	12	J	-20.99	12.6	J	16.7	J	-27.99	10.8	J	10.9	J	-0.92	14.2	J	5.52	J	88.03
Inorganic	Copper	7440-50-8	6020	mg/kg	14.7	J	17.5	J	-17.39	17.7	J	19.5	J	-9.68	14.9	J	14.2	J	4.81	20.3	J	17	J	17.69
Inorganic	Cyanide	57-12-5	9012B	mg/kg						0.57	U	0.57	U	--	0.57	U	0.58	U	--	0.57	U	0.57	U	--
Inorganic	Fluoride	16984-48-8	300	mg/kg	1.7	J	1.6	J	6.06	17.2	J	15.6	J	9.76	6.4	J	5.2	J	20.69	5.2	J	6.1	J	-15.93
Inorganic	Iron	7439-89-6	6010B	mg/kg	26400		27800		-5.17	36000		34600		3.97	34800		30400		13.50	23700		29300		-21.13
Inorganic	Lead	7439-92-1	6020	mg/kg	8.67	J	11.8	J	-30.58	13.2	J	13.5	J	-2.25	9.1	J	9.16	J	-0.66	10.7	J	8.11	J	27.54
Inorganic	Lithium	7439-93-2	6010B	mg/kg	24.9		23.8		4.52	26.2		24.8		5.49	25		25.2		-0.80	21.7		25.7		-16.88
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	6170		5850		5.32	7090		7490		-5.49	6820		6920		-1.46	4650		5950		-24.53
Inorganic	Manganese	7439-96-5	6010B	mg/kg	428		421		1.65	567	J	365	J	43.35	441	J	290	J	41.31	156	J	179	J	-13.73
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.0989	UJ	0.0998	UJ	--	0.114	UJ	0.0048	J	200.00	0.267	J	0.112	UJ	200.00	0.0103	J	0.0215	J	-70.44
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	0.736	J	0.903	J	-20.38	0.333	J	0.361	J	-8.07	0.259		0.321		-21.38	0.265	J	0.269	J	-1.50
Inorganic	Nickel	7440-02-0	6020	mg/kg	17.7	J	20.5	J	-14.66	28.5	J	35	J	-20.47	18.7	J	18.4	J	1.62	19.4	J	20.6	J	-6.00
Inorganic	Nitrate	14797-55-8	300	mg/kg						1.9		1.5	J	23.53	1.4	J	1.9		-30.30	1.9		1.3	J	37.50
Inorganic	Percent Moisture	MOIST	160.3M	%	4.6		4.4		4.44	12.6		12.2		3.23	14.1		14		0.71	12.1		13		-7.17
Inorganic	Perchlorate	14797-73-0	314	ug/kg	31.4	U	31.4	U	--	34.3	U	34.2	U	--	34.9	U	34.9	U	--	34.1	U	34.5	U	--
Inorganic	Perchlorate	14797-73-0	6850	ug/kg																				
Inorganic	pH	pH	9045M	pH unit	7.06 7.06		7		0.85	8.43		8.81		-4.41	8.17		8.58		-4.90	8.36		8.59		-2.71
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	575		530		8.14	413		357		14.55	334	J	228	J	37.72	215	J	174	J	21.08
Inorganic	Potassium	9/7/7440	6010B	mg/kg	5850		5630		3.83	2930	J	3130	J	-6.60	3760	J	3130	J	18.29	2240	J	2440	J	-8.55
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.204	J	0.247	J	-19.07	0.073	J	0.119	J	-47.92	0.0974	J	0.106	J	-8.46	0.451	U	0.455	U	--
Inorganic	Silver	7440-22-4	6020	mg/kg	0.0381	J	0.0436	J	-13.46	0.0599	J	0.0547	J	9.08	0.0521	J	0.049	J	6.13	0.047	J	0.0864	J	-59.07
Inorganic	Sodium	7440-23-5	6010B	mg/kg	92	J	90.7	J	1.42	476		438		8.32	386		416		-7.48	250		338		-29.93
Inorganic	Strontium	7440-24-6	6010B	mg/kg	28.3		27.6		2.50	43.6		45.3		-3.82	43.8		43.7		0.23	20.7	J	36.3	J	-54.74
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.298	J	0.419	J	-33.75	0.386	J	0.424	J	-9.38	0.355		0.346		2.57	0.269	J	0.375	J	-32.92
Inorganic	Tin	7440-31-5	6010B	mg/kg	10.1	U	10.4	U	--	11.2	U	11.2	U	--	11.6	U	11.6	U	--	11	U	11.1	U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	1510		1500		0.66	1250		1410		-12.03	1340	J	1240	J	7.75	1020		1170		-13.70
Inorganic	Vanadium	7440-62-2	6020	mg/kg	47.4		55.3		-15.38	57.6	J	56.6	J	1.75	42.7	J	52.7	J	-20.96	44.7		51		-13.17
Inorganic	Zinc	7440-66-6	6020	mg/kg	75.6		87.7		-14.82	80		86.6		-7.92	77.4	J	75	J	3.15	49.8		57.8		-14.87
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	7.67		7.52		1.97	4.86	J	3.58	J	30.33	4.55	J	4.48	J	1.55	3	J	3.79	J	-23.27
Misc. Organics	1,3,5-Trinitrobenzene	99-35-4	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	2,4,6-Trinitrotoluene	118-96-7	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	2,4-Diamino-6-nitrotoluene	6629-29-4	8330A	ug/kg						270	U	270	U	--	280	U	280	U	--	270	U	280	U	--
Misc. Organics	2,4-Dinitrotoluene	121-14-2	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	2,6-Diamino-4-nitrotoluene	59229-75-3	8330A	ug/kg						270	U	270	U	--	280	U	280	U	--	270	U	280	U	--
Misc. Organics	2,6-Dinitrotoluene	606-20-2	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	2-Amino-4,6-Dinitrotoluene	35572-78-2	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	2-Nitrotoluene	88-72-2	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	2-Propanol	67-63-0	8015B	ug/kg						570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Misc. Organics	3-Nitrotoluene	99-08-1	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	4-Amino-2,6-Dinitrotoluene	19406-51-0	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	4-Nitrotoluene	99-99-0	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	Diethylene Glycol	111-46-6	8015M	mg/kg						11	U	11	UJ	--	12	U	12	UJ	--	11	U	11	UJ	--
Misc. Organics	Ethanol	64-17-5	8015B	ug/kg						570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Misc. Organics	Ethylene Glycol	107-21-1	8015M	mg/kg						11	U	11	UJ	--	12	U	12	U	--	11	U	11	U	--
Misc. Organics	Formaldehyde	50-00-0	8315A	ug/kg						1700	U	1700	U	--	1700	U	1700	U	--	1700	U	1700	U	--
Misc. Organics	HMX	2691-41-0	8330A	ug/kg						340	U	330	U	--	350	U	350	U	--	340	U	340	U	--
Misc. Organics	m-Dinitrobenzene	99-65-0	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	Methanol	67-56-1	8015B	ug/kg						570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Misc. Organics	m-Terphenyl	92-06-8	8015B	mg/kg						4	U	4	UJ	--	4.1	U	4.1	UJ	--	4	U	4	U	--
Misc. Organics	Nitrobenzene	98-95-3	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	Nitroglycerin	55-63-0	8330A	ug/kg						2700	U	2700	U	--	2800	U	2800	U	--	2700	U	2800	U	--
Misc. Organics	o-Terphenyl	84-15-1	8015B	mg/kg						4	U	4	U	--	4.1	U	4.1	U	--	4	U	4	U	--
Misc. Organics	PETN	78-11-5	8330A	ug/kg						2700	U	2700	U	--	2800	U	2800	U	--	2700	U	2800	U	--
Misc. Organics	Propylene glycol	57-55-6	8015M	mg/kg						11	U	11	UJ	--	12	U	12	U	--	11	U	11	U	--
Misc. Organics	p-Terphenyl	92-94-4	8015B	mg/kg						4	U	4	U	--	4.1	U	4.1	U	--	4	U	4	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-155-SA5DN		SL-155-SA5DN			SL-155-SA5DN		SL-024-SA5DN			SL-033-SA5DN		SL-033-SA5DN			SL-030-SA5DN		SL-030-SA5DN		
				Sample Name:	DUP-13-SA5DN-QC-060311		SL-155-SA5DN-SS-0.0-0.5			DUP13-SA5DN-QC-060711		SL-024-SA5DN-SB-4.0-5.0			DUP14-SA5DN-QC-061411		SL-033-SA5DN-SB-4.0-5.0			DUP15-SA5DN-QC-061511		SL-030-SA5DN-SB-4.0-5.0		
				Sample Date	06/03/2011		06/03/2011			06/07/2011		06/07/2011			06/14/2011		06/14/2011			06/15/2011		06/15/2011		
				Start Depth:	0		0			0		4			4		4			4		4		
				End Depth:	0.5		0.5			0.5		5			5		5			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					RPD					RPD				RPD					RPD
Misc. Organics	RDX	121-82-4	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
Misc. Organics	Tetryl	479-45-8	8330A	ug/kg						140	U	130	U	--	140	U	140	U	--	140	U	140	U	--
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	15		14.2		5.48	5.53	U	5.63	U	--	6.19	J	2.8	J	75.42	5.52	U	5.65	U	--
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	2.02	J	2.09	J	-3.41	5.53	U	5.63	U	--	1.34	J	5.62	UJ	200.00	5.52	U	5.65	U	--
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	5.19	U	5.16	U	--	5.53	UJ	5.63	UJ	--	5.72	U	5.62	U	--	5.52	UJ	5.65	UJ	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	0.272	J	0.287	J	-5.37	0.0484	J	0.083	J	-52.66	5.72	UJ	5.62	UJ	--	5.52	UJ	0.0294	J	200.00
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	0.303	J	0.294	J	3.02	5.53	UJ	5.63	UJ	--	0.402	J	5.62	UJ	200.00	5.52	U	5.65	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	0.958	J	1.05	J	-9.16	5.53	U	5.63	U	--	0.449	J	5.62	UJ	200.00	5.52	U	5.65	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	5.19	U	0.2	J	200.00	5.53	UJ	0.15	J	200.00	0.304	J	5.62	UJ	200.00	5.52	U	5.65	U	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	1.06	J	1.08	J	-1.87	5.53	U	5.63	U	--	5.72	U	5.62	U	--	5.52	U	5.65	U	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	1.06	J	1.04	J	1.90	0.265	J	5.63	UJ	200.00	5.72	U	5.62	U	--	0.111	J	0.0888	J	22.22
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	0.205	J	0.203	J	0.98	0.069	J	0.25	J	-113.48	0.278	J	5.62	UJ	200.00	5.52	U	5.65	U	--
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	0.234	J	0.327	J	-33.16	5.53	UJ	0.337	J	200.00	0.789	J	5.62	UJ	200.00	5.52	U	5.65	U	--
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	0.211	J	0.225	J	-6.42	5.53	UJ	5.63	UJ	--	0.342	J	5.62	UJ	200.00	5.52	U	5.65	U	--
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	5.19	U	0.318	J	200.00	5.53	UJ	5.63	UJ	--	0.716	J	5.62	UJ	200.00	5.52	U	5.65	U	--
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.0227	J	0.0404	J	-56.10	0.0271	J	0.0887	J	-106.39	1.14	UJ	1.12	UJ	--	1.1	U	1.13	U	--
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	0.123	J	0.169	J	-31.51	0.0257	J	0.0933	J	-113.61	0.198	J	1.12	UJ	200.00	1.1	U	1.13	U	--
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	1.8	U	1.8	U	--	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	1.8	U	1.8	U	--	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	1.8	U	1.8	U	--	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	1.8	UJ	1.8	UJ	--	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	1.8	UJ	1.8	UJ	--	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	1.8	UJ	1.8	UJ	--	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	1.6	J	1.6	J	--	1.9	U	1.9	U	--	0.83	J	1.4	J	-51.12	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	1.8	U	1.8	U	--	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	1.8	U	1.8	U	--	1.9	U	1.9	U	--	2	U	2	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.5	U	3.5	U	--	3.8	U	3.7	U	--	3.8	U	3.8	U	--	3.7	U	3.8	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.5	U	3.5	U	--	3.8	U	3.7	U	--	3.8	U	3.8	U	--	3.7	U	3.8	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	2.7	J	3.5	J	-25.81	3.8	U	3.7	U	--	3.8	UJ	1.8	J	200.00	3.7	U	3.8	U	--
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	190		186		2.13	20.1		13.5		39.29	54	J	14.7	J	114.41	11	U	11.3	U	--
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	6.78	J	6.88	J	-1.46	11.1	U	11.3	U	--	11.4	UJ	11.2	UJ	--	11	UJ	11.3	UJ	--
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg	9.4	U	9.4	U	--															
Pesticides	2,4 DB	94-82-6	8151A	ug/kg	4.6	U	2	U	--															
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg	0.48	U	0.18	U	--															
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg	0.18	U	0.18	U	--															
Pesticides	2,4-D	94-75-7	8151A	ug/kg	3.8	U	3.8	U	--															
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg	0.36	U	0.36	U	--															
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg	0.45	UJ	0.29	J	200.00															
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg	0.36	UJ	0.37	J	200.00															
Pesticides	Aldrin	309-00-2	8081A	ug/kg	0.17	UJ	0.17	U	--															
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg	0.17	UJ	0.17	U	--															
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg	0.17	UJ	0.17	U	--															
Pesticides	Chlordane	57-74-9	8081A	ug/kg	4	J	2.5	J	46.15															
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg	0.17	UJ	0.063	J	200.00															
Pesticides	Dicamba	1918-00-9	8151A	ug/kg	1.3	U	1.3	U	--															
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg	1.8	U	1.8	U	--															
Pesticides	Dieldrin	60-57-1	8081A	ug/kg	0.36	UJ	0.36	U	--															
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg	2.5	U	2.5	U	--															
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg	0.17	UJ	0.17	U	--															
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg	0.36	UJ	0.15	J	200.00															
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg	0.36	UJ	0.36	U	--															
Pesticides	Endrin	72-20-8	8081A	ug/kg	0.36	UJ	0.36	U	--															
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg	0.36	UJ	0.23	J	200.00															
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg	0.075	J	0.36	UJ	200.00															
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg	0.17	UJ	0.17	U	--															
Pesticides	Heptachlor	76-44-8	8081A	ug/kg	0.17	UJ	0.17	U	--															
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg	0.17	UJ	0.17	U	--															
Pesticides	MCPA	94-74-6	8151A	ug/kg	260	U	260	U	--															
Pesticides	MCPP	93-65-2	8151A	ug/kg	260	U	260	U	--															
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg	1.7	UJ	1.7	U	--															
Pesticides	Mirex	2385-85-5	8081A	ug/kg	0.36	UJ	0.36	U	--															
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg	6.9	UJ	6.9	U	--															
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	170	U	170	U	--	190	UJ	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg	1000	U	1000	U	--	1100	U	1100	R	--	1200	U	1200	U	--	1100	U	1100	U	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-155-SA5DN		SL-155-SA5DN		RPD	SL-155-SA5DN		SL-024-SA5DN		RPD	SL-033-SA5DN		SL-033-SA5DN		RPD	SL-030-SA5DN		SL-030-SA5DN		RPD
				Sample Name:	DUP-13-SA5DN-QC-060311		SL-155-SA5DN-SS-0.0-0.5			DUP13-SA5DN-QC-060711		SL-024-SA5DN-SB-4.0-5.0			DUP14-SA5DN-QC-061411		SL-033-SA5DN-SB-4.0-5.0			DUP15-SA5DN-QC-061511		SL-030-SA5DN-SB-4.0-5.0		
				Sample Date	06/03/2011		06/03/2011			06/07/2011		06/07/2011			06/14/2011		06/14/2011			06/15/2011		06/15/2011		
				Start Depth:	0		0			0		4			4		4			4		4		
				End Depth:	0.5		0.5			0.5		5			5		5			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																			
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	350	U	350	U	--	380	U	380	U	--	390	U	390	U	--	380	U	380	U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	520	U	520	U	--	570	U	570	R	--	580	U	580	U	--	570	U	570	U	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg	520	U	520	U	--	570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	UJ	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg	520	U	520	U	--	570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg	3500	U	3500	R	--	3800	U	3800	UJ	--	3900	U	3900	U	--	3800	U	3800	U	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	0.79	J	1.7	UJ	200.00	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	1.1	J	1.1	J	--	1.9	U	1.9	U	--	1.9	UJ	0.99	J	200.00	1.9	U	1.9	U	--
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	3.5		4.1		-15.79	1.9	U	1.9	U	--	0.88	J	1.9	UJ	200.00	1.9	U	1.9	U	--
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	UJ	1.2	J	200.00	1.9	U	1.9	U	--
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	0.82	J	0.73	J	11.61	1.9	U	1.9	U	--	1.9	UJ	1.3	J	200.00	1.9	U	1.9	U	--
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg	520	U	520	U	--	570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg	520	U	520	U	--	570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg	22	J	23	J	-4.44						35	J			200.00					
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg						20	U	20	U	--			21	U		20	U	21	U	-4.88
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C	ug/kg																				
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg	19	U	19	U	--	20	U	20	U	--	21	UJ	8.3	J	200.00	20	U	21	U	-4.88
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Chrysene	218-01-9	8270C	ug/kg																				
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	1.9	J	5.4	J	-95.89	1.9	U	1.9	U	--	0.73	J	1.1	J	-40.44	1.9	U	1.9	U	--
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C	ug/kg																				
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg	19	U	19	U	--	20	U	20	U	--	21	U	21	U	--	20	U	21	U	-4.88
Semivolatiles	Dimethylphthalate	131-11-3	8270C	ug/kg																				
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg	19	U	19	U	--	20	U	20	UJ	--	21	U	21	U	--	20	U	21	U	-4.88
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C	ug/kg																				
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg	19	UJ	19	UJ	--	20	U	20	U	--	7.3	J	9.6	J	-27.22	20	U	21	U	-4.88
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C	ug/kg																				
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg	19	U	19	U	--	20	U	20	U	--	21	U	21	U	--	20	U	21	U	-4.88
Semivolatiles	Fluoranthene	206-44-0	8270C	ug/kg																				
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	2.5	J	2.6	J	-3.92	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	520	U	520	U	--	570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	0.88	J	0.96	J	-8.70	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	170	U	170	U	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	1625C	ng/kg						65.1	J	37.8	UJ	200.00	387	U	388	U	--	24.5	J	36.3	J	-38.82
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	170	U	170	UJ	--	190	U	190	UJ	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	520	U	520	U	--	570	U	570	U	--	580	U	580	U	--	570	U	570	U	--
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	1.7		1.6	J	6.06	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	170	U	170	U	--	190	U	190	U	--	190	U	190	U	--	190	U	190	U	--
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	1.5	J	1.7		-12.50	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
Volatiles	1,1,1,2-Tetrachloroethane	630-20-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,1,1-Trichloroethane	71-55-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,1,2,2-Tetrachloroethane	79-34-5	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,1,2-Trichloroethane	79-00-5	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,1-Dichloroethane	75-34-3	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,1-Dichloroethene	75-35-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,1-Dichloropropene	563-58-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,2,3-Trichlorobenzene	87-61-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,2,3-Trichloropropane	96-18-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,2,4-Trichlorobenzene	120-82-1	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,2,4-Trimethylbenzene	95-63-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,2-Dibromo-3-chloropropane	96-12-8	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,2-Dibromoethane	106-93-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,2-Dichlorobenzene	95-50-1	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,2-Dichloroethane	107-06-2	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-155-SA5DN		SL-155-SA5DN			SL-155-SA5DN		SL-024-SA5DN			SL-033-SA5DN			SL-033-SA5DN			SL-030-SA5DN		SL-030-SA5DN		
				Sample Name:	DUP-13-SA5DN-QC-060311		SL-155-SA5DN-SS-0.0-0.5			DUP13-SA5DN-QC-060711		SL-024-SA5DN-SB-4.0-5.0			DUP14-SA5DN-QC-061411			SL-033-SA5DN-SB-4.0-5.0			DUP15-SA5DN-QC-061511		SL-030-SA5DN-SB-4.0-5.0		
				Sample Date	06/03/2011		06/03/2011			06/07/2011		06/07/2011			06/14/2011			06/14/2011			06/15/2011		06/15/2011		
				Start Depth:	0		0			0		4			4			4			4		4		
				End Depth:	0.5		0.5			0.5		5			5			5			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN			5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO			SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD			N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					RPD					RPD					RPD					RPD
Volatiles	1,2-Dichloropropane	78-87-5	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,3,5-Trimethylbenzene	108-67-8	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,3-Dichlorobenzene	541-73-1	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,3-Dichloropropane	142-28-9	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,4-Dichlorobenzene	106-46-7	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	1,4-Dioxane	123-91-1	8260B SIM	ug/kg						16	U	14	U	--	16	U	14	U	--	14	U	15	U	--
Volatiles	2,2-Dichloropropane	594-20-7	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	2-Butanone	78-93-3	8260B	ug/kg						8	U	8	U	--	7.4	U	7.9	U	--	8.2	U	7.9	U	--
Volatiles	2-Chloroethyl Vinyl Ether	110-75-8	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	2-Chlorotoluene	95-49-8	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	2-Hexanone	591-78-6	8260B	ug/kg						8	U	8	U	--	7.4	U	7.9	U	--	8.2	U	7.9	U	--
Volatiles	4-Chlorotoluene	106-43-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	4-Methyl-2-Pentanone	108-10-1	8260B	ug/kg						8	U	8	U	--	7.4	U	7.9	U	--	8.2	U	7.9	U	--
Volatiles	Acetone	67-64-1	8260B	ug/kg						8	U	8	U	--	7.4	UJ	7.9	UJ	--	8.2	UJ	8.1	J	200.00
Volatiles	Benzene	71-43-2	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Bromobenzene	108-86-1	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Bromochloromethane	74-97-5	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Bromodichloromethane	75-27-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Bromoform	75-25-2	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Bromomethane	74-83-9	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Carbon tetrachloride	56-23-5	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Chlorobenzene	108-90-7	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Chloroethane	75-00-3	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Chloroform	67-66-3	8260B	ug/kg						4	U	4	U	--	0.19	J	3.9	UJ	200.00	4.1	U	4	U	--
Volatiles	Chloromethane	74-87-3	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Chlorotrifluoroethene	79-38-9	8260B	ug/kg						5	U	5	U	--	4.6	U	4.9	UJ	--	5.1	U	5	UJ	--
Volatiles	cis-1,2-Dichloroethene	156-59-2	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	cis-1,3-Dichloropropene	10061-01-5	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Dibromochloromethane	124-48-1	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Dibromomethane	74-95-3	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Dichlorodifluoromethane	75-71-8	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	EFH (C12-C14)	PHCC12C14	8015M	mg/kg						1.4	U	1.4	U	--	7	U	1.4	U	--	1.4	U	1.4	U	--
Volatiles	EFH (C15-C20)	PHCC15C20	8015M	mg/kg						1.4	U	1.4	U	--	7	U	1.4	U	--	1.4	U	1.4	U	--
Volatiles	EFH (C21-C30)	PHCC21C30	8015M	mg/kg						1.4	U	1.4	U	--	22	J	11	J	66.67	0.48	J	1.4	UJ	200.00
Volatiles	EFH (C30-C40)	PHCC30C40	8015M	mg/kg						1.4	U	1.4	U	--	75	J	25	J	100.00	1.4	U	1.4	U	--
Volatiles	EFH (C8-C11)	PHCC8C11	8015M	mg/kg						1.4	U	1.4	U	--	7	UJ	0.54	J	200.00	1.4	U	1.4	U	--
Volatiles	Ethylbenzene	100-41-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Freon 113	76-13-1	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Freon 113a	75-88-7	8260B	ug/kg						5	U	5	U	--	4.6	U	4.9	U	--	5.1	U	5	U	--
Volatiles	GRO (C5-C12)	GROC5C12	8015M	mg/kg						0.9	U	1	U	--	1	U	1	U	--	1	U	1	U	--
Volatiles	Hexachlorobutadiene	87-68-3	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Isopropylbenzene	98-82-8	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Isopropyltoluene	99-87-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	m,p-Xylene	179601-23-1	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Methyl tert-Butyl Ether	1634-04-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Methylene chloride	75-09-2	8260B	ug/kg						4	U	4	U	--	15	J	3.9	UJ	200.00	4.1	UJ	4	UJ	--
Volatiles	N-Butylbenzene	104-51-8	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	N-Propylbenzene	103-65-1	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	o-Xylene	95-47-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	sec-Butylbenzene	135-98-8	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Styrene	100-42-5	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	tert-Butylbenzene	98-06-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Tetrachloroethene	127-18-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Toluene	108-88-3	8260B	ug/kg						4	U	4	U	--	0.33	J	0.24	J	31.58	0.1	J	0.1	J	--
Volatiles	trans-1,2-Dichloroethene	156-60-5	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	trans-1,3-Dichloropropene	10061-02-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Trichloroethene	79-01-6	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Trichlorofluoromethane	75-69-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--
Volatiles	Vinyl Chloride	75-01-4	8260B	ug/kg						4	U	4	U	--	3.7	U	3.9	U	--	4.1	U	4	U	--

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

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

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

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-112-SA5DN	SL-112-SA5DN	RPD	SL-092-SA5DN	SL-092-SA5DN	RPD	SL-116-SA5DN	SL-116-SA5DN	RPD	SL-200-SA5DN	SL-200-SA5DN	RPD
				Sample Name:	DUP16-SA5DN-QC-062211	SL-112-SA5DN-SB-4.0-5.0		DUP17-SA5DN-QC-062411	SL-092-SA5DN-SB-4.0-5.0		DUP18-SA5DN-QC-062811	SL-116-SA5DN-SB-2.0-3.0		DUP-19-SA5DN-QC-070611	SL-200-SA5DN-SB-4.0-5.0	
				Sample Date	06/22/2011	06/22/2011		06/24/2011	06/24/2011		06/28/2011	06/28/2011		07/06/2011	07/06/2011	
				Start Depth:	4	4		4	4		2	2		4	4	
				End Depth:	5	5		5	5		3	3		5	5	
				Area:	5DN	5DN		5DN	5DN		5DN	5DN		5DN	5DN	
				Matrix:	SO	SO		SO	SO		SO	SO		SO	SO	
				Sample Type:	FD	N		FD	N		FD	N		FD	N	
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit												
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	37900	36500	3.76	33300	29900	10.76	20600	16700	20.91	31400	32200	-2.52
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.23 J	0.229 J	0.44	0.231 UJ	0.223 UJ	--	0.209 UJ	0.215 UJ	--	0.23 J	0.337 J	-37.74
Inorganic	Arsenic	7440-38-2	6020	mg/kg	7.9 J	12.3 J	-43.56	7.82 J	10.1 J	-25.45	12.7	8.46	40.08	7.06 J	9.25 J	-26.85
Inorganic	Barium	7440-39-3	6020	mg/kg	187 J	229 J	-20.19	178 J	182 J	-2.22	130 J	95.9 J	30.19	126 J	180 J	-35.29
Inorganic	Beryllium	7440-41-7	6020	mg/kg	1.01 J	1.28 J	-23.58	1.08 J	1.28 J	-16.95	0.817	0.675	19.03	0.966 J	1.3 J	-29.48
Inorganic	Boron	7440-42-8	6010B	mg/kg	16.6	17.8	-6.98	16.9	16	5.47	4.06 J	4.3 J	-5.74	5.73 U	5.57 U	--
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.339 J	0.506 J	-39.53	0.318 J	0.37 J	-15.12	0.17	0.117	36.93	0.359 J	0.454 J	-23.37
Inorganic	Calcium	7440-70-2	6010B	mg/kg	6970	6820	2.18	8120	7840	3.51	3880	3530	9.45	24300	19900	19.91
Inorganic	Chromium	7440-47-3	6020	mg/kg	33.7 J	47 J	-32.96	34.3 J	42.5 J	-21.35	41.6 J	26.1 J	45.79	44.8 J	56.4 J	-22.92
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	0.7 J	0.74 J	-5.56	0.49 J	0.48 J	2.06	0.48 J	0.46 J	4.26	0.66 J	0.58 J	12.90
Inorganic	Cobalt	7440-48-4	6020	mg/kg	11.6 J	18.5 J	-45.85	12.6 J	16.7 J	-27.99	10.4 J	7.09 J	37.85	13 J	17.1 J	-27.24
Inorganic	Copper	7440-50-8	6020	mg/kg	16.9 J	23.2 J	-31.42	20.3 J	23.7 J	-15.45	16 J	12.2 J	26.95	21.9 J	26.7 J	-19.75
Inorganic	Cyanide	57-12-5	9012B	mg/kg	0.56 U	0.58 U	--									
Inorganic	Fluoride	16984-48-8	300	mg/kg	3.3 J	3 J	9.52	3.3 J	3.3 J	--	3.4 J	5.9 J	-53.76	3.2 J 3.2 J	2.8 J	13.33
Inorganic	Iron	7439-89-6	6010B	mg/kg	38800	38400	1.04	44000 J	33800 J	26.22	25700	22200	14.61	35400	33100	6.72
Inorganic	Lead	7439-92-1	6020	mg/kg	11.2 J	15.9 J	-34.69	12.9 J	13.7 J	-6.02	8.55 J	8.01 J	6.52	10.3 J	14.3 J	-32.52
Inorganic	Lithium	7439-93-2	6010B	mg/kg	30.9	31.3	-1.29	31	29.9	3.61	28.1	26.1	7.38	27.4	28.3	-3.23
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	8360	8050	3.78	9210	7700	17.86	5710	5180	9.73	8190	7780	5.13
Inorganic	Manganese	7439-96-5	6010B	mg/kg	453	443	2.23	361	472	-26.65	329	256	24.96	417	443	-6.05
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.01 J	0.112 U	200.00	0.116 U	0.112 U	--	0.0188 J	0.106 UJ	200.00	0.11 U	0.111 U	--
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	0.601 J	0.831 J	-32.12	0.436 J	0.518 J	-17.19	0.538	0.329	48.21	0.527 J	0.688 J	-26.50
Inorganic	Nickel	7440-02-0	6020	mg/kg	27 J	42.5 J	-44.60	28.2 J	31.7 J	-11.69	33.8 J	20.7 J	48.07	24.7 J	31.9 J	-25.44
Inorganic	Nitrate	14797-55-8	300	mg/kg	1.7	2.1	-21.05									
Inorganic	Percent Moisture	MOIST	160.3M	%	12.8	14.5	-12.45	15.1	13	14.95	8	7.1	11.92	14.5	13.7	5.67
Inorganic	Perchlorate	14797-73-0	314	ug/kg	34.4 U	35.1 U	--	35.3 U	34.5 U	--	32.6 U	32.3 U	--	35.1 U	34.8 U	--
Inorganic	Perchlorate	14797-73-0	6850	ug/kg					5.7 U							
Inorganic	pH	pH	9045M	pH unit	7.39	7.38	0.14	7.76	7.82	-0.77	6.48	7.87	-19.37	7.9	7.88	0.25
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	337	325	3.63	452	406	10.72	365 J	363 J	0.55	542	440	20.77
Inorganic	Potassium	9/7/7440	6010B	mg/kg	3780 J	3900 J	-3.13	4050 J	3830 J	5.58	1840 J	2320 J	-23.08	6020	6100	-1.32
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.104 J	0.144 J	-32.26	0.0799 J	0.15 J	-60.98	0.128 J	0.103 J	21.65	0.221 J	0.243 J	-9.48
Inorganic	Silver	7440-22-4	6020	mg/kg	0.0683 J	0.0865 J	-23.51	0.0374 J	0.0675 J	-57.39	0.183 J	0.0883 J	69.81	0.0681 J	0.0445 J	41.92
Inorganic	Sodium	7440-23-5	6010B	mg/kg	190	186	2.13	240	223	7.34	193	150	25.07	108 J	93.2 J	14.71
Inorganic	Strontium	7440-24-6	6010B	mg/kg	37.7	36.3	3.78	44.6	38	15.98	26.9	22.8	16.50	62.2	43.8	34.72
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.355 J	0.549 J	-42.92	0.369 J	0.423 J	-13.64	0.362	0.295	20.40	0.348	0.529	-41.28
Inorganic	Tin	7440-31-5	6010B	mg/kg	11.1 U	11.5 U	--	11.8 U	11.2 U	--	10.5 U	10.7 U	--	11.5 U	11.1 U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	1050	1270	-18.97	1330	1350	-1.49	1180	1210	-2.51	1560	1570	-0.64
Inorganic	Vanadium	7440-62-2	6020	mg/kg	54.7 J	80.6 J	-38.29	57.4 J	77.2 J	-29.42	83.9 J	51.9 J	47.13	85.2 J	108 J	-23.60
Inorganic	Zinc	7440-66-6	6020	mg/kg	79.3 J	109 J	-31.55	85.2 J	99 J	-14.98	77.4	58.4	27.98	88.2 J	109 J	-21.10
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	5.91	4.33 J	30.86	8.47	8.67	-2.33	4.06 J	3.95 J	2.75	7.93	6.38	21.66
Misc. Organics	1,3,5-Trinitrobenzene	99-35-4	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	2,4,6-Trinitrotoluene	118-96-7	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	2,4-Diamino-6-nitrotoluene	6629-29-4	8330A	ug/kg	280 U	270 U	--									
Misc. Organics	2,4-Dinitrotoluene	121-14-2	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	2,6-Diamino-4-nitrotoluene	59229-75-3	8330A	ug/kg	280 U	270 U	--									
Misc. Organics	2,6-Dinitrotoluene	606-20-2	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	2-Amino-4,6-Dinitrotoluene	35572-78-2	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	2-Nitrotoluene	88-72-2	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	2-Propanol	67-63-0	8015B	ug/kg	570 U	580 U	--									
Misc. Organics	3-Nitrotoluene	99-08-1	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	4-Amino-2,6-Dinitrotoluene	19406-51-0	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	4-Nitrotoluene	99-99-0	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	Diethylene Glycol	111-46-6	8015M	mg/kg	11 U	12 UJ	--									
Misc. Organics	Ethanol	64-17-5	8015B	ug/kg	570 U	580 U	--									
Misc. Organics	Ethylene Glycol	107-21-1	8015M	mg/kg	11 U	12 UJ	--									
Misc. Organics	Formaldehyde	50-00-0	8315A	ug/kg	1700 U	1800 U	--									
Misc. Organics	HMX	2691-41-0	8330A	ug/kg	340 U	340 U	--									
Misc. Organics	m-Dinitrobenzene	99-65-0	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	Methanol	67-56-1	8015B	ug/kg	570 U	580 U	--									
Misc. Organics	m-Terphenyl	92-06-8	8015B	mg/kg	4 U	4.1 UJ	--									
Misc. Organics	Nitrobenzene	98-95-3	8330A	ug/kg	140 U	130 U	--									
Misc. Organics	Nitroglycerin	55-63-0	8330A	ug/kg	2800 U	2700 U	--									
Misc. Organics	o-Terphenyl	84-15-1	8015B	mg/kg	4 U	4.1 U	--									
Misc. Organics	PETN	78-11-5	8330A	ug/kg	2800 U	2700 U	--									
Misc. Organics	Propylene glycol	57-55-6	8015M	mg/kg	11 U	12 U	--									
Misc. Organics	p-Terphenyl	92-94-4	8015B	mg/kg	4 U	4.1 U	--									

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-112-SA5DN		SL-112-SA5DN		RPD	SL-092-SA5DN		SL-092-SA5DN		RPD	SL-116-SA5DN		SL-116-SA5DN		RPD	SL-200-SA5DN		SL-200-SA5DN		RPD
				Sample Name:	DUP16-SA5DN-QC-062211		SL-112-SA5DN-SB-4.0-5.0			DUP17-SA5DN-QC-062411		SL-092-SA5DN-SB-4.0-5.0			DUP18-SA5DN-QC-062811		SL-116-SA5DN-SB-2.0-3.0			DUP-19-SA5DN-QC-070611		SL-200-SA5DN-SB-4.0-5.0		
				Sample Date	06/22/2011		06/22/2011			06/24/2011		06/24/2011			06/28/2011		06/28/2011			07/06/2011		07/06/2011		
				Start Depth:	4		4			4		4			2		2			4		4		
				End Depth:	5		5			5		5			3		3			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Misc. Organics	RDX	121-82-4	8330A	ug/kg	140	U	130	U	--															
Misc. Organics	Tetryl	479-45-8	8330A	ug/kg	140	U	130	U	--															
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	5.7	U	5.8	U	--	5.81	U	5.54	U	--	5.35	U	5.34	U	--	5.57	U	5.53	U	--
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	5.7	U	5.8	U	--	5.81	U	5.54	U	--	5.35	UJ	5.34	UJ	--	5.57	U	5.53	U	--
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	5.7	U	5.8	U	--	5.81	U	5.54	U	--	5.35	U	5.34	U	--	5.57	UJ	5.53	UJ	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	5.7	UJ	5.8	UJ	--	5.81	U	5.54	U	--	0.0337	J	0.0924	J	-93.10	5.57	U	5.53	U	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	5.7	U	5.8	U	--	5.81	UJ	5.54	UJ	--	5.35	UJ	0.151	J	200.00	5.57	U	5.53	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	5.7	UJ	5.8	UJ	--	5.81	U	5.54	U	--	5.35	UJ	0.18	J	200.00	5.57	U	5.53	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	5.7	U	5.8	U	--	5.81	UJ	5.54	UJ	--	5.35	UJ	0.163	J	200.00	5.57	U	5.53	U	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	5.7	UJ	5.8	UJ	--	5.81	U	5.54	U	--	5.35	U	5.34	U	--	5.57	U	5.53	U	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	5.7	U	0.209	J	185.85	5.81	U	5.54	U	--	5.35	U	5.34	U	--	0.29	J	0.349	J	-18.47
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	5.7	UJ	5.8	UJ	--	5.81	UJ	5.54	UJ	--	5.35	UJ	0.173	J	200.00	5.57	U	5.53	U	--
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	5.7	UJ	5.8	UJ	--	5.81	UJ	5.54	UJ	--	5.35	UJ	0.208	J	200.00	0.224	J	0.191	J	15.90
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	5.7	U	5.8	U	--	5.81	UJ	5.54	UJ	--	5.35	UJ	5.34	UJ	--	5.57	U	5.53	U	--
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	5.7	U	5.8	U	--	5.81	UJ	5.54	UJ	--	5.35	UJ	5.34	UJ	--	5.57	U	5.53	U	--
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.14	U	1.16	U	--	0.0269	J	0.0268	J	0.37	1.07	UJ	0.0496	J	200.00	0.0386	J	0.0682	J	-55.43
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	1.14	U	1.16	U	--	1.16	U	1.11	U	--	1.07	UJ	0.0575	J	200.00	0.0648	J	0.039	J	49.71
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	1.9	U	2	U	--	2	U	2	U	--	1.8	U	1.8	U	--	2	U	2	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.8	U	3.9	U	--	3.9	U	3.8	U	--	3.6	U	3.6	U	--	3.8	U	3.8	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.8	U	3.9	U	--	3.9	U	3.8	U	--	3.6	U	3.6	U	--	3.8	U	3.8	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	1.7	J	3.9	UJ	200.00	3.9	U	3.8	U	--	3.6	U	3.6	U	--	3.8	U	3.8	U	--
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	8.04	J	5.04	J	45.87	13.6	J	11.1	UJ	200.00	10.7	U	10.7	U	--	11.1	U	11.1	U	--
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	11.4	U	11.6	U	--	11.6	U	11.1	U	--	10.7	U	10.7	U	--	11.1	UJ	11.1	UJ	--
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg																				
Pesticides	2,4 DB	94-82-6	8151A	ug/kg																				
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg																				
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg																				
Pesticides	2,4-D	94-75-7	8151A	ug/kg																				
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg																				
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg																				
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg																				
Pesticides	Aldrin	309-00-2	8081A	ug/kg																				
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg																				
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg																				
Pesticides	Chlordane	57-74-9	8081A	ug/kg																				
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg																				
Pesticides	Dicamba	1918-00-9	8151A	ug/kg																				
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg																				
Pesticides	Dieldrin	60-57-1	8081A	ug/kg																				
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg																				
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg																				
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg																				
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg																				
Pesticides	Endrin	72-20-8	8081A	ug/kg																				
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg																				
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg																				
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg																				
Pesticides	Heptachlor	76-44-8	8081A	ug/kg																				
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg																				
Pesticides	MCPA	94-74-6	8151A	ug/kg																				
Pesticides	MCPP	93-65-2	8151A	ug/kg																				
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg																				
Pesticides	Mirex	2385-85-5	8081A	ug/kg																				
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg																				
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg	1100	U	1200	U	--	1200	U	1100	U	--	1100	UJ	1100	UJ	--	1200	U	1200	U	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	UJ	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-112-SA5DN		SL-112-SA5DN		RPD	SL-092-SA5DN		SL-092-SA5DN		RPD	SL-116-SA5DN		SL-116-SA5DN		RPD	SL-200-SA5DN		SL-200-SA5DN		RPD
				Sample Name:	DUP16-SA5DN-QC-062211		SL-112-SA5DN-SB-4.0-5.0			DUP17-SA5DN-QC-062411		SL-092-SA5DN-SB-4.0-5.0			DUP18-SA5DN-QC-062811		SL-116-SA5DN-SB-2.0-3.0			DUP-19-SA5DN-QC-070611		SL-200-SA5DN-SB-4.0-5.0		
				Sample Date	06/22/2011		06/22/2011			06/24/2011		06/24/2011			06/28/2011		06/28/2011			07/06/2011		07/06/2011		
				Start Depth:	4		4			4		4			2		2			4		4		
				End Depth:	5		5			5		5			3		3			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	380	U	390	U	--	390	U	380	U	--	360	U	360	U	--	390	U	380	U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	570	U	580	U	--	580	U	570	U	--	540	UJ	540	UJ	--	580	U	580	U	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg	570	U	580	U	--	580	U	570	U	--	540	U	540	U	--	580	U	580	U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg	570	U	580	U	--	580	U	570	U	--	540	U	540	U	--	580	U	580	U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg	3800	U	3900	UJ	--	3900	U	3800	U	--	3600	U	3600	UJ	--	3900	U	3800	U	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg	570	U	580	U	--	580	U	570	U	--	540	U	540	U	--	580	U	580	U	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg	570	U	580	U	--	580	U	570	U	--	540	U	540	U	--	580	U	580	U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg																				
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg	20	U	21	U	--	21	U	21	U	--	7.6	J	6.8	J	11.11	21	U	21	U	--
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C	ug/kg																				
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg	20	U	21	U	--	21	U	21	U	--	19	U	19	U	--	21	U	21	U	--
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Chrysene	218-01-9	8270C	ug/kg																				
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C	ug/kg																				
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg	20	U	21	U	--	21	U	21	U	--	19	U	19	U	--	21	U	21	U	--
Semivolatiles	Dimethylphthalate	131-11-3	8270C	ug/kg																				
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg	20	U	21	U	-4.88	21	U	21	U	--	19	U	19	U	--	21	U	21	U	--
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C	ug/kg																190	U			200.00
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg	20	UJ	11	J	200.00	21	U	21	U	--	19	U	19	U	--			21	U	
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C	ug/kg																				
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg	20	U	21	U	--	21	U	21	U	--	6.8	J	19	UJ	200.00	21	UJ	7	J	200.00
Semivolatiles	Fluoranthene	206-44-0	8270C	ug/kg																				
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	570	U	580	U	--	580	U	570	U	--	540	U	540	U	--	580	U	580	U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	1625C	ng/kg	38.2	U	38.5	U	--															
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	570	U	580	U	--	580	U	570	U	--	540	U	540	U	--	580	U	580	U	--
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	190	U	190	U	--	190	U	190	U	--	180	U	180	U	--	190	U	190	U	--
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--
Volatiles	1,1,1,2-Tetrachloroethane	630-20-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,1,1-Trichloroethane	71-55-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,1,2,2-Tetrachloroethane	79-34-5	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,1,2-Trichloroethane	79-00-5	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,1-Dichloroethane	75-34-3	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,1-Dichloroethene	75-35-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,1-Dichloropropene	563-58-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,2,3-Trichlorobenzene	87-61-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,2,3-Trichloropropane	96-18-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,2,4-Trichlorobenzene	120-82-1	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,2,4-Trimethylbenzene	95-63-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,2-Dibromo-3-chloropropane	96-12-8	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,2-Dibromoethane	106-93-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,2-Dichlorobenzene	95-50-1	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,2-Dichloroethane	107-06-2	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-112-SA5DN		SL-112-SA5DN		RPD	SL-092-SA5DN		SL-092-SA5DN		RPD	SL-116-SA5DN		SL-116-SA5DN		RPD	SL-200-SA5DN		SL-200-SA5DN		RPD
				Sample Name:	DUP16-SA5DN-QC-062211		SL-112-SA5DN-SB-4.0-5.0			DUP17-SA5DN-QC-062411		SL-092-SA5DN-SB-4.0-5.0			DUP18-SA5DN-QC-062811		SL-116-SA5DN-SB-2.0-3.0			DUP-19-SA5DN-QC-070611		SL-200-SA5DN-SB-4.0-5.0		
				Sample Date	06/22/2011		06/22/2011			06/24/2011		06/24/2011			06/28/2011		06/28/2011			07/06/2011		07/06/2011		
				Start Depth:	4		4			4		4			2		2			4		4		
				End Depth:	5		5			5		5			3		3			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Volatiles	1,2-Dichloropropane	78-87-5	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,3,5-Trimethylbenzene	108-67-8	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,3-Dichlorobenzene	541-73-1	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,3-Dichloropropane	142-28-9	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,4-Dichlorobenzene	106-46-7	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	1,4-Dioxane	123-91-1	8260B SIM	ug/kg	14	U	15	U	--	14	U	16	U	--	16	U	15	U	--	15	U	15	U	--
Volatiles	2,2-Dichloropropane	594-20-7	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	2-Butanone	78-93-3	8260B	ug/kg	7.6	U	8.5	U	--	8.5	U	7.7	U	--	7.7	U	8.8	U	--	8.2	U	8.3	U	--
Volatiles	2-Chloroethyl Vinyl Ether	110-75-8	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	2-Chlorotoluene	95-49-8	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	2-Hexanone	591-78-6	8260B	ug/kg	7.6	U	8.5	U	--	8.5	U	7.7	U	--	7.7	U	8.8	U	--	8.2	U	8.3	U	--
Volatiles	4-Chlorotoluene	106-43-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	4-Methyl-2-Pentanone	108-10-1	8260B	ug/kg	7.6	U	8.5	U	--	8.5	U	7.7	U	--	7.7	U	8.8	U	--	8.2	U	8.3	U	--
Volatiles	Acetone	67-64-1	8260B	ug/kg	7.5	J	8.5	UJ	200.00	15		10		40.00	7.7	U	8.8	U	--	8.2	U	8.3	U	--
Volatiles	Benzene	71-43-2	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Bromobenzene	108-86-1	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Bromochloromethane	74-97-5	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Bromodichloromethane	75-27-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Bromoform	75-25-2	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Bromomethane	74-83-9	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Carbon tetrachloride	56-23-5	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Chlorobenzene	108-90-7	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Chloroethane	75-00-3	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Chloroform	67-66-3	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Chloromethane	74-87-3	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Chlorotrifluoroethene	79-38-9	8260B	ug/kg	4.7	U	5.3	U	--	5.3	U	4.8	U	--	4.8	U	5.5	U	--	5.1	U	5.2	U	--
Volatiles	cis-1,2-Dichloroethene	156-59-2	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	cis-1,3-Dichloropropene	10061-01-5	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Dibromochloromethane	124-48-1	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Dibromomethane	74-95-3	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Dichlorodifluoromethane	75-71-8	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	1.4	U	1.4	U	--															
Volatiles	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	1.4	U	1.4	U	--															
Volatiles	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	2.6	J	1.4	J	60.00															
Volatiles	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	15	J	4.2	J	112.50															
Volatiles	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	1.4	U	1.4	U	--															
Volatiles	Ethylbenzene	100-41-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Freon 113	76-13-1	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Freon 113a	75-88-7	8260B	ug/kg	4.7	U	5.3	U	--	5.3	U	4.8	U	--	4.8	U	5.5	U	--	5.1	U	5.2	U	--
Volatiles	GRO (C5-C12)	GROC5C12	8015M	mg/kg	1	U	1	U	--															
Volatiles	Hexachlorobutadiene	87-68-3	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Isopropylbenzene	98-82-8	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Isopropyltoluene	99-87-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	m,p-Xylene	179601-23-1	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Methyl tert-Butyl Ether	1634-04-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Methylene chloride	75-09-2	8260B	ug/kg	3.8	U	4.2	U	--	16		21	J	-27.03	3.9	UJ	93	J	200.00	4.1	UJ	4.2	UJ	--
Volatiles	N-Butylbenzene	104-51-8	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	N-Propylbenzene	103-65-1	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	o-Xylene	95-47-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	sec-Butylbenzene	135-98-8	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Styrene	100-42-5	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	tert-Butylbenzene	98-06-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Tetrachloroethene	127-18-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Toluene	108-88-3	8260B	ug/kg	3.8	UJ	4.2	UJ	--	0.12	J	3.8	UJ	200.00	3.9	UJ	4.4	UJ	--	4.1	UJ	0.11	J	200.00
Volatiles	trans-1,2-Dichloroethene	156-60-5	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	trans-1,3-Dichloropropene	10061-02-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Trichloroethene	79-01-6	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Trichlorofluoromethane	75-69-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--
Volatiles	Vinyl Chloride	75-01-4	8260B	ug/kg	3.8	U	4.2	U	--	4.2	U	3.8	U	--	3.9	U	4.4	U	--	4.1	U	4.2	U	--

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

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

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

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-166-SA5DN	SL-166-SA5DN	RPD	SL-183-SA5DN	SL-183-SA5DN	RPD	SL-175-SA5DN	SL-175-SA5DN	RPD	SL-189-SA5DN	SL-189-SA5DN	RPD
				Sample Name:	DUP20-SA5DN-QC-070711	SL-166-SA5DN-SB-4.0-5.0		DUP21-SA5DN-QC-072811	SL-183-SA5DN-SB-4.0-5.0		DUP22-SA5DN-QC-080111	SL-175-SA5DN-SB-4.0-5.0		DUP23-SA5DN-QC-080411	SL-189-SA5DN-SB-4.0-5.0	
				Sample Date	07/07/2011	07/07/2011		07/28/2011	07/28/2011		08/01/2011	08/01/2011		08/04/2011	08/04/2011	
				Start Depth:	4	4		4	4		4	4		4	4	
				End Depth:	5	5		5	5		5	5		5	5	
				Area:	5DN	5DN		5DN	5DN		5DN	5DN		5DN	5DN	
				Matrix:	SO	SO		SO	SO		SO	SO		SO	SO	
				Sample Type:	FD	N		FD	N		FD	N		FD	N	
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit												
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	32200	33500	-3.96	32700	33000	-0.91	23400	20800	11.76	29800	29900	-0.34
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.333 J	0.311 J	6.83	0.116 J	0.167 J	-36.04	0.184 J	0.163 J	12.10	0.0885 J	0.283 J	-104.71
Inorganic	Arsenic	7440-38-2	6020	mg/kg	10.7 J	9.85 J	8.27	8.25	8.65	-4.73	7.3 J	5.66 J	25.31	5.16 J	8.34 J	-47.11
Inorganic	Barium	7440-39-3	6020	mg/kg	181 J	167 J	8.05	129	134	-3.80	158	136	14.97	118 J	191 J	-47.25
Inorganic	Beryllium	7440-41-7	6020	mg/kg	1.11 J	1.06 J	4.61	0.79	0.841	-6.25	0.9	0.792	12.77	0.794 J	1.23 J	-43.08
Inorganic	Boron	7440-42-8	6010B	mg/kg	5.71 U	5.7 U	--	4.64 J	5.1 J	-9.45	10.2	8.12	22.71	12.6	12.7	-0.79
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.564 J	0.451 J	22.27	0.25	0.272	-8.43	0.504 J	0.311 J	47.36	0.214	0.349	-47.96
Inorganic	Calcium	7440-70-2	6010B	mg/kg	25200	37100	-38.20	16400	16500	-0.61	19500 J	18700 J	4.19	15300	16400	-6.94
Inorganic	Chromium	7440-47-3	6020	mg/kg	42.6 J	39.1 J	8.57	30.7 J	31.9 J	-3.83	33.8	27.1	22.00	31.3 J	52.7 J	-50.95
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	0.46 J	0.39 J	16.47	0.27 J	0.24 J	11.76	0.5 J	0.6 J	-18.18	1.1 UJ	0.54 J	200.00
Inorganic	Cobalt	7440-48-4	6020	mg/kg	13.6	12.1	11.67	10.3	10.3	--	9.84	8.3	16.98	9.73 J	15.2 J	-43.88
Inorganic	Copper	7440-50-8	6020	mg/kg	25.4 J	20.3 J	22.32	14.9	15.6	-4.59	17.1 J	13.7 J	22.08	14.8 J	24.5 J	-49.36
Inorganic	Cyanide	57-12-5	9012B	mg/kg							0.54 U	0.55 U	--			
Inorganic	Fluoride	16984-48-8	300	mg/kg	3.3 J 3.3 J	3.6 J	-8.70	6.9 J	6.6 J	4.44	4.4 J	2.5 J	55.07	2.4 J	2.6 J	-8.00
Inorganic	Iron	7439-89-6	6010B	mg/kg	33700	34100	-1.18	33900	32600	3.91	24200	23100	4.65	30800	30700	0.33
Inorganic	Lead	7439-92-1	6020	mg/kg	13.1 J	11.4 J	13.88	9.37	9.43	-0.64	10.9 J	9.31 J	15.73	8.08 J	13.6 J	-50.92
Inorganic	Lithium	7439-93-2	6010B	mg/kg	30.4	31.7	-4.19	31.1	30.7	1.29	24.2	23.5	2.94	25.4	25.4	--
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	8130	8040	1.11	7840	7770	0.90	5670 J	4810 J	16.41	6540	6570	-0.46
Inorganic	Manganese	7439-96-5	6010B	mg/kg	435	419	3.75	381	387	-1.56	317	317	--	384	385	-0.26
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.111 U	0.113 U	--	0.0095 J	0.012 J	-23.26	0.105 UJ	0.0142 J	200.00	0.103 U	0.105 U	--
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	0.751	0.616	19.75	0.499	0.557	-10.98	0.563 J	0.561 J	0.36	0.42 J	0.763 J	-57.99
Inorganic	Nickel	7440-02-0	6020	mg/kg	31.3 J	26.7 J	15.86	22.2	23.6	-6.11	23 J	19.2 J	18.01	19 J	30.9 J	-47.70
Inorganic	Nitrate	14797-55-8	300	mg/kg							1.5 J	2.3	-42.11			
Inorganic	Percent Moisture	MOIST	160.3M	%	14.2	13.2	7.30	9.8	10.9	-10.63	9.2	9.2	--	9.8	9	8.51
Inorganic	Perchlorate	14797-73-0	314	ug/kg	35.0 U 35.0 U	34.6 U	--	33.3 U	33.7 U	--	33 U	33 U	--	33.3 U	33 U	--
Inorganic	Perchlorate	14797-73-0	6850	ug/kg												
Inorganic	pH	pH	9045M	pH unit	8.34 8.34	8.42	-0.95	8.14	8.2	-0.73	8.18 8.18	8.37	-2.30	8.19	8.02	2.10
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	644	548	16.11	283	281	0.71	323 J	334 J	-3.35	371 J	376 J	-1.34
Inorganic	Potassium	9/7/7440	6010B	mg/kg	5010	4540	9.84	3830 J	3800 J	0.79	3240 J	2960 J	9.03	4960	5170	-4.15
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.248 J	0.263 J	-5.87	0.162 J	0.171 J	-5.41	0.127 J	0.132 J	-3.86	0.148 J	0.279 J	-61.36
Inorganic	Silver	7440-22-4	6020	mg/kg	0.0669 J	0.0582 J	13.91	0.0493 J	0.0438 J	11.82	0.126 J	0.0517 J	83.62	0.0361 J	0.0528 J	-37.57
Inorganic	Sodium	7440-23-5	6010B	mg/kg	91.4 J	96.6 J	-5.53	144	144	--	111	98.8 J	11.63	73.1 J	82.5 J	-12.08
Inorganic	Strontium	7440-24-6	6010B	mg/kg	49.4	58.6	-17.04	36.1	36.1	--	35.7	32.3	10.00	37	38	-2.67
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.472 J	0.42 J	11.66	0.342	0.358	-4.57	0.394 J	0.341 J	14.42	0.337 J	0.521 J	-42.89
Inorganic	Tin	7440-31-5	6010B	mg/kg	11.4 U	11.4 U	--	11.1 U	10.8 U	--	10.9 U	10.9 U	--	10.8 U	11 U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	941	1060	-11.89	1330	1330	--	1250	1260	-0.80	1250	1380	-9.89
Inorganic	Vanadium	7440-62-2	6020	mg/kg	81.1	73.1	10.38	59.4 J	62 J	-4.28	63.6	49.7	24.54	59.1 J	99.8 J	-51.23
Inorganic	Zinc	7440-66-6	6020	mg/kg	95.5 J	81.5 J	15.82	80.1	70.1	13.32	83.3	75.9	9.30	63 J	102 J	-47.27
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	7.1	7.87	-10.29	6.2	6.14	0.97	2.69 J	2.03 J	27.97	2.1 J	2.28 J	-8.22
Misc. Organics	1,3,5-Trinitrobenzene	99-35-4	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	2,4,6-Trinitrotoluene	118-96-7	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	2,4-Diamino-6-nitrotoluene	6629-29-4	8330A	ug/kg							260 U	260 U	--			
Misc. Organics	2,4-Dinitrotoluene	121-14-2	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	2,6-Diamino-4-nitrotoluene	59229-75-3	8330A	ug/kg							260 U	260 U	--			
Misc. Organics	2,6-Dinitrotoluene	606-20-2	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	2-Amino-4,6-Dinitrotoluene	35572-78-2	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	2-Nitrotoluene	88-72-2	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	2-Propanol	67-63-0	8015B	ug/kg							550 U 550 U	550 U	--			
Misc. Organics	3-Nitrotoluene	99-08-1	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	4-Amino-2,6-Dinitrotoluene	19406-51-0	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	4-Nitrotoluene	99-99-0	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	Diethylene Glycol	111-46-6	8015M	mg/kg							11 U	11 UJ	--			
Misc. Organics	Ethanol	64-17-5	8015B	ug/kg							550 U 550 U	550 U	--			
Misc. Organics	Ethylene Glycol	107-21-1	8015M	mg/kg							11 U	11 UJ	--			
Misc. Organics	Formaldehyde	50-00-0	8315A	ug/kg							1700 U 1700 U	1600 U	--			
Misc. Organics	HMX	2691-41-0	8330A	ug/kg							330 U	330 U	--			
Misc. Organics	m-Dinitrobenzene	99-65-0	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	Methanol	67-56-1	8015B	ug/kg							550 U 550 U	550 U	--			
Misc. Organics	m-Terphenyl	92-06-8	8015B	mg/kg							3.9 U	3.9 UJ	--			
Misc. Organics	Nitrobenzene	98-95-3	8330A	ug/kg							130 U	130 U	--			
Misc. Organics	Nitroglycerin	55-63-0	8330A	ug/kg							2600 UJ	2600 UJ	--			
Misc. Organics	o-Terphenyl	84-15-1	8015B	mg/kg							3.9 U	3.9 U	--			
Misc. Organics	PETN	78-11-5	8330A	ug/kg							2600 U	2600 U	--			
Misc. Organics	Propylene glycol	57-55-6	8015M	mg/kg							11 U	11 UJ	--			
Misc. Organics	p-Terphenyl	92-94-4	8015B	mg/kg							3.9 U	3.9 UJ	--			

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-166-SA5DN		SL-166-SA5DN			SL-183-SA5DN		SL-183-SA5DN			SL-175-SA5DN		SL-175-SA5DN			SL-189-SA5DN		SL-189-SA5DN		
				Sample Name:	DUP20-SA5DN-QC-070711		SL-166-SA5DN-SB-4.0-5.0		RPD	DUP21-SA5DN-QC-072811		SL-183-SA5DN-SB-4.0-5.0		RPD	DUP22-SA5DN-QC-080111		SL-175-SA5DN-SB-4.0-5.0		RPD	DUP23-SA5DN-QC-080411		SL-189-SA5DN-SB-4.0-5.0		RPD
				Sample Date	07/07/2011		07/07/2011			07/28/2011		07/28/2011			08/01/2011		08/01/2011			08/04/2011		08/04/2011		
				Start Depth:	4		4			4		4			4		4			4		4		
				End Depth:	5		5			5		5			5		5			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Misc. Organics	RDX	121-82-4	8330A	ug/kg											130	U	130	U	--					
Misc. Organics	Tetryl	479-45-8	8330A	ug/kg											130	U	130	U	--					
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	5.77	U	5.71	U	--	5.42	U	5.45	U	--	40.8		48		-16.22	5.31	U	5.24	U	--
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	5.77	UJ	5.71	UJ	--	5.42	U	5.45	U	--	5.67		6.13		-7.80	5.31	U	5.24	U	--
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	5.77	U	5.71	U	--	5.42	U	5.45	U	--	0.551	J	0.497	J	10.31	5.31	U	5.24	U	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	5.77	U	5.71	U	--	0.0398	J	0.0161	J	84.79	5.46	U	0.368	J	174.74	5.31	UJ	5.24	UJ	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	5.77	U	5.71	U	--	5.42	U	5.45	U	--	5.46	U	5.37	U	--	5.31	U	5.24	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	5.77	UJ	5.71	UJ	--	5.42	UJ	5.45	UJ	--	1.59	J	1.93	J	-19.32	5.31	U	5.24	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	5.77	UJ	5.71	UJ	--	5.42	UJ	5.45	UJ	--	5.46	U	5.37	U	--	5.31	UJ	5.24	UJ	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	5.77	U	5.71	U	--	5.42	U	5.45	U	--	0.609	J	0.813	J	-28.69	0.163	J	0.176	J	-7.67
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	5.77	UJ	5.71	UJ	--	5.42	UJ	5.45	UJ	--	5.46	U	5.37	U	--	0.193	J	0.227	J	-16.19
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	0.0496	J	5.71	UJ	200.00	5.42	UJ	5.45	UJ	--	5.46	U	5.37	U	--	5.31	UJ	5.24	UJ	--
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	5.77	UJ	5.71	UJ	--	5.42	U	5.45	U	--	5.46	U	5.37	U	--	0.178	J	0.231	J	-25.92
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	5.77	UJ	5.71	UJ	--	5.42	UJ	5.45	UJ	--	0.323	J	0.399	J	-21.05	5.31	U	5.24	U	--
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	5.77	UJ	5.71	UJ	--	5.42	U	5.45	U	--	5.46	UJ	5.37	UJ	--	5.31	U	5.24	U	--
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.15	UJ	1.14	UJ	--	1.08	U	1.09	U	--	1.09	U	1.07	U	--	0.029	J	1.05	UJ	200.00
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	1.15	U	1.14	U	--	0.0235	J	1.09	UJ	200.00	1.09	U	1.07	U	--	1.06	UJ	1.05	UJ	--
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	UJ	1.2	J	200.00
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	0.92	J	2.7	J	-98.34	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	2	U	2	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.8	U	3.8	U	--	3.7	U	3.7	U	--	3.6	U	3.6	U	--	3.7	U	3.6	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.8	U	3.8	U	--	3.7	U	3.7	U	--	3.6	U	3.6	U	--	3.7	U	3.6	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	3.8	U	3.8	U	--	3.7	U	3.7	U	--	1.7	J	3.7	J	-74.07	3.7	U	3.6	U	--
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	11.5	U	11.4	U	--	8.41	J	4.73	J	56.01	413		565		-31.08	5.41	J	2.91	J	60.10
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	11.5	UJ	11.4	UJ	--	10.8	U	10.9	U	--	16.9		15.7		7.36	10.6	U	10.5	U	--
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg																				
Pesticides	2,4 DB	94-82-6	8151A	ug/kg																				
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg																				
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg																				
Pesticides	2,4-D	94-75-7	8151A	ug/kg																				
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg																				
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg																				
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg																				
Pesticides	Aldrin	309-00-2	8081A	ug/kg																				
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg																				
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg																				
Pesticides	Chlordane	57-74-9	8081A	ug/kg																				
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg																				
Pesticides	Dicamba	1918-00-9	8151A	ug/kg																				
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg																				
Pesticides	Dieldrin	60-57-1	8081A	ug/kg																				
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg																				
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg																				
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg																				
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg																				
Pesticides	Endrin	72-20-8	8081A	ug/kg																				
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg																				
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg																				
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg																				
Pesticides	Heptachlor	76-44-8	8081A	ug/kg																				
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg																				
Pesticides	MCPA	94-74-6	8151A	ug/kg																				
Pesticides	MCPP	93-65-2	8151A	ug/kg																				
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg																				
Pesticides	Mirex	2385-85-5	8081A	ug/kg																				
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg																				
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	U	180	U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	UJ	--	180	UJ	180	U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg	1200	UJ	1100	UJ	--	1100	U	1100	U	--	1100	U	1100	U	--	1100	UJ	1100	U	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	0.9	J	0.81	J	10.53	1.8	U	1.8	U	--
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-166-SA5DN		SL-166-SA5DN		RPD	SL-183-SA5DN		SL-183-SA5DN		RPD	SL-175-SA5DN		SL-175-SA5DN		RPD	SL-189-SA5DN		SL-189-SA5DN		RPD
				Sample Name:	DUP20-SA5DN-QC-070711		SL-166-SA5DN-SB-4.0-5.0			DUP21-SA5DN-QC-072811		SL-183-SA5DN-SB-4.0-5.0			DUP22-SA5DN-QC-080111		SL-175-SA5DN-SB-4.0-5.0			DUP23-SA5DN-QC-080411		SL-189-SA5DN-SB-4.0-5.0		
				Sample Date	07/07/2011		07/07/2011			07/28/2011		07/28/2011			08/01/2011		08/01/2011			08/04/2011		08/04/2011		
				Start Depth:	4		4			4		4			4		4			4		4		
				End Depth:	5		5			5		5			5		5			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	390	U	380	U	--	370	U	370	U	--	370	U	370	U	--	370	UJ	370	U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg	190	U	190	U	--	180	U	190	R	--	180	U	180	U	--	180	U	180	U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	580	U	570	U	--	550	U	560	U	--	550	U	550	U	--	550	UJ	550	U	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg	580	U	570	U	--	550	U	560	U	--	550	U	550	U	--	550	UJ	550	U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg	580	U	570	U	--	550	U	560	U	--	550	U	550	U	--	550	UJ	550	U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	UJ	1	J	200.00
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg	3900	U	3800	U	--	3700	U	3700	UJ	--	3700	U	3700	UJ	--	3700	UJ	3700	UJ	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	UJ	1.1	J	200.00
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	UJ	0.83	J	200.00	1.8	UJ	0.92	J	200.00
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.9		2		-5.13	1.8	UJ	1.2	J	200.00
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	UJ	1.4	J	200.00	1.8	U	1.8	U	--
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	UJ	0.97	J	200.00
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg	580	U	570	U	--	550	U	560	U	--	550	U	550	U	--	550	UJ	550	U	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg	580	U	570	U	--	550	U	560	U	--	550	U	550	U	--	550	UJ	550	U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg	390	U			200.00						30	J			200.00					
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg			21	U		20	U	20	U	--			13	J		11	J	20	UJ	200.00
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C	ug/kg																				
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Chrysene	218-01-9	8270C	ug/kg																				
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	J	1.9	UJ	200.00	3.6	J	1	J	113.04	1.8	UJ	0.91	J	200.00
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C	ug/kg																				
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Dimethylphthalate	131-11-3	8270C	ug/kg																				
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C	ug/kg	190	U	190	U	--															
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg						20	U	20	U	--	20	U	20	U	--	12	J	20	UJ	200.00
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C	ug/kg																				
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg	21	U	21	U	--	20	U	20	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Fluoranthene	206-44-0	8270C	ug/kg																				
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1	J	0.86	J	15.05	1.8	UJ	1.1	J	200.00
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	580	U	570	U	--	550	U	560	U	--	550	U	550	U	--	550	UJ	550	U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	1625C	ng/kg											156	J	370	J	-81.37					
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.8	U	1.8	U	--	1.8	U	1.8	U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	580	U	570	U	--	550	U	560	U	--	550	U	550	U	--	550	UJ	550	U	--
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	2.8	J	1.5	J	60.47	1.8	UJ	1.1	J	200.00
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	190	U	190	U	--	180	U	190	U	--	180	U	180	U	--	180	UJ	180	U	--
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	1.9	U	1.9	U	--	1.8	U	1.9	U	--	1.3	J	0.87	J	39.63	1.8	UJ	1.1	J	200.00
Volatiles	1,1,1,2-Tetrachloroethane	630-20-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,1,1-Trichloroethane	71-55-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,1,2,2-Tetrachloroethane	79-34-5	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,1,2-Trichloroethane	79-00-5	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,1-Dichloroethane	75-34-3	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,1-Dichloroethene	75-35-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,1-Dichloropropene	563-58-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,2,3-Trichlorobenzene	87-61-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,2,3-Trichloropropane	96-18-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,2,4-Trichlorobenzene	120-82-1	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,2,4-Trimethylbenzene	95-63-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,2-Dibromo-3-chloropropane	96-12-8	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,2-Dibromoethane	106-93-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,2-Dichlorobenzene	95-50-1	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,2-Dichloroethane	107-06-2	8260B	ug/kg	4.5	U	4.3	U	--															

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-166-SA5DN		SL-166-SA5DN		RPD	SL-183-SA5DN		SL-183-SA5DN		RPD	SL-175-SA5DN		SL-175-SA5DN		RPD	SL-189-SA5DN		SL-189-SA5DN		RPD
				Sample Name:	DUP20-SA5DN-QC-070711		SL-166-SA5DN-SB-4.0-5.0			DUP21-SA5DN-QC-072811		SL-183-SA5DN-SB-4.0-5.0			DUP22-SA5DN-QC-080111		SL-175-SA5DN-SB-4.0-5.0			DUP23-SA5DN-QC-080411		SL-189-SA5DN-SB-4.0-5.0		
				Sample Date	07/07/2011		07/07/2011			07/28/2011		07/28/2011			08/01/2011		08/01/2011			08/04/2011		08/04/2011		
				Start Depth:	4		4			4		4			4		4			4		4		
				End Depth:	5		5			5		5			5		5			5		5		
				Area:	5DN		5DN			5DN		5DN			5DN		5DN			5DN		5DN		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Volatiles	1,2-Dichloropropane	78-87-5	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,3,5-Trimethylbenzene	108-67-8	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,3-Dichlorobenzene	541-73-1	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,3-Dichloropropane	142-28-9	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,4-Dichlorobenzene	106-46-7	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	1,4-Dioxane	123-91-1	8260B SIM	ug/kg	17	U	16	U	--															
Volatiles	2,2-Dichloropropane	594-20-7	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	2-Butanone	78-93-3	8260B	ug/kg	9	U	8.7	U	--															
Volatiles	2-Chloroethyl Vinyl Ether	110-75-8	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	2-Chlorotoluene	95-49-8	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	2-Hexanone	591-78-6	8260B	ug/kg	9	U	8.7	U	--															
Volatiles	4-Chlorotoluene	106-43-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	4-Methyl-2-Pentanone	108-10-1	8260B	ug/kg	9	U	8.7	U	--															
Volatiles	Acetone	67-64-1	8260B	ug/kg	9	U	8.7	U	--															
Volatiles	Benzene	71-43-2	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Bromobenzene	108-86-1	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Bromochloromethane	74-97-5	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Bromodichloromethane	75-27-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Bromoform	75-25-2	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Bromomethane	74-83-9	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Carbon tetrachloride	56-23-5	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Chlorobenzene	108-90-7	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Chloroethane	75-00-3	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Chloroform	67-66-3	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Chloromethane	74-87-3	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Chlorotrifluoroethene	79-38-9	8260B	ug/kg	5.6	U	5.4	U	--															
Volatiles	cis-1,2-Dichloroethene	156-59-2	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	cis-1,3-Dichloropropene	10061-01-5	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Dibromochloromethane	124-48-1	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Dibromomethane	74-95-3	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Dichlorodifluoromethane	75-71-8	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	EFH (C12-C14)	PHCC12C14	8015M	mg/kg											2.6	U	6.6	U	--					
Volatiles	EFH (C15-C20)	PHCC15C20	8015M	mg/kg											2.6	U	6.6	U	--					
Volatiles	EFH (C21-C30)	PHCC21C30	8015M	mg/kg											6	J	17	J	-95.65					
Volatiles	EFH (C30-C40)	PHCC30C40	8015M	mg/kg											22	J	76	J	-110.20					
Volatiles	EFH (C8-C11)	PHCC8C11	8015M	mg/kg											2.6	U	6.6	U	--					
Volatiles	Ethylbenzene	100-41-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Freon 113	76-13-1	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Freon 113a	75-88-7	8260B	ug/kg	5.6	U	5.4	U	--															
Volatiles	GRO (C5-C12)	GROC5C12	8015M	mg/kg											1	U	0.9	U	--					
Volatiles	Hexachlorobutadiene	87-68-3	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Isopropylbenzene	98-82-8	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Isopropyltoluene	99-87-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	m,p-Xylene	179601-23-1	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Methyl tert-Butyl Ether	1634-04-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Methylene chloride	75-09-2	8260B	ug/kg	34		33	J	2.99															
Volatiles	N-Butylbenzene	104-51-8	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	N-Propylbenzene	103-65-1	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	o-Xylene	95-47-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	sec-Butylbenzene	135-98-8	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Styrene	100-42-5	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	tert-Butylbenzene	98-06-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Tetrachloroethene	127-18-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Toluene	108-88-3	8260B	ug/kg	0.1	J	0.1	J	--															
Volatiles	trans-1,2-Dichloroethene	156-60-5	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	trans-1,3-Dichloropropene	10061-02-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Trichloroethene	79-01-6	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Trichlorofluoromethane	75-69-4	8260B	ug/kg	4.5	U	4.3	U	--															
Volatiles	Vinyl Chloride	75-01-4	8260B	ug/kg	4.5	U	4.3	U	--															

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

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

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

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-009-SA5DN		SL-009-SA5DN		RPD
				Sample Name:	DUP24-SA5DN-QC-080911		SL-009-SA5DN-SB-4.0-5.0		
				Sample Date	08/09/2011		08/09/2011		
				Start Depth:	4		4		
				End Depth:	5		5		
				Area:	5DN		5DN		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	17900		16600		7.54
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.22	UJ	0.213	UJ	--
Inorganic	Arsenic	7440-38-2	6020	mg/kg	6.39	J	5.33	J	18.09
Inorganic	Barium	7440-39-3	6020	mg/kg	98.5		96.4		2.15
Inorganic	Beryllium	7440-41-7	6020	mg/kg	0.804		0.697		14.26
Inorganic	Boron	7440-42-8	6010B	mg/kg	5.56	U	5.33	U	--
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.0779	J	0.112		-35.91
Inorganic	Calcium	7440-70-2	6010B	mg/kg	2510		2500		0.40
Inorganic	Chromium	7440-47-3	6020	mg/kg	20.9	J	15.6	J	29.04
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	1.1	U	1.1	U	--
Inorganic	Cobalt	7440-48-4	6020	mg/kg	5.43	J	11.9	J	-74.67
Inorganic	Copper	7440-50-8	6020	mg/kg	10.7	J	8.73	J	20.28
Inorganic	Cyanide	57-12-5	9012B	mg/kg					
Inorganic	Fluoride	16984-48-8	300	mg/kg	6.6	J	5.7	J	14.63
Inorganic	Iron	7439-89-6	6010B	mg/kg	19000		18700		1.59
Inorganic	Lead	7439-92-1	6020	mg/kg	7.02	J	7.94	J	-12.30
Inorganic	Lithium	7439-93-2	6010B	mg/kg	18.5		17.7		4.42
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	3500		3270		6.79
Inorganic	Manganese	7439-96-5	6010B	mg/kg	166	J	137	J	19.14
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.0188	J	0.0232	J	-20.95
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	0.409		0.603		-38.34
Inorganic	Nickel	7440-02-0	6020	mg/kg	13.1	J	13	J	0.77
Inorganic	Nitrate	14797-55-8	300	mg/kg					
Inorganic	Percent Moisture	MOIST	160.3M	%	10.9		9.8		10.63
Inorganic	Perchlorate	14797-73-0	314	ug/kg	33.7	U	33.3	U	--
Inorganic	Perchlorate	14797-73-0	6850	ug/kg					
Inorganic	pH	pH	9045M	pH unit	8.11		7.93		2.24
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	184	J	178	J	3.31
Inorganic	Potassium	9/7/7440	6010B	mg/kg	2270	J	2190	J	3.59
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.44	UJ	0.426	UJ	--
Inorganic	Silver	7440-22-4	6020	mg/kg	0.0572	J	0.0481	J	17.28
Inorganic	Sodium	7440-23-5	6010B	mg/kg	102	J	95.4	J	6.69
Inorganic	Strontium	7440-24-6	6010B	mg/kg	18.8		17		10.06
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.283		0.235		18.53
Inorganic	Tin	7440-31-5	6010B	mg/kg	11.1	U	10.7	U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	1040		979		6.04
Inorganic	Vanadium	7440-62-2	6020	mg/kg	41.6	J	34.5	J	18.66
Inorganic	Zinc	7440-66-6	6020	mg/kg	47.3	J	38.7	J	20.00
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	3.12	J	3.05	J	2.27
Misc. Organics	1,3,5-Trinitrobenzene	99-35-4	8330A	ug/kg					
Misc. Organics	2,4,6-Trinitrotoluene	118-96-7	8330A	ug/kg					
Misc. Organics	2,4-Diamino-6-nitrotoluene	6629-29-4	8330A	ug/kg					
Misc. Organics	2,4-Dinitrotoluene	121-14-2	8330A	ug/kg					
Misc. Organics	2,6-Diamino-4-nitrotoluene	59229-75-3	8330A	ug/kg					
Misc. Organics	2,6-Dinitrotoluene	606-20-2	8330A	ug/kg					
Misc. Organics	2-Amino-4,6-Dinitrotoluene	35572-78-2	8330A	ug/kg					
Misc. Organics	2-Nitrotoluene	88-72-2	8330A	ug/kg					
Misc. Organics	2-Propanol	67-63-0	8015B	ug/kg					
Misc. Organics	3-Nitrotoluene	99-08-1	8330A	ug/kg					
Misc. Organics	4-Amino-2,6-Dinitrotoluene	19406-51-0	8330A	ug/kg					
Misc. Organics	4-Nitrotoluene	99-99-0	8330A	ug/kg					
Misc. Organics	Diethylene Glycol	111-46-6	8015M	mg/kg					
Misc. Organics	Ethanol	64-17-5	8015B	ug/kg					
Misc. Organics	Ethylene Glycol	107-21-1	8015M	mg/kg					
Misc. Organics	Formaldehyde	50-00-0	8315A	ug/kg					
Misc. Organics	HMX	2691-41-0	8330A	ug/kg					
Misc. Organics	m-Dinitrobenzene	99-65-0	8330A	ug/kg					
Misc. Organics	Methanol	67-56-1	8015B	ug/kg					
Misc. Organics	m-Terphenyl	92-06-8	8015B	mg/kg					
Misc. Organics	Nitrobenzene	98-95-3	8330A	ug/kg					
Misc. Organics	Nitroglycerin	55-63-0	8330A	ug/kg					
Misc. Organics	o-Terphenyl	84-15-1	8015B	mg/kg					
Misc. Organics	PETN	78-11-5	8330A	ug/kg					
Misc. Organics	Propylene glycol	57-55-6	8015M	mg/kg					
Misc. Organics	p-Terphenyl	92-94-4	8015B	mg/kg					

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-009-SA5DN		SL-009-SA5DN		RPD
				Sample Name:	DUP24-SA5DN-QC-080911		SL-009-SA5DN-SB-4.0-5.0		
				Sample Date	08/09/2011		08/09/2011		
				Start Depth:	4		4		
				End Depth:	5		5		
				Area:	5DN		5DN		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
Misc. Organics	RDX	121-82-4	8330A	ug/kg					
Misc. Organics	Tetryl	479-45-8	8330A	ug/kg					
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	5.51	U	5.51	U	--
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	5.51	U	5.51	U	--
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	5.51	UJ	5.51	UJ	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	0.052	J	5.51	UJ	200.00
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	5.51	UJ	5.51	UJ	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	5.51	U	5.51	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	5.51	UJ	5.51	UJ	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	5.51	UJ	5.51	UJ	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	0.0396	J	0.0413	J	-4.20
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	5.51	UJ	5.51	UJ	--
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	0.0543	J	0.125	J	-78.86
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	5.51	U	5.51	U	--
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	0.121	J	0.1	J	19.00
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.1	U	1.1	U	--
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	1.1	U	1.1	U	--
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.7	U	3.6	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.7	U	3.6	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	3.7	U	3.6	U	--
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	4.76	J	4.04	J	16.36
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	0.273	J	0.14	J	64.41
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg					
Pesticides	2,4 DB	94-82-6	8151A	ug/kg					
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg					
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg					
Pesticides	2,4-D	94-75-7	8151A	ug/kg					
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg					
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg					
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg					
Pesticides	Aldrin	309-00-2	8081A	ug/kg					
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg					
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg					
Pesticides	Chlordane	57-74-9	8081A	ug/kg					
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg					
Pesticides	Dicamba	1918-00-9	8151A	ug/kg					
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg					
Pesticides	Dieldrin	60-57-1	8081A	ug/kg					
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg					
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg					
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg					
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg					
Pesticides	Endrin	72-20-8	8081A	ug/kg					
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg					
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg					
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg					
Pesticides	Heptachlor	76-44-8	8081A	ug/kg					
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg					
Pesticides	MCPA	94-74-6	8151A	ug/kg					
Pesticides	MCPP	93-65-2	8151A	ug/kg					
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg					
Pesticides	Mirex	2385-85-5	8081A	ug/kg					
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg					
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	190	U	180	U	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	190	U	180	U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	190	U	180	U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	190	U	180	U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	190	U	180	U	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg	1100	U	1100	R	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg	190	U	180	U	--

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-009-SA5DN		SL-009-SA5DN		RPD
				Sample Name:	DUP24-SA5DN-QC-080911		SL-009-SA5DN-SB-4.0-5.0		
				Sample Date	08/09/2011		08/09/2011		
				Start Depth:	4		4		
				End Depth:	5		5		
				Area:	5DN		5DN		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg	190	U	180	U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg	190	U	180	U	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	370	U	370	U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg	190	U	180	U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg	190	U	180	U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	560	UJ	550	UJ	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	190	U	180	U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	190	U	180	U	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg	190	U	180	U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	190	U	180	U	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg	190	U	180	U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg	190	U	180	U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg	560	U	550	U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg	560	U	550	U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg	1.9	U	1.8	UJ	--
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg	3700	U	3700	U	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg	560	UJ	550	R	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg	560	U	550	U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	190	UJ	180	UJ	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	190	U	180	U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg					
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg	21	J	50	J	-81.69
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C	ug/kg					
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg	20	U	20	U	--
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Chrysene	218-01-9	8270C	ug/kg					
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C	ug/kg					
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg	20	U	20	U	--
Semivolatiles	Dimethylphthalate	131-11-3	8270C	ug/kg					
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg	20	U	20	U	--
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C	ug/kg					
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg	20	U	20	U	--
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C	ug/kg					
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg	52	J	20	UJ	200.00
Semivolatiles	Fluoranthene	206-44-0	8270C	ug/kg					
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	560	U	550	U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	190	U	180	U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	1625C	ng/kg					
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	190	U	180	U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	560	U	550	U	--
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	1.9	U	1.8	U	--
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	190	U	180	U	--
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	1.9	U	1.8	U	--
Volatiles	1,1,1,2-Tetrachloroethane	630-20-6	8260B	ug/kg					
Volatiles	1,1,1-Trichloroethane	71-55-6	8260B	ug/kg					
Volatiles	1,1,2,2-Tetrachloroethane	79-34-5	8260B	ug/kg					
Volatiles	1,1,2-Trichloroethane	79-00-5	8260B	ug/kg					
Volatiles	1,1-Dichloroethane	75-34-3	8260B	ug/kg					
Volatiles	1,1-Dichloroethene	75-35-4	8260B	ug/kg					
Volatiles	1,1-Dichloropropene	563-58-6	8260B	ug/kg					
Volatiles	1,2,3-Trichlorobenzene	87-61-6	8260B	ug/kg					
Volatiles	1,2,3-Trichloropropane	96-18-4	8260B	ug/kg					
Volatiles	1,2,4-Trichlorobenzene	120-82-1	8260B	ug/kg					
Volatiles	1,2,4-Trimethylbenzene	95-63-6	8260B	ug/kg					
Volatiles	1,2-Dibromo-3-chloropropane	96-12-8	8260B	ug/kg					
Volatiles	1,2-Dibromoethane	106-93-4	8260B	ug/kg					
Volatiles	1,2-Dichlorobenzene	95-50-1	8260B	ug/kg					
Volatiles	1,2-Dichloroethane	107-06-2	8260B	ug/kg					

Table C-6 - Subarea 5D North Field Duplicate Results

				Location	SL-009-SA5DN		SL-009-SA5DN		RPD
				Sample Name:	DUP24-SA5DN-QC-080911		SL-009-SA5DN-SB-4.0-5.0		
				Sample Date	08/09/2011		08/09/2011		
				Start Depth:	4		4		
				End Depth:	5		5		
				Area:	5DN		5DN		
				Matrix:	SO		SO		
				Sample Type:	FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					
Volatiles	1,2-Dichloropropane	78-87-5	8260B	ug/kg					
Volatiles	1,3,5-Trimethylbenzene	108-67-8	8260B	ug/kg					
Volatiles	1,3-Dichlorobenzene	541-73-1	8260B	ug/kg					
Volatiles	1,3-Dichloropropane	142-28-9	8260B	ug/kg					
Volatiles	1,4-Dichlorobenzene	106-46-7	8260B	ug/kg					
Volatiles	1,4-Dioxane	123-91-1	8260B SIM	ug/kg					
Volatiles	2,2-Dichloropropane	594-20-7	8260B	ug/kg					
Volatiles	2-Butanone	78-93-3	8260B	ug/kg					
Volatiles	2-Chloroethyl Vinyl Ether	110-75-8	8260B	ug/kg					
Volatiles	2-Chlorotoluene	95-49-8	8260B	ug/kg					
Volatiles	2-Hexanone	591-78-6	8260B	ug/kg					
Volatiles	4-Chlorotoluene	106-43-4	8260B	ug/kg					
Volatiles	4-Methyl-2-Pentanone	108-10-1	8260B	ug/kg					
Volatiles	Acetone	67-64-1	8260B	ug/kg					
Volatiles	Benzene	71-43-2	8260B	ug/kg					
Volatiles	Bromobenzene	108-86-1	8260B	ug/kg					
Volatiles	Bromochloromethane	74-97-5	8260B	ug/kg					
Volatiles	Bromodichloromethane	75-27-4	8260B	ug/kg					
Volatiles	Bromoform	75-25-2	8260B	ug/kg					
Volatiles	Bromomethane	74-83-9	8260B	ug/kg					
Volatiles	Carbon tetrachloride	56-23-5	8260B	ug/kg					
Volatiles	Chlorobenzene	108-90-7	8260B	ug/kg					
Volatiles	Chloroethane	75-00-3	8260B	ug/kg					
Volatiles	Chloroform	67-66-3	8260B	ug/kg					
Volatiles	Chloromethane	74-87-3	8260B	ug/kg					
Volatiles	Chlorotrifluoroethene	79-38-9	8260B	ug/kg					
Volatiles	cis-1,2-Dichloroethene	156-59-2	8260B	ug/kg					
Volatiles	cis-1,3-Dichloropropene	10061-01-5	8260B	ug/kg					
Volatiles	Dibromochloromethane	124-48-1	8260B	ug/kg					
Volatiles	Dibromomethane	74-95-3	8260B	ug/kg					
Volatiles	Dichlorodifluoromethane	75-71-8	8260B	ug/kg					
Volatiles	EFH (C12-C14)	PHCC12C14	8015M	mg/kg					
Volatiles	EFH (C15-C20)	PHCC15C20	8015M	mg/kg					
Volatiles	EFH (C21-C30)	PHCC21C30	8015M	mg/kg					
Volatiles	EFH (C30-C40)	PHCC30C40	8015M	mg/kg					
Volatiles	EFH (C8-C11)	PHCC8C11	8015M	mg/kg					
Volatiles	Ethylbenzene	100-41-4	8260B	ug/kg					
Volatiles	Freon 113	76-13-1	8260B	ug/kg					
Volatiles	Freon 113a	75-88-7	8260B	ug/kg					
Volatiles	GRO (C5-C12)	GROC5C12	8015M	mg/kg					
Volatiles	Hexachlorobutadiene	87-68-3	8260B	ug/kg					
Volatiles	Isopropylbenzene	98-82-8	8260B	ug/kg					
Volatiles	Isopropyltoluene	99-87-6	8260B	ug/kg					
Volatiles	m,p-Xylene	179601-23-1	8260B	ug/kg					
Volatiles	Methyl tert-Butyl Ether	1634-04-4	8260B	ug/kg					
Volatiles	Methylene chloride	75-09-2	8260B	ug/kg					
Volatiles	N-Butylbenzene	104-51-8	8260B	ug/kg					
Volatiles	N-Propylbenzene	103-65-1	8260B	ug/kg					
Volatiles	o-Xylene	95-47-6	8260B	ug/kg					
Volatiles	sec-Butylbenzene	135-98-8	8260B	ug/kg					
Volatiles	Styrene	100-42-5	8260B	ug/kg					
Volatiles	tert-Butylbenzene	98-06-6	8260B	ug/kg					
Volatiles	Tetrachloroethene	127-18-4	8260B	ug/kg					
Volatiles	Toluene	108-88-3	8260B	ug/kg					
Volatiles	trans-1,2-Dichloroethene	156-60-5	8260B	ug/kg					
Volatiles	trans-1,3-Dichloropropene	10061-02-6	8260B	ug/kg					
Volatiles	Trichloroethene	79-01-6	8260B	ug/kg					
Volatiles	Trichlorofluoromethane	75-69-4	8260B	ug/kg					
Volatiles	Vinyl Chloride	75-01-4	8260B	ug/kg					

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

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

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

Table C-7 - Subarea 5D South Field Duplicate Results

				Location	SL-001-SA5DS		SL-001-SA5DS		RPD	SL-034-SA5DS		SL-034-SA5DS		RPD	SL-034-SA5DS		SL-034-SA5DS		RPD	SL-006-SA5DS		SL-006-SA5DS		RPD
				Sample Name:	DUP01-SA5DS-QC-092611		SL-001-SA5DS-SS-0.0-0.5			DUP-02-SA5DS-QC-092811		SL-034-SA5DS-SS-0.0-0.5			DUP03-SA5DS-QC-101711		SL-034-SA5DS-SB-4.0-5.0			DUP04-SA5DS-QC-110911		SL-006-SA5DS-SS-0.0-0.5		
				Sample Date	09/26/2011		09/26/2011			09/28/2011		09/28/2011			10/17/2011		10/17/2011			11/09/2011		09/27/2011		
				Start Depth:	0		0			0		0			4		4			0		0		
				End Depth:	0.5		0.5			0.5		0.5			5		5			0.5		0.5		
				Area:	5DS		5DS			5DS		5DS			5DS		5DS			5DS		5DS		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	12200		12200		--	30100		31900		-5.81	34700		34200		1.45	17200		17000		1.17
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.43	J	0.436	J	-1.39	0.33	J	0.392	J	-17.17	0.562	UJ	0.223	UJ	--	0.217	R	0.203	J	6.67
Inorganic	Arsenic	7440-38-2	6020	mg/kg	8.99	J	7.36	J	19.94	7.53	J	7.4	J	1.74	6.43	J	6.85	J	-6.33	4.58	J	5.8	J	-23.51
Inorganic	Barium	7440-39-3	6020	mg/kg	98.1	J	69.4	J	34.27	134		182		-30.38	133		162		-19.66	63.8	J	81.2	J	-24.00
Inorganic	Beryllium	7440-41-7	6020	mg/kg	0.397		0.401		-1.00	1.08		1.16		-7.14	0.852		0.879		-3.12	0.498	J	0.698	J	-33.44
Inorganic	Boron	7440-42-8	6010B	mg/kg	6.86		7.49		-8.78	14.9		15.5		-3.95	4.65	J	4.91	J	-5.44	7.21		7.62		-5.53
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.351	J	0.294	J	17.67	0.277	J	0.304	J	-9.29	0.154	J	0.162		-5.06	0.181	J	0.233	J	-25.12
Inorganic	Calcium	7440-70-2	6010B	mg/kg	5090		5160		-1.37	8920		9210		-3.20	14900	J	9770	J	41.59	3730		3670		1.62
Inorganic	Chromium	7440-47-3	6020	mg/kg	63.1	J	54.1	J	15.36	40.4	J	40	J	1.00	40		48.2		-18.59	33.4	J	42	J	-22.81
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	1	U	1	U	--	1	J	1	UJ	200.00	1.1	U	1.2	U	--	1.1	J	1.1	UJ	200.00
Inorganic	Cobalt	7440-48-4	6020	mg/kg	11.7		7.42		44.77	14.2	J	13.9	J	2.14	12.7		15.5		-19.86	5.31	J	6.69	J	-23.00
Inorganic	Copper	7440-50-8	6020	mg/kg	8.84	J	7.37	J	18.14	21.8	J	21.6	J	0.92	18.3		21.3		-15.15	6.41	J	7.68	J	-18.03
Inorganic	Fluoride	16984-48-8	300	mg/kg	2.9	J	4.6	J	-45.33	1.3		1.4		-7.41	5.4	J	4.9	J	9.71	1.1	UJ	1.1	UJ	--
Inorganic	Iron	7439-89-6	6010B	mg/kg	23700		22900		3.43	35800		37400		-4.37	36000		36000		--	23400		23300		0.43
Inorganic	Lead	7439-92-1	6020	mg/kg	48	J	40.1	J	17.93	12.7	J	12.4	J	2.39	9.38	J	11	J	-15.90	12.3	J	14.8	J	-18.45
Inorganic	Lithium	7439-93-2	6010B	mg/kg	18.2		16.2		11.63	30.4		31.6		-3.87	31.7		31.2		1.59	19.4		19.5		-0.51
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	5790		5630		2.80	8650		8840		-2.17	8640		8730		-1.04	4970		5010		-0.80
Inorganic	Manganese	7439-96-5	6010B	mg/kg	308		305		0.98	353		370		-4.70	327		367		-11.53	264		278		-5.17
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.0115	J	0.0133	J	-14.52	0.101	U	0.103	U	--	0.113	U	0.11	U	--	0.0143	J	0.0144	J	-0.70
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	0.906	J	0.757	J	17.92	0.543	J	0.548	J	-0.92	0.262	J	0.326		-21.77	0.441	J	0.484	J	-9.30
Inorganic	Nickel	7440-02-0	6020	mg/kg	19.4	J	14	J	32.34	28	J	27.8	J	0.72	21.8	J	26.2	J	-18.33	9.63	J	12.5	J	-25.94
Inorganic	Percent Moisture	MOIST	160.3M	%	0.73		0.67		8.57	3.8		4		-5.13	12.7		12.2		4.02	10.7		10.3		3.81
Inorganic	Perchlorate	14797-73-0	314	ug/kg	30.2	U	30.2	U	--	31.2	U	31.3	U	--	34.4	U	34.2	U	--	33.6	U	33.4	U	--
Inorganic	pH	pH	9045M	pH unit	6.51		6.04		7.49	7.31		7.61		-4.02	8.5		8.26		2.86	6.16		6.27		-1.77
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	879		878		0.11	533		511		4.21	295	J	258	J	13.38	751		731		2.70
Inorganic	Potassium	9/7/7440	6010B	mg/kg	1630		1760		-7.67	5030		4980		1.00	3840		4010		-4.33	3110		3110		--
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.275	J	0.257	J	6.77	0.267	J	0.272	J	-1.86	1.12	UJ	0.22	J	200.00	0.176	J	0.29	J	-48.93
Inorganic	Silver	7440-22-4	6020	mg/kg	0.0541	J	0.0372	J	37.02	0.042	J	0.0485	J	-14.36	0.281	UJ	0.023	J	200.00	0.0262	J	0.0259	J	1.15
Inorganic	Sodium	7440-23-5	6010B	mg/kg	109		124		-12.88	99.2	J	100	J	-0.80	135		132		2.25	100	J	98.3	J	1.71
Inorganic	Strontium	7440-24-6	6010B	mg/kg	22.4		22		1.80	39.1		40.3		-3.02	49		47.1		3.95	26.9		26.5		1.50
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.197	J	0.172	J	13.55	0.448	J	0.432	J	3.64	0.29		0.441		-41.31	0.171	J	0.238	J	-32.76
Inorganic	Tin	7440-31-5	6010B	mg/kg	9.88	U	10.1	U	--	10.3	U	10.3	U	--	11.3	U	11.4	U	--	11.2	U	10.6	U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	1160		1240		-6.67	1440		1540		-6.71	1820		1820		--	964		924		4.24
Inorganic	Vanadium	7440-62-2	6020	mg/kg	118	J	98.1	J	18.42	81.1		79		2.62	81.3	J	99.3	J	-19.93	54.5	J	69.8	J	-24.62
Inorganic	Zinc	7440-66-6	6020	mg/kg	82.3	J	72.7	J	12.39	99.6		102		-2.38	77.6		91.9		-16.87	48.5	J	60.5	J	-22.02
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	8.12		12.5		-42.48	4.15	J	4.78	J	-14.11	4.85	J	5.12	J	-5.42	8.55		8.03		6.27
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	15.1		13.6		10.45	5.06	U	5.13	U	--	5.63	U	5.49	U	--	4.28	J	4.09	J	4.54
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	2.43	J	2.62	J	-7.52	5.06	UJ	5.13	UJ	--	5.63	U	5.49	U	--	0.991	J	0.95	J	4.22
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	0.233	J	0.221	J	5.29	5.06	UJ	5.13	UJ	--	5.63	UJ	5.49	UJ	--	5.52	U	5.52	U	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	0.295	J	0.286	J	3.10	5.06	UJ	5.13	UJ	--	0.0475	J	5.49	UJ	200.00	0.121	J	5.52	U	200.00
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	0.466	J	0.26	J	56.75	5.06	UJ	5.13	UJ	--	5.63	UJ	5.49	UJ	--	0.321	J	0.353	J	-9.50
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	0.765	J	0.734	J	4.14	5.06	U	0.0828	J	200.00	0.0734	J	0.0442	J	49.66	0.974	J	0.903	J	7.57
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	0.347	J	0.419	J	-18.80	5.06	UJ	5.13	UJ	--	5.63	UJ	5.49	UJ	--	0.217	J	0.215	J	0.93
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	0.668	J	0.789	J	-16.61	5.06	U	0.133	J	200.00	5.63	UJ	5.49	UJ	--	1.25	J	1.32	J	-5.45
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	4.94	U	0.12	J	200.00	0.174	J	5.13	UJ	200.00	0.143	J	5.49	U	200.00	0.467	J	0.501	J	-7.02
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	0.159	J	0.246	J	-42.96	5.06	UJ	5.13	UJ	--	0.128	J	5.49	UJ	200.00	0.209	J	0.185	J	12.18
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	0.644	J	1.23	J	-62.54	5.06	UJ	5.13	UJ	--	0.19	J	5.49	UJ	200.00	0.407	J	0.293	J	32.57
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	0.328	J	0.314	J	4.36	5.06	UJ	5.13	UJ	--	5.63	UJ	5.49	UJ	--	5.52	U	5.52	U	--
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	1.15	J	1.31	J	-13.01	5.06	U	5.13	U	--	5.63	UJ	5.49	UJ	--	0.503	J	5.52	UJ	200.00
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	0.989	U	0.987	U	--	1.01	U	1.03	U	--	0.0345	J	1.1	UJ	200.00	0.0565	J	0.0534	J	5.64
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	0.602	J	0.51	J	16.55	0.0615	J	1.03	UJ	200.00	1.13	U	1.1	U	--	1.1	UJ	0.124	J	200.00
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	1.7	U	1.7	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	1.7	U	1.7	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	1.7	U	1.7	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	1.7	U	1.7	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	1.7	U	1.7	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	4.9		8		-48.06	0.62	J	1.8	UJ	200.00	1.9	U	1.9	U	--	0.85	J	1.8	J	-71.70
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	5.9		7.7		-26.47	1.8	U	1.8	U	--	1.9	U	1.9	U	--	0.68	J	1.9	UJ	200.00
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	1.7	U	1.7	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	1.7	U	1.7	U	--	1.8	U	1.8	U	--	1.9	U	1.9	U	--	1.9	U	1.9	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.3	U	3.3	U	--	3.4	U	3.4	U	--	3.8	U	3.7	U	--	3.7	U	3.7	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.3	U	3.3	U	--	3.4	U	3.4	U	--	3.8	U	3.7	U	--	3.7	U	3.7	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	7.4	J	2.4	J	102.04	3.4	U	3.4	U	--	3.8	U	3.7	U	--	1.9	J	1.7	J	11.11
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	230	J	135	J	52.05	6.37	J	9.33	J	-37.71	11.3	U	11	U	--	39.2		38.5		1.80
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	5.39	J	5.49	J	-1.84	10.1	U	0.613	J	200.00	11.3	U	11	U	--	1.85	J	1.87	J	-1.08
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg	9	U	9.1	R	--	9.3	U	9.3	U	--										
Pesticides	2,4 DB	94-82-6	8151A	ug/kg	1.7	U	2	R	--	2.6	U	3.5	U	--										
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg	0.43	U	0.5	U	--	0.18	U	0.18	U	--										
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg	0.17	U	0.17	R	--	0.23	UJ	0.44	J	200.00										
Pesticides	2,4-D	94-75-7	8151A	ug/kg	3.6	U	3.6	U	--	3.7	U	3.7	U	--										
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg	0.34	U	0.34	R	--	0.35	U	0.35	U	--								0.35	U	
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg	0.7		0.52		29.51	0.36	J	0.1	J	113.04								1	J	
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg	1.5		1.2		22.22	0.46	J	0.22	J	70.59								0.63	J	
Pesticides	Aldrin	309-00-2	8081A	ug/kg	0.17	U	0.17	U	--	0.17	U	0.17	U	--								0.17	U	
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg	0.17	U	0.17	U	--	0.17	U	0.17	U	--								0.17	U	
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg	0.17	U	0.17	U	--	0.13	J	0.17	UJ	200.00								0.17	U	
Pesticides	Chlordane	57-74-9	8081A	ug/kg	5.3	J	2	J	90.41	1.9	J	0.9	J	71.43								3.8	J	
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg	0.48	J	0.17	UJ	200.00	0.17	U	0.17	U	--								0.17	U	
Pesticides	Dicamba	1918-00-9	8151A	ug/kg	1.2	U	1.2	R	--	1.2	U	1.2	U	--										

Table C-7 - Subarea 5D South Field Duplicate Results

				Location	SL-001-SA5DS		SL-001-SA5DS		RPD	SL-034-SA5DS		SL-034-SA5DS		RPD	SL-034-SA5DS		SL-034-SA5DS		RPD	SL-006-SA5DS		SL-006-SA5DS		RPD
				Sample Name:	DUP01-SA5DS-QC-092611		SL-001-SA5DS-SS-0.0-0.5			DUP-02-SA5DS-QC-092811		SL-034-SA5DS-SS-0.0-0.5			DUP03-SA5DS-QC-101711		SL-034-SA5DS-SB-4.0-5.0			DUP04-SA5DS-QC-110911		SL-006-SA5DS-SS-0.0-0.5		
				Sample Date	09/26/2011		09/26/2011			09/28/2011		09/28/2011			10/17/2011		10/17/2011			11/09/2011		09/27/2011		
				Start Depth:	0		0			0		0			4		4			0		0		
				End Depth:	0.5		0.5			0.5		0.5			5		5			0.5		0.5		
				Area:	5DS		5DS			5DS		5DS			5DS		5DS			5DS		5DS		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit																				
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg	1.7	U	1.7	R	--	1.8	U	1.8	U	--										
Pesticides	Dieldrin	60-57-1	8081A	ug/kg	0.34	U	0.34	U	--	0.35	U	0.35	U	--								0.35	U	
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg	2.4	R	2.4	R	--	2.5	U	2.5	U	--										
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg	0.17	U	0.17	U	--	0.17	U	0.17	U	--								0.17	U	
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg	0.34	U	0.34	U	--	0.35	U	0.35	U	--								0.35	U	
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg	0.34	U	0.34	U	--	0.35	U	0.35	U	--								0.35	U	
Pesticides	Endrin	72-20-8	8081A	ug/kg	0.34	U	0.34	U	--	0.35	U	0.35	U	--								0.35	U	
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg	0.51		0.43	J	17.02	0.13	J	0.35	UJ	200.00								0.35	U	
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg	0.34	U	0.34	U	--	0.35	U	0.35	U	--								0.35	U	
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg	0.17	U	0.17	U	--	0.17	UJ	0.038	J	200.00								0.17	U	
Pesticides	Heptachlor	76-44-8	8081A	ug/kg	0.17	U	0.17	U	--	0.17	U	0.17	U	--								0.17	U	
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg	0.17	U	0.17	U	--	0.17	U	0.17	U	--								0.17	U	
Pesticides	MCPA	94-74-6	8151A	ug/kg	250	U	250	R	--	260	U	260	U	--										
Pesticides	MCPP	93-65-2	8151A	ug/kg	250	U	250	R	--	260	U	260	U	--										
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--								1.7	U	
Pesticides	Mirex	2385-85-5	8081A	ug/kg	0.34	U	0.34	U	--	0.35	U	0.35	U	--								0.35	U	
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg	13	U	13	U	--	6.8	U	6.9	U	--								7.2	U	
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg	1000	U	1000	U	--	1000	U	1000	U	--	1100	U	1100	UJ	--	1100	U	1100	U	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	UJ	180	UJ	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	330	U	330	U	--	350	U	340	U	--	380	U	380	U	--	370	U	370	U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	500	UJ	500	UJ	--	520	U	520	U	--	570	U	570	U	--	550	U	550	U	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg	500	U	500	U	--	520	U	520	U	--	570	U	570	U	--	550	U	550	U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg	500	U	500	U	--	520	U	520	U	--	570	U	570	U	--	550	U	550	U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	0.47	J	1.8	UJ	200.00
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg	3300	U	3300	R	--	3500	U	3400	R	--	3800	U	3800	U	--	3700	U	3700	R	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	0.93	J	1.8	UJ	200.00
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	0.78	J	1.8	UJ	200.00
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	1.1	J	3.2	J	-97.67	1.7	J	1	J	51.85	1.9	U	1.9	U	--	2	J	1.8	UJ	200.00
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	0.89	J	1.8	UJ	200.00
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	0.77	J	1.8	UJ	200.00
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg	500	U	500	U	--	520	U	520	U	--	570	U	570	U	--	550	U	550	U	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg	500	U	500	U	--	520	U	520	U	--	570	U	570	U	--	550	U	550	U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg	51	J			200.00	48	J			200.00										
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg			13	J				18	U		20	U	20	U	--	21	J	20	UJ	200.00
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg	18	U	18	U	--	18	U	18	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	0.75	J	0.49	J	41.94	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.9	J	0.41	J	129.00
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg	18	U	18	U	--	18	U	18	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg	18	U	18	U	--	18	U	18	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg	18	U	18	U	--	18	U	18	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg	18	UJ	6.9	J	200.00	18	U	18	U	--	20	U	20	U	--	20	U	20	U	--
Semivolatiles	Fluoranthene	206-44-0	8270C	ug/kg			36	J																
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	1.7	U			200.00	1.7	U	1.7	U	--	1.9	U	1.9	U	--	2.4	J	1.8	UJ	200.00
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	500	U	500	U	--	520	U	520	U	--	570	U	570	U	--	550	U	550	U	--

Table C-7 - Subarea 5D South Field Duplicate Results

				Location	SL-001-SA5DS		SL-001-SA5DS			SL-034-SA5DS		SL-034-SA5DS			SL-034-SA5DS		SL-034-SA5DS			SL-006-SA5DS		SL-006-SA5DS		
				Sample Name:	DUP01-SA5DS-QC-092611		SL-001-SA5DS-SS-0.0-0.5			DUP-02-SA5DS-QC-092811		SL-034-SA5DS-SS-0.0-0.5			DUP03-SA5DS-QC-101711		SL-034-SA5DS-SB-4.0-5.0			DUP04-SA5DS-QC-110911		SL-006-SA5DS-SS-0.0-0.5		
				Sample Date	09/26/2011		09/26/2011			09/28/2011		09/28/2011			10/17/2011		10/17/2011			11/09/2011		09/27/2011		
				Start Depth:	0		0			0		0			4		4			0		0		
				End Depth:	0.5		0.5			0.5		0.5			5		5			0.5		0.5		
				Area:	5DS		5DS			5DS		5DS			5DS		5DS			5DS		5DS		
				Matrix:	SO		SO			SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit					RPD					RPD				RPD						RPD
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	0.97	J	1.8	UJ	200.00
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	1.7	U	1.7	U	--	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	170	U	170	U	--	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	500	U	500	U	--	520	U	520	U	--	570	U	570	U	--	550	U	550	U	--
Semivolatiles	Phenanthrene	85-01-8	8270C	ug/kg			35	J																
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	1.7	U			200.00	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.4	J	1.8	UJ	200.00
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	18	J	170	UJ	200.00	170	U	170	U	--	190	U	190	U	--	180	U	180	U	--
Semivolatiles	Pyrene	129-00-0	8270C	ug/kg			24	J																
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	1.7	U			200.00	1.7	U	1.7	U	--	1.9	U	1.9	U	--	1.8	J	1.8	UJ	200.00

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

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

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

Table C-8 Summary of Data Completeness Following Data Validation – Subarea 5D North

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins	777	2823		4735	114	8449	100
NDMA	37	41		131	5	214	100
Formaldehyde	5	8		184	12	209	100
Cyanide		2		207		209	100
Fluoride, Nitrate	199	469	1	17	20	706	99.86
Hexavalent Chromium	24	314		156	3	497	100
Mercury	36	192		258	11	497	100
Metals – 6010B	4719	1582		655	2	6958	100
Metals – 6020	2227	5520	1	102	102	7952	99.99
Perchlorate-314	1			493	3	497	100
Perchlorate-6850		9		64		73	100
Alcohols, terphenyls	1	13	3	1215	22	1254	99.76
Energetics	1	11	30	4160	46	4248	99.29
Total Petroleum Hydrocarbons, glycols	278	123	3	1356	38	1798	99.83
PCBs/PCTs	148	223	10	5442	141	5964	99.83
Pesticides	180	390	72	2612	589	3843	98.13
Semivolatiles	64	421	11	23407	412	24315	99.95
Herbicides	82	97	50	1586	15	1830	97.3
Semivolatiles SIM	1116	1193		9102	89	11500	100
Volatiles	79	104		13388	97	13668	100
Volatiles SIM				204		204	100
Completeness Total for All Subarea 5D North Samples Collected and Judged Valid							**99.82**

Table C-9 Summary of Data Completeness Following Data Validation – Subarea 5D South

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins	39	458		485	21	1003	100
Fluoride, Nitrate	16	35		3	8	62	100
NDMA				3		3	100
Formaldehyde				3		3	100
Cyanide				3		3	100
Hexavalent Chromium	8	29		20	2	59	100
Mercury		20		39		59	100
Metals – 6010B	647	114		65		826	100
Metals – 6020	327	599		9	9	944	100
Perchlorate-314	1			58		59	100
Perchlorate-6850		2		4		6	100
PCBs/PCTs	16	55		596	41	708	100
Alcohols, terphenyls				18		18	100
Energetics				54		54	100
Total Petroleum Hydrocarbons, glycols	4	1		22		27	100
Pesticides	35	61	1	537	38	672	99.85
Herbicides	24	10	16	260		310	94.84
Semivolatiles	1	19	4	2748	16	2788	99.86
Semivolatiles SIM	108	230		1113	11	1462	100
Completeness Total for All Subarea 5D South Samples Collected and Judged Valid							**99.77**

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-002-SA5DN-SB-4.0-5.0	DE151	SO	2011-05-16	FIELD
5DN	SL-002-SA5DN-SB-9.0-10.0	DE151	SO	2011-05-16	FIELD
5DN	SL-003-SA5DN-SB-0.5-1.5	DE151	SO	2011-05-16	FIELD
5DN	SL-003-SA5DN-SB-8.0-9.0	DE151	SO	2011-05-16	FIELD
5DN	SL-004-SA5DN-SB-3.5-4.5	DE151	SO	2011-05-16	FIELD
5DN	SL-004-SA5DN-SB-9.0-10.0	DE151	SO	2011-05-16	FIELD
	TB-051611	DE151	AQ	2011-05-16	FIELD
5DN	DUP-01-SA5DN-QC-051711	DE152	SO	2011-05-17	FIELD
5DN	EB01-SA5DN-SS-051711	DE152	WQ	2011-05-17	FIELD
5DN	SL-066-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-067-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-072-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-074-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-075-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-076-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-079-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-080-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-081-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-082-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-083-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-084-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-206-SA5DN-SS-0.0-0.5	DE152	SO	2011-05-17	FIELD
5DN	SL-001-SA5DN-SB-5.5-6.5	DE153	SO	2011-05-17	FIELD
5DN	SL-001-SA5DN-SB-9.0-10.0	DE153	SO	2011-05-17	FIELD
5DN	SL-005-SA5DN-SB-4.0-5.0	DE153	SO	2011-05-17	FIELD
5DN	SL-005-SA5DN-SB-9.0-10.0	DE153	SO	2011-05-17	FIELD
5DN	SL-068-SA5DN-SB-4.0-5.0	DE153	SO	2011-05-17	FIELD
5DN	SL-068-SA5DN-SB-9.0-10.0	DE153	SO	2011-05-17	FIELD
5DN	SL-073-SA5DN-SB-4.0-5.0	DE153	SO	2011-05-17	FIELD
5DN	SL-073-SA5DN-SB-9.0-10.0	DE153	SO	2011-05-17	FIELD
	TB-051711	DE153	AQ	2011-05-17	FIELD
5DN	DUP-02-SA5DN-QC-051811	DE154	SO	2011-05-18	FIELD
5DN	EB02-SA5DN-SS-051811	DE154	WQ	2011-05-18	FIELD
5DN	SL-054-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-055-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-056-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-058-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-059-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-064-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-065-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-086-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-087-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-088-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-089-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-090-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	SL-202-SA5DN-SS-0.0-0.5	DE154	SO	2011-05-18	FIELD
5DN	DUP-03-SA5DN-QC-051811	DE155	SO	2011-05-18	FIELD
5DN	SL-069-SA5DN-SB-4.0-5.0	DE155	SO	2011-05-18	FIELD
5DN	SL-069-SA5DN-SB-9.0-10.0	DE155	SO	2011-05-18	FIELD
5DN	SL-070-SA5DN-SB-4.0-5.0	DE155	SO	2011-05-18	FIELD
5DN	SL-070-SA5DN-SB-9.0-10.0	DE155	SO	2011-05-18	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-074-SA5DN-SB-4.0-5.0	DE155	SO	2011-05-18	FIELD
5DN	SL-074-SA5DN-SB-9.0-10.0	DE155	SO	2011-05-18	FIELD
5DN	SL-076-SA5DN-SB-4.0-5.0	DE155	SO	2011-05-18	FIELD
5DN	SL-076-SA5DN-SB-9.0-10.0	DE155	SO	2011-05-18	FIELD
5DN	EB03-SA5DN-SB-051911	DE156	WQ	2011-05-19	FIELD
5DN	EB04-SA5DN-SS-051911	DE156	WQ	2011-05-19	FIELD
5DN	SL-066-SA5DN-SB-4.0-5.0	DE156	SO	2011-05-19	FIELD
5DN	SL-066-SA5DN-SB-9.0-10.0	DE156	SO	2011-05-19	FIELD
5DN	SL-067-SA5DN-SB-4.0-5.0	DE156	SO	2011-05-19	FIELD
5DN	SL-067-SA5DN-SB-9.0-10.0	DE156	SO	2011-05-19	FIELD
5DN	SL-079-SA5DN-SB-4.0-5.0	DE156	SO	2011-05-19	FIELD
5DN	SL-079-SA5DN-SB-9.0-10.0	DE156	SO	2011-05-19	FIELD
5DN	SL-080-SA5DN-SB-4.0-5.0	DE156	SO	2011-05-19	FIELD
5DN	SL-080-SA5DN-SB-8.0-9.0	DE156	SO	2011-05-19	FIELD
5DN	SL-082-SA5DN-SB-4.0-5.0	DE156	SO	2011-05-19	FIELD
5DN	SL-206-SA5DN-SB-4.0-5.0	DE156	SO	2011-05-19	FIELD
	TB-051911	DE156	AQ	2011-05-19	FIELD
5DN	DUP-04-SA5DN-QC-051911	DE157	SO	2011-05-19	FIELD
5DN	SL-030-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-031-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-032-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-033-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-034-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-035-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-041-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-042-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-043-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-045-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-046-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-047-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-048-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-049-SA5DN-SS-0.0-0.5	DE157	SO	2011-05-19	FIELD
5DN	SL-020-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-024-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-025-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-026-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-027-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-028-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-029-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-036-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-037-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-038-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-039-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-040-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-044-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-050-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-051-SA5DN-SS-0.0-0.5	DE158	SO	2011-05-20	FIELD
5DN	SL-064-SA5DN-SB-4.0-5.0	DE158	SO	2011-05-20	FIELD
5DN	SL-065-SA5DN-SB-4.0-5.0	DE158	SO	2011-05-20	FIELD
5DN	SL-065-SA5DN-SB-7.0-8.0	DE158	SO	2011-05-20	FIELD
5DN	SL-086-SA5DN-SB-4.0-5.0	DE158	SO	2011-05-20	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-088-SA5DN-SB-4.0-5.0	DE158	SO	2011-05-20	FIELD
	TB-052011	DE158	AQ	2011-05-20	FIELD
5DN	DUP05-SA5DN-QC-052311	DE159	SO	2011-05-23	FIELD
5DN	EB05-SA5DN-SS-052311	DE159	WQ	2011-05-23	FIELD
5DN	SL-015-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-016-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-017-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-019-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-021-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-022-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-023-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-052-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-053-SA5DN-SS-0.0-0.5	DE159	SO	2011-05-23	FIELD
5DN	SL-075-SA5DN-SB-4.0-5.0	DE159	SO	2011-05-23	FIELD
5DN	SL-075-SA5DN-SB-9.0-10.0	DE159	SO	2011-05-23	FIELD
5DN	SL-081-SA5DN-SB-4.0-5.0	DE159	SO	2011-05-23	FIELD
5DN	SL-081-SA5DN-SB-9.0-10.0	DE159	SO	2011-05-23	FIELD
5DN	SL-084-SA5DN-SB-4.0-5.0	DE159	SO	2011-05-23	FIELD
5DN	SL-089-SA5DN-SB-4.0-5.0	DE159	SO	2011-05-23	FIELD
	TB-052311	DE159	WQ	2011-05-23	FIELD
5DN	SL-008-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-23	FIELD
5DN	SL-009-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-23	FIELD
5DN	SL-010-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-23	FIELD
5DN	SL-011-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-23	FIELD
5DN	SL-012-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-23	FIELD
5DN	SL-013-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-23	FIELD
5DN	SL-014-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-23	FIELD
5DN	SL-018-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-23	FIELD
5DN	SL-186-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-187-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-188-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-189-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-191-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-192-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-193-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-194-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-195-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-196-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-197-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	SL-198-SA5DN-SS-0.0-0.5	DE160	SO	2011-05-24	FIELD
5DN	EB05-SA5DN-SS-052311	DE161	WQ	2011-05-23	FIELD
5DN	EB06-SA5DN-SS-052411	DE161	WQ	2011-05-24	FIELD
5DN	SL-139-SA5DN-SB-2.0-3.0	DE161	SO	2011-05-24	FIELD
5DN	SL-145-SA5DN-SB-2.0-3.0	DE161	SO	2011-05-24	FIELD
5DN	SL-146-SA5DN-SB-2.0-3.0	DE161	SO	2011-05-24	FIELD
5DN	SL-150-SA5DN-SB-4.0-5.0	DE161	SO	2011-05-24	FIELD
5DN	SL-203-SA5DN-SS-0.0-0.5	DE161	SO	2011-05-24	FIELD
5DN	SL-204-SA5DN-SS-0.0-0.5	DE161	SO	2011-05-24	FIELD
	TB-052411	DE161	AQ	2011-05-24	FIELD
5DN	DUP07-SA5DN-QC-052511	DE162	SO	2011-05-25	FIELD
5DN	SL-130-SA5DN-SB-4.0-5.0	DE162	SO	2011-05-25	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-133-SA5DN-SB-4.0-5.0	DE162	SO	2011-05-25	FIELD
5DN	SL-140-SA5DN-SB-2.0-3.0	DE162	SO	2011-05-25	FIELD
5DN	SL-142-SA5DN-SB-2.0-3.0	DE162	SO	2011-05-25	FIELD
5DN	SL-144-SA5DN-SB-2.0-3.0	DE162	SO	2011-05-25	FIELD
	TB-052511	DE162	AQ	2011-05-25	FIELD
5DN	DUP06-SA5DN-QC-052411	DE163	SO	2011-05-24	FIELD
5DN	SL-001-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-25	FIELD
5DN	SL-002-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-25	FIELD
5DN	SL-004-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-25	FIELD
5DN	SL-005-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-25	FIELD
5DN	SL-006-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-25	FIELD
5DN	SL-057-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-24	FIELD
5DN	SL-060-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-25	FIELD
5DN	SL-185-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-24	FIELD
5DN	SL-190-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-25	FIELD
5DN	SL-199-SA5DN-SS-0.0-0.5	DE163	SO	2011-05-25	FIELD
5DN	DUP08-SA5DN-QC-052411	DE164	SO	2011-05-25	FIELD
5DN	EB07-SA5DN-SS-052511	DE164	WQ	2011-05-25	FIELD
5DN	EB08-SA5DN-SB-052511	DE164	WQ	2011-05-25	FIELD
5DN	SL-200-SA5DN-SS-0.0-0.5	DE164	SO	2011-05-25	FIELD
5DN	SL-201-SA5DN-SS-0.0-0.5	DE164	SO	2011-05-25	FIELD
5DN	SL-205-SA5DN-SS-0.0-0.5	DE164	SO	2011-05-25	FIELD
5DN	EB09-SA5DN-SS-052611	DE166	WQ	2011-05-26	FIELD
5DN	SL-164-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-165-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-170-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-171-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-172-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-173-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-174-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-175-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-176-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-179-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-180-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-181-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-182-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-183-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
5DN	SL-184-SA5DN-SS-0.0-0.5	DE166	SO	2011-05-26	FIELD
	TB-052611	DE166	AQ	2011-05-26	FIELD
5DN	DUP09-SA5DN-QC-052711	DE167	SO	2011-05-27	FIELD
5DN	SL-071-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
5DN	SL-091-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
5DN	SL-092-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
5DN	SL-093-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
5DN	SL-117-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
5DN	SL-118-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
5DN	SL-119-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
5DN	SL-120-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
5DN	SL-122-SA5DN-SS-0.0-0.5	DE167	SO	2011-05-27	FIELD
	TB-052711	DE167	AQ	2011-05-27	FIELD
5DN	DUP-10-SA5DN-QC-053111	DE168	SO	2011-05-31	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-008-SA5DN-SB-4.0-5.0	DE168	SO	2011-05-31	FIELD
5DN	SL-008-SA5DN-SB-9.0-10.0	DE168	SO	2011-05-31	FIELD
5DN	SL-010-SA5DN-SB-4.0-5.0	DE168	SO	2011-05-31	FIELD
5DN	SL-010-SA5DN-SB-9.0-10.0	DE168	SO	2011-05-31	FIELD
5DN	SL-013-SA5DN-SB-4.0-5.0	DE168	SO	2011-05-31	FIELD
5DN	SL-013-SA5DN-SB-9.0-10.0	DE168	SO	2011-05-31	FIELD
5DN	EB10-SA5DN-SS-053111	DE169	WQ	2011-05-31	FIELD
5DN	EB11-SA5DN-SB-053111	DE169	WQ	2011-05-31	FIELD
5DN	SL-014-SA5DN-SB-4.0-5.0	DE169	SO	2011-05-31	FIELD
5DN	SL-014-SA5DN-SB-9.0-10.0	DE169	SO	2011-05-31	FIELD
5DN	SL-094-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-095-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-097-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-098-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-099-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-101-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-102-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-103-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-104-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-110-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-111-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-112-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-113-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-114-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-121-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
5DN	SL-125-SA5DN-SS-0.0-0.5	DE169	SO	2011-05-31	FIELD
	TB-053111	DE169	AQ	2011-05-31	FIELD
5DN	DUP-11-SA5DN-QC-060111	DE170	SO	2011-06-01	FIELD
5DN	SL-015-SA5DN-SB-12.0-13.0	DE170	SO	2011-06-01	FIELD
5DN	SL-015-SA5DN-SB-4.0-5.0	DE170	SO	2011-06-01	FIELD
5DN	SL-017-SA5DN-SB-4.0-5.0	DE170	SO	2011-06-01	FIELD
5DN	SL-017-SA5DN-SB-7.0-8.0	DE170	SO	2011-06-01	FIELD
5DN	SL-018-SA5DN-SB-4.0-5.0	DE170	SO	2011-06-01	FIELD
5DN	SL-100-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-105-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-106-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-107-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-108-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-109-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-123-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-124-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-126-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-127-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-128-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-129-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-130-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
5DN	SL-148-SA5DN-SS-0.0-0.5	DE170	SO	2011-06-01	FIELD
	TB-060111	DE170	AQ	2011-06-01	FIELD
5DN	DUP-12-SA5DN-QC-060211	DE171	SO	2011-06-02	FIELD
5DN	EB12-SA5DN-SS-060211	DE171	WQ	2011-06-02	FIELD
5DN	SL-131-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-132-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-133-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-134-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-135-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-136-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-137-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-138-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-139-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-140-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-141-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-142-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-143-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-144-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-145-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-149-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-150-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-151-SA5DN-SS-0.0-0.5	DE171	SO	2011-06-02	FIELD
5DN	SL-016-SA5DN-SB-12.0-13.0	DE172	SO	2011-06-02	FIELD
5DN	SL-016-SA5DN-SB-4.0-5.0	DE172	SO	2011-06-02	FIELD
5DN	SL-018-SA5DN-SB-7.5-8.5	DE172	SO	2011-06-01	FIELD
5DN	SL-021-SA5DN-SB-19.5-20.5	DE172	SO	2011-06-02	FIELD
5DN	SL-021-SA5DN-SB-4.0-5.0	DE172	SO	2011-06-02	FIELD
	TB-060211	DE172	AQ	2011-06-02	FIELD
5DN	DUP-13-SA5DN-QC-060311	DE173	SO	2011-06-03	FIELD
5DN	EB13-SA5DN-SS-060311	DE173	WQ	2011-06-03	FIELD
5DN	EB14-SA5DN-SB-060311	DE173	WQ	2011-06-03	FIELD
5DN	SL-019-SA5DN-SB-4.0-5.0	DE173	SO	2011-06-03	FIELD
5DN	SL-019-SA5DN-SB-9.0-10.0	DE173	SO	2011-06-03	FIELD
5DN	SL-027-SA5DN-SB-14.0-15.0	DE173	SO	2011-06-03	FIELD
5DN	SL-027-SA5DN-SB-4.0-5.0	DE173	SO	2011-06-03	FIELD
5DN	SL-052-SA5DN-SB-4.0-5.0	DE173	SO	2011-06-03	FIELD
5DN	SL-052-SA5DN-SB-9.0-10.0	DE173	SO	2011-06-03	FIELD
5DN	SL-152-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-153-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-154-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-155-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-156-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-157-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-158-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-159-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-160-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-162-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-166-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
5DN	SL-207-SA5DN-SS-0.0-0.5	DE173	SO	2011-06-03	FIELD
	TB-060311	DE173	AQ	2011-06-03	FIELD
5DN	SL-022-SA5DN-SB-15.0-16.0	DE174	SO	2011-06-06	FIELD
5DN	SL-022-SA5DN-SB-4.0-5.0	DE174	SO	2011-06-06	FIELD
5DN	SL-053-SA5DN-SB-11.5-12.5	DE174	SO	2011-06-06	FIELD
5DN	SL-053-SA5DN-SB-4.0-5.0	DE174	SO	2011-06-06	FIELD
	TB-060611	DE174	AQ	2011-06-06	FIELD
5DN	DUP13-SA5DN-QC-060711	DE175	SO	2011-06-07	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	EB15-SA5DN-SB-060711	DE175	WQ	2011-06-07	FIELD
5DN	SL-024-SA5DN-SB-19.0-20.0	DE175	SO	2011-06-07	FIELD
5DN	SL-024-SA5DN-SB-4.0-5.0	DE175	SO	2011-06-07	FIELD
5DN	SL-026-SA5DN-SB-17.0-18.0	DE175	SO	2011-06-07	FIELD
5DN	SL-026-SA5DN-SB-4.0-5.0	DE175	SO	2011-06-07	FIELD
5DN	SL-036-SA5DN-SB-4.0-5.0	DE175	SO	2011-06-07	FIELD
5DN	SL-036-SA5DN-SB-9.0-10.0	DE175	SO	2011-06-07	FIELD
	TB-060711	DE175	AQ	2011-06-07	FIELD
5DN	SL-023-SA5DN-SB-20.0-21.0	DE176	SO	2011-06-08	FIELD
5DN	SL-023-SA5DN-SB-4.0-5.0	DE176	SO	2011-06-08	FIELD
5DN	SL-025-SA5DN-SB-23.0-24.0	DE176	SO	2011-06-08	FIELD
5DN	SL-025-SA5DN-SB-4.0-5.0	DE176	SO	2011-06-08	FIELD
5DN	SL-028-SA5DN-SB-11.5-12.5	DE176	SO	2011-06-08	FIELD
5DN	SL-028-SA5DN-SB-4.0-5.0	DE176	SO	2011-06-08	FIELD
5DN	SL-051-SA5DN-SB-14.0-15.0	DE176	SO	2011-06-08	FIELD
5DN	SL-051-SA5DN-SB-4.0-5.0	DE176	SO	2011-06-08	FIELD
	TB-060811	DE176	AQ	2011-06-08	FIELD
5DN	EB16-SA5DN-SB-060911	DE177	WQ	2011-06-09	FIELD
5DN	SL-037-SA5DN-SB-11.5-12.5	DE177	SO	2011-06-09	FIELD
5DN	SL-037-SA5DN-SB-4.0-5.0	DE177	SO	2011-06-09	FIELD
5DN	SL-038-SA5DN-SB-10.5-11.5	DE177	SO	2011-06-09	FIELD
5DN	SL-038-SA5DN-SB-4.0-5.0	DE177	SO	2011-06-09	FIELD
5DN	SL-039-SA5DN-SB-11.5-12.5	DE177	SO	2011-06-09	FIELD
5DN	SL-039-SA5DN-SB-4.0-5.0	DE177	SO	2011-06-09	FIELD
5DN	SL-040-SA5DN-SB-10.5-11.5	DE177	SO	2011-06-09	FIELD
5DN	SL-040-SA5DN-SB-4.0-5.0	DE177	SO	2011-06-09	FIELD
5DN	SL-050-SA5DN-SB-11.2-12.5	DE177	SO	2011-06-09	FIELD
5DN	SL-050-SA5DN-SB-4.0-5.0	DE177	SO	2011-06-09	FIELD
	TB-060911	DE177	AQ	2011-06-09	FIELD
5DN	SL-041-SA5DN-SB-4.0-5.0	DE178	SO	2011-06-10	FIELD
5DN	SL-041-SA5DN-SB-9.0-10.0	DE178	SO	2011-06-10	FIELD
5DN	SL-045-SA5DN-SB-4.0-5.0	DE178	SO	2011-06-10	FIELD
5DN	SL-045-SA5DN-SB-9.0-10.0	DE178	SO	2011-06-10	FIELD
5DN	SL-048-SA5DN-SB-11.5-12.5	DE178	SO	2011-06-10	FIELD
5DN	SL-048-SA5DN-SB-4.0-5.0	DE178	SO	2011-06-10	FIELD
5DN	SL-049-SA5DN-SB-15.5-16.5	DE178	SO	2011-06-10	FIELD
5DN	SL-049-SA5DN-SB-4.0-5.0	DE178	SO	2011-06-10	FIELD
	TB-061011	DE178	AQ	2011-06-10	FIELD
5DN	SL-042-SA5DN-SB-4.0-5.0	DE179	SO	2011-06-13	FIELD
5DN	SL-042-SA5DN-SB-9.0-10.0	DE179	SO	2011-06-13	FIELD
5DN	SL-043-SA5DN-SB-4.0-5.0	DE179	SO	2011-06-13	FIELD
5DN	SL-043-SA5DN-SB-9.0-10.0	DE179	SO	2011-06-13	FIELD
5DN	SL-046-SA5DN-SB-4.0-5.0	DE179	SO	2011-06-13	FIELD
5DN	SL-046-SA5DN-SB-9.0-10.0	DE179	SO	2011-06-13	FIELD
5DN	SL-047-SA5DN-SB-10.0-11.0	DE179	SO	2011-06-13	FIELD
5DN	SL-047-SA5DN-SB-4.0-5.0	DE179	SO	2011-06-13	FIELD
5DN	SL-054-SA5DN-SB-4.0-5.0	DE179	SO	2011-06-13	FIELD
5DN	SL-054-SA5DN-SB-9.0-10.0	DE179	SO	2011-06-13	FIELD
5DN	SL-202-SA5DN-SB-4.0-5.0	DE179	SO	2011-06-13	FIELD
5DN	SL-202-SA5DN-SB-9.0-10.0	DE179	SO	2011-06-13	FIELD
	TB-061311	DE179	AQ	2011-06-13	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	DUP14-SA5DN-QC-061411	DE180	SO	2011-06-14	FIELD
5DN	EB17-SA5DN-SB-061411	DE180	WQ	2011-06-14	FIELD
5DN	SL-032-SA5DN-SB-10.0-11.0	DE180	SO	2011-06-14	FIELD
5DN	SL-032-SA5DN-SB-4.0-5.0	DE180	SO	2011-06-14	FIELD
5DN	SL-033-SA5DN-SB-11.0-12.0	DE180	SO	2011-06-14	FIELD
5DN	SL-033-SA5DN-SB-4.0-5.0	DE180	SO	2011-06-14	FIELD
5DN	SL-035-SA5DN-SB-4.0-5.0	DE180	SO	2011-06-14	FIELD
5DN	SL-035-SA5DN-SB-9.5-10.5	DE180	SO	2011-06-14	FIELD
5DN	SL-044-SA5DN-SB-12.0-13.0	DE180	SO	2011-06-14	FIELD
5DN	SL-044-SA5DN-SB-4.0-5.0	DE180	SO	2011-06-14	FIELD
	TB-061411	DE180	AQ	2011-06-14	FIELD
5DN	DUP15-SA5DN-QC-061511	DE181	SO	2011-06-15	FIELD
5DN	EB18-SA5DN-SB-061511	DE181	WQ	2011-06-15	FIELD
5DN	SL-020-SA5DN-SB-3.5-4.5	DE181	SO	2011-06-15	FIELD
5DN	SL-029-SA5DN-SB-4.0-5.0	DE181	SO	2011-06-15	FIELD
5DN	SL-030-SA5DN-SB-4.0-5.0	DE181	SO	2011-06-15	FIELD
5DN	SL-031-SA5DN-SB-4.0-5.0	DE181	SO	2011-06-15	FIELD
5DN	SL-034-SA5DN-SB-4.0-5.0	DE181	SO	2011-06-15	FIELD
5DN	SL-055-SA5DN-SB-4.0-5.0	DE181	SO	2011-06-15	FIELD
5DN	SL-055-SA5DN-SB-9.0-10.0	DE181	SO	2011-06-15	FIELD
5DN	SL-056-SA5DN-SB-4.0-5.0	DE181	SO	2011-06-15	FIELD
5DN	SL-056-SA5DN-SB-9.0-10.0	DE181	SO	2011-06-15	FIELD
	TB-061511	DE181	AQ	2011-06-15	FIELD
5DN	SL-057-SA5DN-SB-4.0-5.0	DE182	SO	2011-06-16	FIELD
5DN	SL-057-SA5DN-SB-9.0-10.0	DE182	SO	2011-06-16	FIELD
5DN	SL-058-SA5DN-SB-4.0-5.0	DE182	SO	2011-06-16	FIELD
5DN	SL-058-SA5DN-SB-9.0-10.0	DE182	SO	2011-06-16	FIELD
5DN	SL-059-SA5DN-SB-4.0-5.0	DE182	SO	2011-06-16	FIELD
5DN	SL-059-SA5DN-SB-9.0-10.0	DE182	SO	2011-06-16	FIELD
5DN	SL-061-SA5DN-SB-4.0-5.0	DE182	SO	2011-06-16	FIELD
5DN	SL-061-SA5DN-SB-9.0-10.0	DE182	SO	2011-06-16	FIELD
5DN	SL-062-SA5DN-SB-4.0-5.0	DE182	SO	2011-06-16	FIELD
	TB-061611	DE182	AQ	2011-06-16	FIELD
5DN	SL-073-SA5DN-SB-4.5	DE184	SO	2011-06-20	FIELD
5DN	SL-093-SA5DN-SB-4.0-5.0	DE184	SO	2011-06-20	FIELD
5DN	SL-093-SA5DN-SB-9.0-10.0	DE184	SO	2011-06-20	FIELD
5DN	SL-117-SA5DN-SB-4.0-5.0	DE184	SO	2011-06-20	FIELD
5DN	SL-118-SA5DN-SB-4.0-5.0	DE184	SO	2011-06-20	FIELD
5DN	SL-119-SA5DN-SB-4.0-5.0	DE184	SO	2011-06-20	FIELD
	TB-062011	DE184	AQ	2011-06-20	FIELD
5DN	SL-097-SA5DN-SB-4.0-5.0	DE185	SO	2011-06-21	FIELD
5DN	SL-097-SA5DN-SB-8.5-9.5	DE185	SO	2011-06-21	FIELD
5DN	SL-098-SA5DN-SB-4.0-5.0	DE185	SO	2011-06-21	FIELD
5DN	SL-098-SA5DN-SB-7.0-8.0	DE185	SO	2011-06-21	FIELD
5DN	SL-099-SA5DN-SB-4.0-5.0	DE185	SO	2011-06-21	FIELD
5DN	SL-113-SA5DN-SB-4.0-5.0	DE185	SO	2011-06-21	FIELD
5DN	SL-120-SA5DN-SB-4.0-5.0	DE185	SO	2011-06-21	FIELD
5DN	SL-121-SA5DN-SB-4.0-5.0	DE185	SO	2011-06-21	FIELD
5DN	SL-121-SA5DN-SB-8.0-9.0	DE185	SO	2011-06-21	FIELD
5DN	SL-125-SA5DN-SB-4.0-5.0	DE185	SO	2011-06-21	FIELD
5DN	SL-125-SA5DN-SB-9.0-10.0	DE185	SO	2011-06-21	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
	TB-062111	DE185	AQ	2011-06-21	FIELD
5DN	DUP16-SA5DN-QC-062211	DE186	SO	2011-06-22	FIELD
5DN	EB19-SA5DN-SB-062211	DE186	WQ	2011-06-22	FIELD
5DN	SL-094-SA5DN-SB-4.0-5.0	DE186	SO	2011-06-22	FIELD
5DN	SL-094-SA5DN-SB-9.0-10.0	DE186	SO	2011-06-22	FIELD
5DN	SL-095-SA5DN-SB-4.0-5.0	DE186	SO	2011-06-22	FIELD
5DN	SL-095-SA5DN-SB-9.0-10.0	DE186	SO	2011-06-22	FIELD
5DN	SL-111-SA5DN-SB-4.0-5.0	DE186	SO	2011-06-22	FIELD
5DN	SL-112-SA5DN-SB-4.0-5.0	DE186	SO	2011-06-22	FIELD
5DN	SL-114-SA5DN-SB-4.0-5.0	DE186	SO	2011-06-22	FIELD
5DN	SL-115-SA5DN-SB-4.0-5.0	DE186	SO	2011-06-22	FIELD
	TB-062211	DE186	AQ	2011-06-22	FIELD
5DN	SL-100-SA5DN-SB-3.0-4.0	DE187	SO	2011-06-23	FIELD
5DN	SL-101-SA5DN-SB-2.5-3.5	DE187	SO	2011-06-23	FIELD
5DN	SL-102-SA5DN-SB-4.0-5.0	DE187	SO	2011-06-23	FIELD
5DN	SL-104-SA5DN-SB-4.0-5.0	DE187	SO	2011-06-23	FIELD
5DN	SL-105-SA5DN-SB-4.0-5.0	DE187	SO	2011-06-23	FIELD
5DN	SL-106-SA5DN-SB-4.0-5.0	DE187	SO	2011-06-23	FIELD
5DN	SL-106-SA5DN-SB-9.0-10.0	DE187	SO	2011-06-23	FIELD
5DN	SL-107-SA5DN-SB-3.5-4.5	DE187	SO	2011-06-23	FIELD
5DN	SL-109-SA5DN-SB-3.5-4.5	DE187	SO	2011-06-23	FIELD
5DN	SL-110-SA5DN-SB-4.0-5.0	DE187	SO	2011-06-23	FIELD
	TB-062311	DE187	AQ	2011-06-23	FIELD
5DN	DUP17-SA5DN-QC-062411	DE188	SO	2011-06-24	FIELD
5DN	SL-091-SA5DN-SB-4.0-5.0	DE188	SO	2011-06-24	FIELD
5DN	SL-092-SA5DN-SB-4.0-5.0	DE188	SO	2011-06-24	FIELD
5DN	SL-092-SA5DN-SB-7.0-8.0	DE188	SO	2011-06-24	FIELD
5DN	SL-103-SA5DN-SB-4.0-5.0	DE188	SO	2011-06-24	FIELD
5DN	SL-103-SA5DN-SB-7.0-8.0	DE188	SO	2011-06-24	FIELD
5DN	SL-122-SA5DN-SB-4.0-5.0	DE188	SO	2011-06-24	FIELD
	TB-062411	DE188	AQ	2011-06-24	FIELD
5DN	SL-077-SA5DN-SB-4.0-5.0	DE189	SO	2011-06-27	FIELD
5DN	SL-077-SA5DN-SB-9.0-10.0	DE189	SO	2011-06-27	FIELD
5DN	SL-078-SA5DN-SB-4.0-5.0	DE189	SO	2011-06-27	FIELD
5DN	SL-078-SA5DN-SB-9.0-10.0	DE189	SO	2011-06-27	FIELD
5DN	SL-085-SA5DN-SB-2.5-3.5	DE189	SO	2011-06-27	FIELD
5DN	SL-123-SA5DN-SB-2.5-3.5	DE189	SO	2011-06-27	FIELD
	TB-062711	DE189	AQ	2011-06-27	FIELD
5DN	DUP18-SA5DN-QC-062811	DE190	SO	2011-06-28	FIELD
5DN	SL-116-SA5DN-SB-2.0-3.0	DE190	SO	2011-06-28	FIELD
5DN	SL-131-SA5DN-SB-3.5-4.5	DE190	SO	2011-06-28	FIELD
5DN	SL-132-SA5DN-SB-4.0-5.0	DE190	SO	2011-06-28	FIELD
5DN	SL-141-SA5DN-SB-4.0-5.0	DE190	SO	2011-06-28	FIELD
5DN	SL-143-SA5DN-SB-4.0-5.0	DE190	SO	2011-06-28	FIELD
	TB-062811	DE190	AQ	2011-06-28	FIELD
5DN	EB20-SA5DN-SB-062911	DE191	WQ	2011-06-29	FIELD
5DN	SL-128-SA5DN-SB-4.0-5.0	DE191	SO	2011-06-29	FIELD
5DN	SL-129-SA5DN-SB-2.5-3.5	DE191	SO	2011-06-29	FIELD
5DN	SL-152-SA5DN-SB-2.5-3.5	DE191	SO	2011-06-29	FIELD
5DN	SL-154-SA5DN-SB-4.0-5.0	DE191	SO	2011-06-29	FIELD
5DN	SL-154-SA5DN-SB-9.0-10.0	DE191	SO	2011-06-29	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-165-SA5DN-SB-4.0-5.0	DE191	SO	2011-06-29	FIELD
5DN	SL-165-SA5DN-SB-9.0-10.0	DE191	SO	2011-06-29	FIELD
	TB-062911	DE191	AQ	2011-06-29	FIELD
5DN	SL-181-SA5DN-SB-4.0-5.0	DE192	SO	2011-06-30	FIELD
5DN	SL-181-SA5DN-SB-9.0-10.0	DE192	SO	2011-06-30	FIELD
5DN	SL-182-SA5DN-SB-4.0-5.0	DE192	SO	2011-06-30	FIELD
5DN	SL-182-SA5DN-SB-9.0-10.0	DE192	SO	2011-06-30	FIELD
5DN	SL-184-SA5DN-SB-4.0-5.0	DE192	SO	2011-06-30	FIELD
5DN	SL-184-SA5DN-SB-9.0-10.0	DE192	SO	2011-06-30	FIELD
5DN	SL-187-SA5DN-SB-4.0-5.0	DE192	SO	2011-06-30	FIELD
5DN	SL-187-SA5DN-SB-9.0-10.0	DE192	SO	2011-06-30	FIELD
5DN	SL-196-SA5DN-SB-4.0-5.0	DE192	SO	2011-06-30	FIELD
5DN	SL-196-SA5DN-SB-9.0-10.0	DE192	SO	2011-06-30	FIELD
5DN	SL-197-SA5DN-SB-4.0-5.0	DE192	SO	2011-06-30	FIELD
5DN	SL-197-SA5DN-SB-9.0-10.0	DE192	SO	2011-06-30	FIELD
5DN	SL-203-SA5DN-SB-4.0-5.0	DE192	SO	2011-06-30	FIELD
5DN	SL-203-SA5DN-SB-9.0-10.0	DE192	SO	2011-06-30	FIELD
	TB-063011	DE192	AQ	2011-06-30	FIELD
5DN	SL-186-SA5DN-SB-4.0-5.0	DE193	SO	2011-07-05	FIELD
5DN	SL-186-SA5DN-SB-9.0-10.0	DE193	SO	2011-07-05	FIELD
5DN	SL-192-SA5DN-SB-4.0-5.0	DE193	SO	2011-07-05	FIELD
5DN	SL-192-SA5DN-SB-9.0-10.0	DE193	SO	2011-07-05	FIELD
5DN	SL-194-SA5DN-SB-4.0-5.0	DE193	SO	2011-07-05	FIELD
5DN	SL-194-SA5DN-SB-9.0-10.0	DE193	SO	2011-07-05	FIELD
5DN	SL-195-SA5DN-SB-4.0-5.0	DE193	SO	2011-07-05	FIELD
5DN	SL-195-SA5DN-SB-9.0-10.0	DE193	SO	2011-07-05	FIELD
	TB-070511	DE193	AQ	2011-07-05	FIELD
5DN	DUP-19-SA5DN-QC-070611	DE194	SO	2011-07-06	FIELD
5DN	SL-190-SA5DN-SB-4.0-5.0	DE194	SO	2011-07-06	FIELD
5DN	SL-190-SA5DN-SB-9.0-10.0	DE194	SO	2011-07-06	FIELD
5DN	SL-191-SA5DN-SB-4.0-5.0	DE194	SO	2011-07-06	FIELD
5DN	SL-191-SA5DN-SB-9.0-10.0	DE194	SO	2011-07-06	FIELD
5DN	SL-200-SA5DN-SB-4.0-5.0	DE194	SO	2011-07-06	FIELD
5DN	SL-200-SA5DN-SB-9.0-10.0	DE194	SO	2011-07-06	FIELD
5DN	SL-201-SA5DN-SB-4.0-5.0	DE194	SO	2011-07-06	FIELD
5DN	SL-201-SA5DN-SB-9.0-10.0	DE194	SO	2011-07-06	FIELD
5DN	SL-205-SA5DN-SB-4.0-5.0	DE194	SO	2011-07-06	FIELD
5DN	SL-205-SA5DN-SB-9.0-10.0	DE194	SO	2011-07-06	FIELD
	TB-070611	DE194	AQ	2011-07-06	FIELD
5DN	DUP20-SA5DN-QC-070711	DE195	SO	2011-07-07	FIELD
5DN	EB21-SA5DN-SB-070711	DE195	WQ	2011-07-07	FIELD
5DN	SL-164-SA5DN-SB-4.0-5.0	DE195	SO	2011-07-07	FIELD
5DN	SL-164-SA5DN-SB-9.0-10.0	DE195	SO	2011-07-07	FIELD
5DN	SL-166-SA5DN-SB-4.0-5.0	DE195	SO	2011-07-07	FIELD
5DN	SL-166-SA5DN-SB-9.0-10.0	DE195	SO	2011-07-07	FIELD
5DN	SL-167-SA5DN-SB-4.0-5.0	DE195	SO	2011-07-07	FIELD
5DN	SL-167-SA5DN-SB-9.0-10.0	DE195	SO	2011-07-07	FIELD
5DN	SL-168-SA5DN-SB-4.0-5.0	DE195	SO	2011-07-07	FIELD
5DN	SL-168-SA5DN-SB-9.0-10.0	DE195	SO	2011-07-07	FIELD
5DN	SL-169-SA5DN-SB-4.0-5.0	DE195	SO	2011-07-07	FIELD
5DN	SL-169-SA5DN-SB-7.5-8.5	DE195	SO	2011-07-07	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
	TB-070711	DE195	AQ	2011-07-07	FIELD
5DN	EB22-SA5DN-SB-070811	DE196	WQ	2011-07-08	FIELD
5DN	SL-155-SA5DN-SB-4.0-5.0	DE196	SO	2011-07-08	FIELD
5DN	SL-155-SA5DN-SB-9.0-10.0	DE196	SO	2011-07-08	FIELD
5DN	SL-156-SA5DN-SB-4.0-5.0	DE196	SO	2011-07-08	FIELD
5DN	SL-156-SA5DN-SB-9.0-10.0	DE196	SO	2011-07-08	FIELD
5DN	SL-157-SA5DN-SB-4.0-5.0	DE196	SO	2011-07-08	FIELD
5DN	SL-157-SA5DN-SB-9.0-10.0	DE196	SO	2011-07-08	FIELD
5DN	SL-158-SA5DN-SB-4.0-5.0	DE196	SO	2011-07-08	FIELD
5DN	SL-158-SA5DN-SB-9.0-10.0	DE196	SO	2011-07-08	FIELD
5DN	SL-159-SA5DN-SB-4.0-5.0	DE196	SO	2011-07-08	FIELD
5DN	SL-159-SA5DN-SB-9.0-10.0	DE196	SO	2011-07-08	FIELD
	TB-070811	DE196	AQ	2011-07-08	FIELD
5DN	SL-149-SA5DN-SB-4.0-5.0	DE197	SO	2011-07-11	FIELD
5DN	SL-199-SA5DN-SB-4.0-5.0	DE197	SO	2011-07-11	FIELD
5DN	SL-199-SA5DN-SB-9.0-10.0	DE197	SO	2011-07-11	FIELD
	TB-070911	DE197	AQ	2011-07-11	FIELD
5DN	SL-179-SA5DN-SB-4.0-5.0	DE210	SO	2011-07-27	FIELD
5DN	SL-179-SA5DN-SB-9.0-10.0	DE210	SO	2011-07-27	FIELD
	TB-072711	DE210	AQ	2011-07-27	FIELD
5DN	DUP21-SA5DN-QC-072811	DE211	SO	2011-07-28	FIELD
5DN	SL-172-SA5DN-SB-4.0-5.0	DE211	SO	2011-07-28	FIELD
5DN	SL-172-SA5DN-SB-9.0-10.0	DE211	SO	2011-07-28	FIELD
5DN	SL-183-SA5DN-SB-4.0-5.0	DE211	SO	2011-07-28	FIELD
5DN	SL-183-SA5DN-SB-9.0-10.0	DE211	SO	2011-07-28	FIELD
	TB-072811	DE211	AQ	2011-07-28	FIELD
5DN	SL-174-SA5DN-SB-4.0-5.0	DE212	SO	2011-07-29	FIELD
5DN	SL-174-SA5DN-SB-9.0-10.0	DE212	SO	2011-07-29	FIELD
5DN	SL-180-SA5DN-SB-4.0-5.0	DE212	SO	2011-07-29	FIELD
5DN	SL-180-SA5DN-SB-9.0-10.0	DE212	SO	2011-07-29	FIELD
	TB-072911	DE212	AQ	2011-07-29	FIELD
5DN	DUP22-SA5DN-QC-080111	DE213	SO	2011-08-01	FIELD
5DN	SL-170-SA5DN-SB-4.0-5.0	DE213	SO	2011-08-01	FIELD
5DN	SL-170-SA5DN-SB-9.0-10.0	DE213	SO	2011-08-01	FIELD
5DN	SL-173-SA5DN-SB-4.0-5.0	DE213	SO	2011-08-01	FIELD
5DN	SL-173-SA5DN-SB-9.0-10.0	DE213	SO	2011-08-01	FIELD
5DN	SL-175-SA5DN-SB-4.0-5.0	DE213	SO	2011-08-01	FIELD
5DN	SL-175-SA5DN-SB-9.0-10.0	DE213	SO	2011-08-01	FIELD
5DN	SL-176-SA5DN-SB-4.0-5.0	DE213	SO	2011-08-01	FIELD
5DN	SL-176-SA5DN-SB-9.0-10.0	DE213	SO	2011-08-01	FIELD
	TB-080111	DE213	AQ	2011-08-01	FIELD
5DN	SL-160-SA5DN-SB-4.0-5.0	DE214	SO	2011-08-02	FIELD
5DN	SL-162-SA5DN-SB-4.0-5.0	DE214	SO	2011-08-02	FIELD
5DN	SL-162-SA5DN-SB-9.0-10.0	DE214	SO	2011-08-02	FIELD
	TB-080211	DE214	AQ	2011-08-02	FIELD
5DN	EB23-SA5DN-SB-080311	DE215	WQ	2011-08-03	FIELD
5DN	SL-188-SA5DN-SB-4.0-5.0	DE215	SO	2011-08-03	FIELD
5DN	SL-188-SA5DN-SB-9.0-10.0	DE215	SO	2011-08-03	FIELD
5DN	SL-193-SA5DN-SB-4.0-5.0	DE215	SO	2011-08-03	FIELD
5DN	SL-193-SA5DN-SB-9.0-10.0	DE215	SO	2011-08-03	FIELD
5DN	DUP23-SA5DN-QC-080411	DE216	SO	2011-08-04	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-185-SA5DN-SB-4.0-5.0	DE216	SO	2011-08-04	FIELD
5DN	SL-185-SA5DN-SB-9.0-10.0	DE216	SO	2011-08-04	FIELD
5DN	SL-189-SA5DN-SB-4.0-5.0	DE216	SO	2011-08-04	FIELD
5DN	SL-189-SA5DN-SB-9.0-10.0	DE216	SO	2011-08-04	FIELD
5DN	SL-204-SA5DN-SB-4.0-5.0	DE216	SO	2011-08-04	FIELD
5DN	SL-204-SA5DN-SB-9.0-10.0	DE216	SO	2011-08-04	FIELD
5DN	SL-060-SA5DN-SB-4.0-5.0	DE218	SO	2011-08-05	FIELD
5DN	SL-060-SA5DN-SB-7.0-8.0	DE218	SO	2011-08-05	FIELD
5DN	SL-198-SA5DN-SB-4.0-5.0	DE218	SO	2011-08-05	FIELD
5DN	SL-198-SA5DN-SB-9.0-10.0	DE218	SO	2011-08-05	FIELD
	TB-080511	DE218	AQ	2011-08-05	FIELD
5DN	SL-083-SA5DN-SB-4.0-5.0	DE219	SO	2011-08-08	FIELD
5DN	SL-153-SA5DN-SB-4.0-5.0	DE219	SO	2011-08-08	FIELD
5DN	SL-153-SA5DN-SB-7.0-8.0	DE219	SO	2011-08-08	FIELD
	TB-080811	DE219	AQ	2011-08-08	FIELD
5DN	DUP24-SA5DN-QC-080911	DE220	SO	2011-08-09	FIELD
5DN	SL-009-SA5DN-SB-4.0-5.0	DE220	SO	2011-08-09	FIELD
5DN	SL-009-SA5DN-SB-9.0-10.0	DE220	SO	2011-08-09	FIELD
5DN	SL-011-SA5DN-SB-4.0-5.0	DE220	SO	2011-08-09	FIELD
5DN	SL-012-SA5DN-SB-4.0-5.0	DE220	SO	2011-08-09	FIELD
5DN	SL-012-SA5DN-SB-9.0-10.0	DE220	SO	2011-08-09	FIELD
	TB-080911	DE220	AQ	2011-08-09	FIELD
5DN	SL-007-SA5DN-SB-4.0-5.0	DE221	SO	2011-08-10	FIELD
5DN	SL-071-SA5DN-SB-4.0-5.0	DE221	SO	2011-08-10	FIELD
5DN	SL-071-SA5DN-SB-9.0-10.0	DE221	SO	2011-08-10	FIELD
5DN	SL-072-SA5DN-SB-4.0-5.0	DE221	SO	2011-08-10	FIELD
5DN	EB-SA5DN-SB-081111	DE222	WQ	2011-08-11	FIELD
5DN	SL-006-SA5DN-SB-4.0-5.0	DE222	SO	2011-08-11	FIELD
5DN	SL-006-SA5DN-SB-9.0-10.0	DE222	SO	2011-08-11	FIELD
5DN	SL-207-SA5DN-SB-4.0-5.0	DE222	SO	2011-08-11	FIELD
	TB-081111	DE222	AQ	2011-08-11	FIELD
5DN	SL-007-SA5DN-SS-0.0-0.5	DE229	SO	2011-08-22	FIELD
	TB-082211	DE229	AQ	2011-08-22	FIELD
5DN	SL-002-SA5DN-SB-4.0-5.0	DX081	SO	2011-05-16	FIELD
5DN	SL-002-SA5DN-SB-9.0-10.0	DX081	SO	2011-05-16	FIELD
5DN	SL-003-SA5DN-SB-0.5-1.5	DX081	SO	2011-05-16	FIELD
5DN	SL-003-SA5DN-SB-8.0-9.0	DX081	SO	2011-05-16	FIELD
5DN	SL-004-SA5DN-SB-3.5-4.5	DX081	SO	2011-05-16	FIELD
5DN	SL-004-SA5DN-SB-9.0-10.0	DX081	SO	2011-05-16	FIELD
5DN	DUP-01-SA5DN-QC-051711	DX082	SO	2011-05-17	FIELD
5DN	EB01-SA5DN-SS-051711	DX082	WQ	2011-05-17	FIELD
5DN	SL-066-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-067-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-072-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-074-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-075-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-076-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-079-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-080-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-081-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-082-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-083-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-084-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	SL-206-SA5DN-SS-0.0-0.5	DX082	SO	2011-05-17	FIELD
5DN	EB03-SA5DN-SB-051911	DX083	WQ	2011-05-19	FIELD
5DN	EB04-SA5DN-SS-051911	DX083	WQ	2011-05-19	FIELD
5DN	SL-001-SA5DN-SB-5.5-6.5	DX083	SO	2011-05-17	FIELD
5DN	SL-001-SA5DN-SB-9.0-10.0	DX083	SO	2011-05-17	FIELD
5DN	SL-005-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-17	FIELD
5DN	SL-005-SA5DN-SB-9.0-10.0	DX083	SO	2011-05-17	FIELD
5DN	SL-066-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-19	FIELD
5DN	SL-066-SA5DN-SB-9.0-10.0	DX083	SO	2011-05-19	FIELD
5DN	SL-067-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-19	FIELD
5DN	SL-067-SA5DN-SB-9.0-10.0	DX083	SO	2011-05-19	FIELD
5DN	SL-068-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-17	FIELD
5DN	SL-068-SA5DN-SB-9.0-10.0	DX083	SO	2011-05-17	FIELD
5DN	SL-073-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-17	FIELD
5DN	SL-073-SA5DN-SB-9.0-10.0	DX083	SO	2011-05-17	FIELD
5DN	SL-079-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-19	FIELD
5DN	SL-079-SA5DN-SB-9.0-10.0	DX083	SO	2011-05-19	FIELD
5DN	SL-080-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-19	FIELD
5DN	SL-080-SA5DN-SB-8.0-9.0	DX083	SO	2011-05-19	FIELD
5DN	SL-082-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-19	FIELD
5DN	SL-206-SA5DN-SB-4.0-5.0	DX083	SO	2011-05-19	FIELD
5DN	DUP-02-SA5DN-QC-051811	DX084	SO	2011-05-18	FIELD
5DN	SL-030-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-19	FIELD
5DN	SL-031-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-19	FIELD
5DN	SL-032-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-19	FIELD
5DN	SL-033-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-19	FIELD
5DN	SL-034-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-19	FIELD
5DN	SL-035-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-19	FIELD
5DN	SL-054-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-055-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-056-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-058-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-059-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-064-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-065-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-086-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-087-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-088-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-089-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-090-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	SL-202-SA5DN-SS-0.0-0.5	DX084	SO	2011-05-18	FIELD
5DN	DUP-03-SA5DN-QC-051811	DX085	SO	2011-05-18	FIELD
5DN	SL-020-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-024-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-025-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-026-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-027-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-028-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-029-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-036-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-037-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-038-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-039-SA5DN-SS-0.0-0.5	DX085	SO	2011-05-20	FIELD
5DN	SL-069-SA5DN-SB-4.0-5.0	DX085	SO	2011-05-18	FIELD
5DN	SL-069-SA5DN-SB-9.0-10.0	DX085	SO	2011-05-18	FIELD
5DN	SL-070-SA5DN-SB-4.0-5.0	DX085	SO	2011-05-18	FIELD
5DN	SL-070-SA5DN-SB-9.0-10.0	DX085	SO	2011-05-18	FIELD
5DN	SL-074-SA5DN-SB-4.0-5.0	DX085	SO	2011-05-18	FIELD
5DN	SL-074-SA5DN-SB-9.0-10.0	DX085	SO	2011-05-18	FIELD
5DN	SL-076-SA5DN-SB-4.0-5.0	DX085	SO	2011-05-18	FIELD
5DN	SL-076-SA5DN-SB-9.0-10.0	DX085	SO	2011-05-18	FIELD
5DN	DUP-04-SA5DN-QC-051911	DX086	SO	2011-05-19	FIELD
5DN	SL-040-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-20	FIELD
5DN	SL-041-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-19	FIELD
5DN	SL-042-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-19	FIELD
5DN	SL-043-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-19	FIELD
5DN	SL-044-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-20	FIELD
5DN	SL-045-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-19	FIELD
5DN	SL-046-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-19	FIELD
5DN	SL-047-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-19	FIELD
5DN	SL-048-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-19	FIELD
5DN	SL-049-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-19	FIELD
5DN	SL-050-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-20	FIELD
5DN	SL-051-SA5DN-SS-0.0-0.5	DX086	SO	2011-05-20	FIELD
5DN	SL-064-SA5DN-SB-4.0-5.0	DX086	SO	2011-05-20	FIELD
5DN	SL-065-SA5DN-SB-4.0-5.0	DX086	SO	2011-05-20	FIELD
5DN	SL-065-SA5DN-SB-7.0-8.0	DX086	SO	2011-05-20	FIELD
5DN	SL-086-SA5DN-SB-4.0-5.0	DX086	SO	2011-05-20	FIELD
5DN	SL-088-SA5DN-SB-4.0-5.0	DX086	SO	2011-05-20	FIELD
5DN	DUP05-SA5DN-QC-052311	DX087	SO	2011-05-23	FIELD
5DN	EB05-SA5DN-SS-052311	DX087	WQ	2011-05-23	FIELD
5DN	SL-015-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-016-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-017-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-019-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-021-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-022-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-023-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-052-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-053-SA5DN-SS-0.0-0.5	DX087	SO	2011-05-23	FIELD
5DN	SL-075-SA5DN-SB-4.0-5.0	DX087	SO	2011-05-23	FIELD
5DN	SL-075-SA5DN-SB-9.0-10.0	DX087	SO	2011-05-23	FIELD
5DN	SL-081-SA5DN-SB-4.0-5.0	DX087	SO	2011-05-23	FIELD
5DN	SL-081-SA5DN-SB-9.0-10.0	DX087	SO	2011-05-23	FIELD
5DN	SL-084-SA5DN-SB-4.0-5.0	DX087	SO	2011-05-23	FIELD
5DN	SL-089-SA5DN-SB-4.0-5.0	DX087	SO	2011-05-23	FIELD
5DN	SL-008-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-23	FIELD
5DN	SL-009-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-23	FIELD
5DN	SL-010-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-23	FIELD
5DN	SL-011-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-23	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-012-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-23	FIELD
5DN	SL-013-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-23	FIELD
5DN	SL-014-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-23	FIELD
5DN	SL-018-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-23	FIELD
5DN	SL-186-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-187-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-188-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-189-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-191-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-192-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-193-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-194-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-195-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-196-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-197-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	SL-198-SA5DN-SS-0.0-0.5	DX088	SO	2011-05-24	FIELD
5DN	DUP07-SA5DN-QC-052511	DX089	SO	2011-05-25	FIELD
5DN	EB06-SA5DN-SS-052411	DX089	WQ	2011-05-24	FIELD
5DN	SL-130-SA5DN-SB-4.0-5.0	DX089	SO	2011-05-25	FIELD
5DN	SL-133-SA5DN-SB-4.0-5.0	DX089	SO	2011-05-25	FIELD
5DN	SL-139-SA5DN-SB-2.0-3.0	DX089	SO	2011-05-24	FIELD
5DN	SL-140-SA5DN-SB-2.0-3.0	DX089	SO	2011-05-25	FIELD
5DN	SL-142-SA5DN-SB-2.0-3.0	DX089	SO	2011-05-25	FIELD
5DN	SL-144-SA5DN-SB-2.0-3.0	DX089	SO	2011-05-25	FIELD
5DN	SL-145-SA5DN-SB-2.0-3.0	DX089	SO	2011-05-24	FIELD
5DN	SL-146-SA5DN-SB-2.0-3.0	DX089	SO	2011-05-24	FIELD
5DN	SL-150-SA5DN-SB-4.0-5.0	DX089	SO	2011-05-24	FIELD
5DN	SL-203-SA5DN-SS-0.0-0.5	DX089	SO	2011-05-24	FIELD
5DN	SL-204-SA5DN-SS-0.0-0.5	DX089	SO	2011-05-24	FIELD
5DN	DUP06-SA5DN-QC-052411	DX090	SO	2011-05-24	FIELD
5DN	SL-001-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-25	FIELD
5DN	SL-002-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-25	FIELD
5DN	SL-004-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-25	FIELD
5DN	SL-005-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-25	FIELD
5DN	SL-006-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-25	FIELD
5DN	SL-057-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-24	FIELD
5DN	SL-060-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-25	FIELD
5DN	SL-185-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-24	FIELD
5DN	SL-190-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-25	FIELD
5DN	SL-199-SA5DN-SS-0.0-0.5	DX090	SO	2011-05-25	FIELD
5DN	DUP08-SA5DN-QC-052411	DX091	SO	2011-05-25	FIELD
5DN	EB07-SA5DN-SS-052511	DX091	WQ	2011-05-25	FIELD
5DN	EB08-SA5DN-SB-052511	DX091	WQ	2011-05-25	FIELD
5DN	SL-200-SA5DN-SS-0.0-0.5	DX091	SO	2011-05-25	FIELD
5DN	SL-201-SA5DN-SS-0.0-0.5	DX091	SO	2011-05-25	FIELD
5DN	SL-205-SA5DN-SS-0.0-0.5	DX091	SO	2011-05-25	FIELD
5DN	EB09-SA5DN-SS-052611	DX093	WQ	2011-05-26	FIELD
5DN	SL-164-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-165-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-170-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-171-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-172-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-173-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-174-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-175-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-176-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-179-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-180-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-181-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-182-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-183-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	SL-184-SA5DN-SS-0.0-0.5	DX093	SO	2011-05-26	FIELD
5DN	DUP09-SA5DN-QC-052711	DX094	SO	2011-05-27	FIELD
5DN	DUP-10-SA5DN-QC-053111	DX094	SO	2011-05-31	FIELD
5DN	SL-008-SA5DN-SB-4.0-5.0	DX094	SO	2011-05-31	FIELD
5DN	SL-008-SA5DN-SB-9.0-10.0	DX094	SO	2011-05-31	FIELD
5DN	SL-010-SA5DN-SB-4.0-5.0	DX094	SO	2011-05-31	FIELD
5DN	SL-010-SA5DN-SB-9.0-10.0	DX094	SO	2011-05-31	FIELD
5DN	SL-013-SA5DN-SB-4.0-5.0	DX094	SO	2011-05-31	FIELD
5DN	SL-013-SA5DN-SB-9.0-10.0	DX094	SO	2011-05-31	FIELD
5DN	SL-071-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	SL-091-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	SL-092-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	SL-093-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	SL-117-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	SL-118-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	SL-119-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	SL-120-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	SL-122-SA5DN-SS-0.0-0.5	DX094	SO	2011-05-27	FIELD
5DN	EB10-SA5DN-SS-053111	DX095	WQ	2011-05-31	FIELD
5DN	EB11-SA5DN-SB-053111	DX095	WQ	2011-05-31	FIELD
5DN	SL-014-SA5DN-SB-4.0-5.0	DX095	SO	2011-05-31	FIELD
5DN	SL-014-SA5DN-SB-9.0-10.0	DX095	SO	2011-05-31	FIELD
5DN	SL-094-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-095-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-097-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-098-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-099-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-101-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-102-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-103-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-104-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-110-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-111-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-112-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-113-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-114-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-121-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	SL-125-SA5DN-SS-0.0-0.5	DX095	SO	2011-05-31	FIELD
5DN	DUP-11-SA5DN-QC-060111	DX096	SO	2011-06-01	FIELD
5DN	SL-015-SA5DN-SB-12.0-13.0	DX096	SO	2011-06-01	FIELD
5DN	SL-015-SA5DN-SB-4.0-5.0	DX096	SO	2011-06-01	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-017-SA5DN-SB-4.0-5.0	DX096	SO	2011-06-01	FIELD
5DN	SL-017-SA5DN-SB-7.0-8.0	DX096	SO	2011-06-01	FIELD
5DN	SL-018-SA5DN-SB-4.0-5.0	DX096	SO	2011-06-01	FIELD
5DN	SL-018-SA5DN-SB-7.5-8.5	DX096	SO	2011-06-01	FIELD
5DN	SL-100-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-105-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-106-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-107-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-108-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-109-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-123-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-124-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-126-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-127-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-128-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-129-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-130-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	SL-148-SA5DN-SS-0.0-0.5	DX096	SO	2011-06-01	FIELD
5DN	DUP-12-SA5DN-QC-060211	DX097	SO	2011-06-02	FIELD
5DN	EB12-SA5DN-SS-060211	DX097	WQ	2011-06-02	FIELD
5DN	SL-131-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-132-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-133-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-134-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-135-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-136-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-137-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-138-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-139-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-140-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-141-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-142-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-143-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-144-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-145-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-149-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-150-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	SL-151-SA5DN-SS-0.0-0.5	DX097	SO	2011-06-02	FIELD
5DN	DUP-13-SA5DN-QC-060311	DX098	SO	2011-06-03	FIELD
5DN	EB13-SA5DN-SS-060311	DX098	WQ	2011-06-03	FIELD
5DN	EB14-SA5DN-SB-060311	DX098	WQ	2011-06-03	FIELD
5DN	SL-016-SA5DN-SB-12.0-13.0	DX098	SO	2011-06-02	FIELD
5DN	SL-016-SA5DN-SB-4.0-5.0	DX098	SO	2011-06-02	FIELD
5DN	SL-019-SA5DN-SB-4.0-5.0	DX098	SO	2011-06-03	FIELD
5DN	SL-019-SA5DN-SB-9.0-10.0	DX098	SO	2011-06-03	FIELD
5DN	SL-021-SA5DN-SB-19.5-20.5	DX098	SO	2011-06-02	FIELD
5DN	SL-021-SA5DN-SB-4.0-5.0	DX098	SO	2011-06-02	FIELD
5DN	SL-027-SA5DN-SB-14.0-15.0	DX098	SO	2011-06-03	FIELD
5DN	SL-027-SA5DN-SB-4.0-5.0	DX098	SO	2011-06-03	FIELD
5DN	SL-052-SA5DN-SB-4.0-5.0	DX098	SO	2011-06-03	FIELD
5DN	SL-052-SA5DN-SB-9.0-10.0	DX098	SO	2011-06-03	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-152-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-153-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-154-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-155-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-156-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-157-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-158-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-159-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-160-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-162-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-166-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	SL-207-SA5DN-SS-0.0-0.5	DX098	SO	2011-06-03	FIELD
5DN	DUP13-SA5DN-QC-060711	DX099	SO	2011-06-07	FIELD
5DN	SL-022-SA5DN-SB-15.0-16.0	DX099	SO	2011-06-06	FIELD
5DN	SL-022-SA5DN-SB-4.0-5.0	DX099	SO	2011-06-06	FIELD
5DN	SL-024-SA5DN-SB-19.0-20.0	DX099	SO	2011-06-07	FIELD
5DN	SL-024-SA5DN-SB-4.0-5.0	DX099	SO	2011-06-07	FIELD
5DN	SL-026-SA5DN-SB-17.0-18.0	DX099	SO	2011-06-07	FIELD
5DN	SL-026-SA5DN-SB-4.0-5.0	DX099	SO	2011-06-07	FIELD
5DN	SL-036-SA5DN-SB-4.0-5.0	DX099	SO	2011-06-07	FIELD
5DN	SL-036-SA5DN-SB-9.0-10.0	DX099	SO	2011-06-07	FIELD
5DN	SL-053-SA5DN-SB-11.5-12.5	DX099	SO	2011-06-06	FIELD
5DN	SL-053-SA5DN-SB-4.0-5.0	DX099	SO	2011-06-06	FIELD
5DN	SL-023-SA5DN-SB-20.0-21.0	DX100	SO	2011-06-08	FIELD
5DN	SL-023-SA5DN-SB-4.0-5.0	DX100	SO	2011-06-08	FIELD
5DN	SL-025-SA5DN-SB-23.0-24.0	DX100	SO	2011-06-08	FIELD
5DN	SL-025-SA5DN-SB-4.0-5.0	DX100	SO	2011-06-08	FIELD
5DN	SL-028-SA5DN-SB-11.5-12.5	DX100	SO	2011-06-08	FIELD
5DN	SL-028-SA5DN-SB-4.0-5.0	DX100	SO	2011-06-08	FIELD
5DN	SL-037-SA5DN-SB-11.5-12.5	DX100	SO	2011-06-09	FIELD
5DN	SL-037-SA5DN-SB-4.0-5.0	DX100	SO	2011-06-09	FIELD
5DN	SL-038-SA5DN-SB-10.5-11.5	DX100	SO	2011-06-09	FIELD
5DN	SL-038-SA5DN-SB-4.0-5.0	DX100	SO	2011-06-09	FIELD
5DN	SL-039-SA5DN-SB-11.5-12.5	DX100	SO	2011-06-09	FIELD
5DN	SL-039-SA5DN-SB-4.0-5.0	DX100	SO	2011-06-09	FIELD
5DN	SL-051-SA5DN-SB-14.0-15.0	DX100	SO	2011-06-08	FIELD
5DN	SL-051-SA5DN-SB-4.0-5.0	DX100	SO	2011-06-08	FIELD
5DN	SL-040-SA5DN-SB-10.5-11.5	DX101	SO	2011-06-09	FIELD
5DN	SL-040-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-09	FIELD
5DN	SL-041-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-10	FIELD
5DN	SL-041-SA5DN-SB-9.0-10.0	DX101	SO	2011-06-10	FIELD
5DN	SL-042-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-13	FIELD
5DN	SL-042-SA5DN-SB-9.0-10.0	DX101	SO	2011-06-13	FIELD
5DN	SL-043-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-13	FIELD
5DN	SL-043-SA5DN-SB-9.0-10.0	DX101	SO	2011-06-13	FIELD
5DN	SL-045-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-10	FIELD
5DN	SL-045-SA5DN-SB-9.0-10.0	DX101	SO	2011-06-10	FIELD
5DN	SL-046-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-13	FIELD
5DN	SL-046-SA5DN-SB-9.0-10.0	DX101	SO	2011-06-13	FIELD
5DN	SL-048-SA5DN-SB-11.5-12.5	DX101	SO	2011-06-10	FIELD
5DN	SL-048-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-10	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-049-SA5DN-SB-15.5-16.5	DX101	SO	2011-06-10	FIELD
5DN	SL-049-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-10	FIELD
5DN	SL-050-SA5DN-SB-11.2-12.5	DX101	SO	2011-06-09	FIELD
5DN	SL-050-SA5DN-SB-4.0-5.0	DX101	SO	2011-06-09	FIELD
5DN	DUP14-SA5DN-QC-061411	DX102	SO	2011-06-14	FIELD
5DN	EB17-SA5DN-SB-061411	DX102	WQ	2011-06-14	FIELD
5DN	SL-032-SA5DN-SB-10.0-11.0	DX102	SO	2011-06-14	FIELD
5DN	SL-032-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-14	FIELD
5DN	SL-033-SA5DN-SB-11.0-12.0	DX102	SO	2011-06-14	FIELD
5DN	SL-033-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-14	FIELD
5DN	SL-035-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-14	FIELD
5DN	SL-035-SA5DN-SB-9.5-10.5	DX102	SO	2011-06-14	FIELD
5DN	SL-044-SA5DN-SB-12.0-13.0	DX102	SO	2011-06-14	FIELD
5DN	SL-044-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-14	FIELD
5DN	SL-047-SA5DN-SB-10.0-11.0	DX102	SO	2011-06-13	FIELD
5DN	SL-047-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-13	FIELD
5DN	SL-054-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-13	FIELD
5DN	SL-054-SA5DN-SB-9.0-10.0	DX102	SO	2011-06-13	FIELD
5DN	SL-057-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-16	FIELD
5DN	SL-057-SA5DN-SB-9.0-10.0	DX102	SO	2011-06-16	FIELD
5DN	SL-058-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-16	FIELD
5DN	SL-058-SA5DN-SB-9.0-10.0	DX102	SO	2011-06-16	FIELD
5DN	SL-202-SA5DN-SB-4.0-5.0	DX102	SO	2011-06-13	FIELD
5DN	SL-202-SA5DN-SB-9.0-10.0	DX102	SO	2011-06-13	FIELD
5DN	DUP15-SA5DN-QC-061511	DX103	SO	2011-06-15	FIELD
5DN	EB18-SA5DN-SB-061511	DX103	WQ	2011-06-15	FIELD
5DN	SL-020-SA5DN-SB-3.5-4.5	DX103	SO	2011-06-15	FIELD
5DN	SL-029-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-15	FIELD
5DN	SL-030-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-15	FIELD
5DN	SL-031-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-15	FIELD
5DN	SL-034-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-15	FIELD
5DN	SL-055-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-15	FIELD
5DN	SL-055-SA5DN-SB-9.0-10.0	DX103	SO	2011-06-15	FIELD
5DN	SL-056-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-15	FIELD
5DN	SL-056-SA5DN-SB-9.0-10.0	DX103	SO	2011-06-15	FIELD
5DN	SL-059-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-16	FIELD
5DN	SL-059-SA5DN-SB-9.0-10.0	DX103	SO	2011-06-16	FIELD
5DN	SL-061-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-16	FIELD
5DN	SL-061-SA5DN-SB-9.0-10.0	DX103	SO	2011-06-16	FIELD
5DN	SL-062-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-16	FIELD
5DN	SL-093-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-20	FIELD
5DN	SL-093-SA5DN-SB-9.0-10.0	DX103	SO	2011-06-20	FIELD
5DN	SL-117-SA5DN-SB-4.0-5.0	DX103	SO	2011-06-20	FIELD
5DN	SL-094-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-22	FIELD
5DN	SL-094-SA5DN-SB-9.0-10.0	DX104	SO	2011-06-22	FIELD
5DN	SL-095-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-22	FIELD
5DN	SL-095-SA5DN-SB-9.0-10.0	DX104	SO	2011-06-22	FIELD
5DN	SL-097-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-21	FIELD
5DN	SL-097-SA5DN-SB-8.5-9.5	DX104	SO	2011-06-21	FIELD
5DN	SL-098-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-21	FIELD
5DN	SL-098-SA5DN-SB-7.0-8.0	DX104	SO	2011-06-21	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-099-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-21	FIELD
5DN	SL-111-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-22	FIELD
5DN	SL-112-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-22	FIELD
5DN	SL-113-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-21	FIELD
5DN	SL-114-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-22	FIELD
5DN	SL-118-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-20	FIELD
5DN	SL-119-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-20	FIELD
5DN	SL-120-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-21	FIELD
5DN	SL-121-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-21	FIELD
5DN	SL-121-SA5DN-SB-8.0-9.0	DX104	SO	2011-06-21	FIELD
5DN	SL-125-SA5DN-SB-4.0-5.0	DX104	SO	2011-06-21	FIELD
5DN	SL-125-SA5DN-SB-9.0-10.0	DX104	SO	2011-06-21	FIELD
5DN	DUP16-SA5DN-QC-062211	DX105	SO	2011-06-22	FIELD
5DN	DUP17-SA5DN-QC-062411	DX105	SO	2011-06-24	FIELD
5DN	EB19-SA5DN-SB-062211	DX105	WQ	2011-06-22	FIELD
5DN	SL-091-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-24	FIELD
5DN	SL-092-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-24	FIELD
5DN	SL-092-SA5DN-SB-7.0-8.0	DX105	SO	2011-06-24	FIELD
5DN	SL-100-SA5DN-SB-3.0-4.0	DX105	SO	2011-06-23	FIELD
5DN	SL-101-SA5DN-SB-2.5-3.5	DX105	SO	2011-06-23	FIELD
5DN	SL-102-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-23	FIELD
5DN	SL-103-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-24	FIELD
5DN	SL-103-SA5DN-SB-7.0-8.0	DX105	SO	2011-06-24	FIELD
5DN	SL-104-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-23	FIELD
5DN	SL-105-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-23	FIELD
5DN	SL-106-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-23	FIELD
5DN	SL-106-SA5DN-SB-9.0-10.0	DX105	SO	2011-06-23	FIELD
5DN	SL-107-SA5DN-SB-3.5-4.5	DX105	SO	2011-06-23	FIELD
5DN	SL-109-SA5DN-SB-3.5-4.5	DX105	SO	2011-06-23	FIELD
5DN	SL-110-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-23	FIELD
5DN	SL-115-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-22	FIELD
5DN	SL-122-SA5DN-SB-4.0-5.0	DX105	SO	2011-06-24	FIELD
5DN	DUP18-SA5DN-QC-062811	DX106	SO	2011-06-28	FIELD
5DN	EB20-SA5DN-SB-062911	DX106	WQ	2011-06-29	FIELD
5DN	SL-077-SA5DN-SB-4.0-5.0	DX106	SO	2011-06-27	FIELD
5DN	SL-077-SA5DN-SB-9.0-10.0	DX106	SO	2011-06-27	FIELD
5DN	SL-078-SA5DN-SB-4.0-5.0	DX106	SO	2011-06-27	FIELD
5DN	SL-078-SA5DN-SB-9.0-10.0	DX106	SO	2011-06-27	FIELD
5DN	SL-085-SA5DN-SB-2.5-3.5	DX106	SO	2011-06-27	FIELD
5DN	SL-116-SA5DN-SB-2.0-3.0	DX106	SO	2011-06-28	FIELD
5DN	SL-123-SA5DN-SB-2.5-3.5	DX106	SO	2011-06-27	FIELD
5DN	SL-128-SA5DN-SB-4.0-5.0	DX106	SO	2011-06-29	FIELD
5DN	SL-129-SA5DN-SB-2.5-3.5	DX106	SO	2011-06-29	FIELD
5DN	SL-131-SA5DN-SB-3.5-4.5	DX106	SO	2011-06-28	FIELD
5DN	SL-132-SA5DN-SB-4.0-5.0	DX106	SO	2011-06-28	FIELD
5DN	SL-141-SA5DN-SB-4.0-5.0	DX106	SO	2011-06-28	FIELD
5DN	SL-143-SA5DN-SB-4.0-5.0	DX106	SO	2011-06-28	FIELD
5DN	SL-152-SA5DN-SB-2.5-3.5	DX106	SO	2011-06-29	FIELD
5DN	SL-154-SA5DN-SB-4.0-5.0	DX106	SO	2011-06-29	FIELD
5DN	SL-154-SA5DN-SB-9.0-10.0	DX106	SO	2011-06-29	FIELD
5DN	SL-165-SA5DN-SB-4.0-5.0	DX106	SO	2011-06-29	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-165-SA5DN-SB-9.0-10.0	DX106	SO	2011-06-29	FIELD
5DN	SL-181-SA5DN-SB-4.0-5.0	DX107	SO	2011-06-30	FIELD
5DN	SL-181-SA5DN-SB-9.0-10.0	DX107	SO	2011-06-30	FIELD
5DN	SL-182-SA5DN-SB-4.0-5.0	DX107	SO	2011-06-30	FIELD
5DN	SL-182-SA5DN-SB-9.0-10.0	DX107	SO	2011-06-30	FIELD
5DN	SL-184-SA5DN-SB-4.0-5.0	DX107	SO	2011-06-30	FIELD
5DN	SL-184-SA5DN-SB-9.0-10.0	DX107	SO	2011-06-30	FIELD
5DN	SL-186-SA5DN-SB-4.0-5.0	DX107	SO	2011-07-05	FIELD
5DN	SL-187-SA5DN-SB-4.0-5.0	DX107	SO	2011-06-30	FIELD
5DN	SL-187-SA5DN-SB-9.0-10.0	DX107	SO	2011-06-30	FIELD
5DN	SL-192-SA5DN-SB-4.0-5.0	DX107	SO	2011-07-05	FIELD
5DN	SL-194-SA5DN-SB-4.0-5.0	DX107	SO	2011-07-05	FIELD
5DN	SL-194-SA5DN-SB-9.0-10.0	DX107	SO	2011-07-05	FIELD
5DN	SL-195-SA5DN-SB-4.0-5.0	DX107	SO	2011-07-05	FIELD
5DN	SL-195-SA5DN-SB-9.0-10.0	DX107	SO	2011-07-05	FIELD
5DN	SL-196-SA5DN-SB-4.0-5.0	DX107	SO	2011-06-30	FIELD
5DN	SL-196-SA5DN-SB-9.0-10.0	DX107	SO	2011-06-30	FIELD
5DN	SL-197-SA5DN-SB-4.0-5.0	DX107	SO	2011-06-30	FIELD
5DN	SL-197-SA5DN-SB-9.0-10.0	DX107	SO	2011-06-30	FIELD
5DN	SL-203-SA5DN-SB-4.0-5.0	DX107	SO	2011-06-30	FIELD
5DN	SL-203-SA5DN-SB-9.0-10.0	DX107	SO	2011-06-30	FIELD
5DN	DUP-19-SA5DN-QC-070611	DX108	SO	2011-07-06	FIELD
5DN	SL-186-SA5DN-SB-9.0-10.0	DX108	SO	2011-07-05	FIELD
5DN	SL-190-SA5DN-SB-4.0-5.0	DX108	SO	2011-07-06	FIELD
5DN	SL-190-SA5DN-SB-9.0-10.0	DX108	SO	2011-07-06	FIELD
5DN	SL-191-SA5DN-SB-4.0-5.0	DX108	SO	2011-07-06	FIELD
5DN	SL-191-SA5DN-SB-9.0-10.0	DX108	SO	2011-07-06	FIELD
5DN	SL-192-SA5DN-SB-9.0-10.0	DX108	SO	2011-07-05	FIELD
5DN	SL-200-SA5DN-SB-4.0-5.0	DX108	SO	2011-07-06	FIELD
5DN	SL-200-SA5DN-SB-9.0-10.0	DX108	SO	2011-07-06	FIELD
5DN	SL-201-SA5DN-SB-4.0-5.0	DX108	SO	2011-07-06	FIELD
5DN	SL-201-SA5DN-SB-9.0-10.0	DX108	SO	2011-07-06	FIELD
5DN	SL-205-SA5DN-SB-4.0-5.0	DX108	SO	2011-07-06	FIELD
5DN	SL-205-SA5DN-SB-9.0-10.0	DX108	SO	2011-07-06	FIELD
5DN	DUP20-SA5DN-QC-070711	DX109	SO	2011-07-07	FIELD
5DN	EB21-SA5DN-SB-070711	DX109	WQ	2011-07-07	FIELD
5DN	SL-155-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-08	FIELD
5DN	SL-155-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-08	FIELD
5DN	SL-156-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-08	FIELD
5DN	SL-156-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-08	FIELD
5DN	SL-157-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-08	FIELD
5DN	SL-157-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-08	FIELD
5DN	SL-158-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-08	FIELD
5DN	SL-158-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-08	FIELD
5DN	SL-159-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-08	FIELD
5DN	SL-159-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-08	FIELD
5DN	SL-164-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-07	FIELD
5DN	SL-164-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-07	FIELD
5DN	SL-166-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-07	FIELD
5DN	SL-166-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-07	FIELD
5DN	SL-167-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-07	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-167-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-07	FIELD
5DN	SL-168-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-07	FIELD
5DN	SL-168-SA5DN-SB-9.0-10.0	DX109	SO	2011-07-07	FIELD
5DN	SL-169-SA5DN-SB-4.0-5.0	DX109	SO	2011-07-07	FIELD
5DN	SL-169-SA5DN-SB-7.5-8.5	DX109	SO	2011-07-07	FIELD
5DN	SL-149-SA5DN-SB-4.0-5.0	DX110	SO	2011-07-11	FIELD
5DN	SL-199-SA5DN-SB-4.0-5.0	DX110	SO	2011-07-11	FIELD
5DN	SL-199-SA5DN-SB-9.0-10.0	DX110	SO	2011-07-11	FIELD
5DN	SL-179-SA5DN-SB-4.0-5.0	DX120	SO	2011-07-27	FIELD
5DN	SL-179-SA5DN-SB-9.0-10.0	DX120	SO	2011-07-27	FIELD
5DN	DUP21-SA5DN-QC-072811	DX121	SO	2011-07-28	FIELD
5DN	SL-172-SA5DN-SB-4.0-5.0	DX121	SO	2011-07-28	FIELD
5DN	SL-172-SA5DN-SB-9.0-10.0	DX121	SO	2011-07-28	FIELD
5DN	SL-174-SA5DN-SB-4.0-5.0	DX121	SO	2011-07-29	FIELD
5DN	SL-174-SA5DN-SB-9.0-10.0	DX121	SO	2011-07-29	FIELD
5DN	SL-180-SA5DN-SB-4.0-5.0	DX121	SO	2011-07-29	FIELD
5DN	SL-180-SA5DN-SB-9.0-10.0	DX121	SO	2011-07-29	FIELD
5DN	SL-183-SA5DN-SB-4.0-5.0	DX121	SO	2011-07-28	FIELD
5DN	SL-183-SA5DN-SB-9.0-10.0	DX121	SO	2011-07-28	FIELD
5DN	DUP22-SA5DN-QC-080111	DX123	SO	2011-08-01	FIELD
5DN	SL-160-SA5DN-SB-4.0-5.0	DX123	SO	2011-08-02	FIELD
5DN	SL-162-SA5DN-SB-4.0-5.0	DX123	SO	2011-08-02	FIELD
5DN	SL-162-SA5DN-SB-9.0-10.0	DX123	SO	2011-08-02	FIELD
5DN	SL-170-SA5DN-SB-4.0-5.0	DX123	SO	2011-08-01	FIELD
5DN	SL-170-SA5DN-SB-9.0-10.0	DX123	SO	2011-08-01	FIELD
5DN	SL-173-SA5DN-SB-4.0-5.0	DX123	SO	2011-08-01	FIELD
5DN	SL-173-SA5DN-SB-9.0-10.0	DX123	SO	2011-08-01	FIELD
5DN	SL-175-SA5DN-SB-4.0-5.0	DX123	SO	2011-08-01	FIELD
5DN	SL-175-SA5DN-SB-9.0-10.0	DX123	SO	2011-08-01	FIELD
5DN	SL-176-SA5DN-SB-4.0-5.0	DX123	SO	2011-08-01	FIELD
5DN	SL-176-SA5DN-SB-9.0-10.0	DX123	SO	2011-08-01	FIELD
5DN	DUP23-SA5DN-QC-080411	DX124	SO	2011-08-04	FIELD
5DN	EB23-SA5DN-SB-080311	DX124	WQ	2011-08-03	FIELD
5DN	SL-185-SA5DN-SB-4.0-5.0	DX124	SO	2011-08-04	FIELD
5DN	SL-185-SA5DN-SB-9.0-10.0	DX124	SO	2011-08-04	FIELD
5DN	SL-188-SA5DN-SB-4.0-5.0	DX124	SO	2011-08-03	FIELD
5DN	SL-188-SA5DN-SB-9.0-10.0	DX124	SO	2011-08-03	FIELD
5DN	SL-189-SA5DN-SB-4.0-5.0	DX124	SO	2011-08-04	FIELD
5DN	SL-189-SA5DN-SB-9.0-10.0	DX124	SO	2011-08-04	FIELD
5DN	SL-193-SA5DN-SB-4.0-5.0	DX124	SO	2011-08-03	FIELD
5DN	SL-193-SA5DN-SB-9.0-10.0	DX124	SO	2011-08-03	FIELD
5DN	SL-204-SA5DN-SB-4.0-5.0	DX124	SO	2011-08-04	FIELD
5DN	SL-204-SA5DN-SB-9.0-10.0	DX124	SO	2011-08-04	FIELD
5DN	SL-060-SA5DN-SB-4.0-5.0	DX125	SO	2011-08-05	FIELD
5DN	SL-060-SA5DN-SB-7.0-8.0	DX125	SO	2011-08-05	FIELD
5DN	SL-198-SA5DN-SB-4.0-5.0	DX125	SO	2011-08-05	FIELD
5DN	SL-198-SA5DN-SB-9.0-10.0	DX125	SO	2011-08-05	FIELD
5DN	DUP24-SA5DN-QC-080911	DX126	SO	2011-08-09	FIELD
5DN	SL-009-SA5DN-SB-4.0-5.0	DX126	SO	2011-08-09	FIELD
5DN	SL-009-SA5DN-SB-9.0-10.0	DX126	SO	2011-08-09	FIELD
5DN	SL-011-SA5DN-SB-4.0-5.0	DX126	SO	2011-08-09	FIELD

Appendix C. Samples by SDG for Subarea 5D North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DN	SL-012-SA5DN-SB-4.0-5.0	DX126	SO	2011-08-09	FIELD
5DN	SL-012-SA5DN-SB-9.0-10.0	DX126	SO	2011-08-09	FIELD
5DN	SL-083-SA5DN-SB-4.0-5.0	DX126	SO	2011-08-08	FIELD
5DN	SL-153-SA5DN-SB-4.0-5.0	DX126	SO	2011-08-08	FIELD
5DN	SL-153-SA5DN-SB-7.0-8.0	DX126	SO	2011-08-08	FIELD
5DN	EB-SA5DN-SB-081111	DX127	WQ	2011-08-11	FIELD
5DN	SL-006-SA5DN-SB-4.0-5.0	DX127	SO	2011-08-11	FIELD
5DN	SL-006-SA5DN-SB-9.0-10.0	DX127	SO	2011-08-11	FIELD
5DN	SL-007-SA5DN-SB-4.0-5.0	DX127	SO	2011-08-10	FIELD
5DN	SL-071-SA5DN-SB-4.0-5.0	DX127	SO	2011-08-10	FIELD
5DN	SL-071-SA5DN-SB-9.0-10.0	DX127	SO	2011-08-10	FIELD
5DN	SL-072-SA5DN-SB-4.0-5.0	DX127	SO	2011-08-10	FIELD
5DN	SL-207-SA5DN-SB-4.0-5.0	DX127	SO	2011-08-11	FIELD
5DN	SL-007-SA5DN-SS-0.0-0.5	DX129	SO	2011-08-22	FIELD

Appendix C. Samples by SDG for Subarea 5D South

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DS	DUP01-SA5DS-QC-092611	DE253	SO	2011-09-26	FIELD
5DS	SL-001-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-002-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-026-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-027-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-028-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-029-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-030-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-031-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-032-SA5DS-SS-0.0-0.5	DE253	SO	2011-09-26	FIELD
5DS	SL-004-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-005-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-006-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-019-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-020-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-021-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-022-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-023-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-024-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-025-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
5DS	SL-038-SA5DS-SS-0.0-0.5	DE256	SO	2011-09-27	FIELD
	TB-092711	DE256	AQ	2011-09-27	FIELD
5DS	DUP-02-SA5DS-QC-092811	DE257	SO	2011-09-28	FIELD
5DS	EB-SA5DS-SS-092811	DE257	AQ	2011-09-28	FIELD
5DS	SL-007-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-008-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-009-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-010-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-013-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-014-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-015-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-016-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-017-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-033-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-034-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
5DS	SL-040-SA5DS-SS-0.0-0.5	DE257	SO	2011-09-28	FIELD
	TB-092711	DE257	AQ	2011-09-27	FIELD
5DS	SL-036-SA5DS-SB-4.0-5.0	DE269	SO	2011-10-14	FIELD
5DS	SL-036-SA5DS-SB-9.0-10.0	DE269	SO	2011-10-14	FIELD
5DS	SL-037-SA5DS-SB-4.0-5.0	DE269	SO	2011-10-14	FIELD
5DS	SL-037-SA5DS-SB-9.0-10.0	DE269	SO	2011-10-14	FIELD
5DS	SL-038-SA5DS-SB-4.0-5.0	DE269	SO	2011-10-14	FIELD
5DS	SL-038-SA5DS-SB-9.0-10.0	DE269	SO	2011-10-14	FIELD
	TB-101411	DE269	SO	2011-10-14	FIELD
5DS	DUP03-SA5DS-QC-101711	DE270	SO	2011-10-17	FIELD
5DS	EB-SA5DS-SB-101711	DE270	WQ	2011-10-17	FIELD
5DS	SL-033-SA5DS-SB-2.0-3.0	DE270	SO	2011-10-17	FIELD
5DS	SL-034-SA5DS-SB-4.0-5.0	DE270	SO	2011-10-17	FIELD
5DS	SL-034-SA5DS-SB-9.0-10.0	DE270	SO	2011-10-17	FIELD
5DS	SL-039-SA5DS-SB-3.0-4.0	DE270	SO	2011-10-17	FIELD
	TB-101711	DE270	SO	2011-10-17	FIELD
5DS	EB-SA5DS-SB-101811	DE271	WQ	2011-10-18	FIELD
5DS	SL-013-SA5DS-SB-4.0-5.0	DE271	SO	2011-10-18	FIELD
5DS	SL-015-SA5DS-SB-3.5-4.5	DE271	SO	2011-10-18	FIELD
	TB-101811	DE271	SO	2011-10-18	FIELD
5DS	SL-016-SA5DS-SB-4.0-5.0	DE272	SO	2011-10-19	FIELD
	TB-101911	DE272	SO	2011-10-19	FIELD
5DS	SL-026-SA5DS-SB-4.0-5.0	DE273	SO	2011-10-20	FIELD
5DS	SL-026-SA5DS-SB-9.0-10.0	DE273	SO	2011-10-20	FIELD
5DS	SL-040-SA5DS-SB-4.0-5.0	DE273	SO	2011-10-20	FIELD

Appendix C. Samples by SDG for Subarea 5D South

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DS	SL-040-SA5DS-SB-9.0-10.0	DE273	SO	2011-10-20	FIELD
	TB-102011	DE273	AQ	2011-10-20	FIELD
5DS	EB-SA5DS-SB-110811	DE282	WQ	2011-11-08	FIELD
5DS	SL-010-SA5DS-SB-2.0-3.0	DE282	SO	2011-11-08	FIELD
5DS	SL-019-SA5DS-SB-2.0-3.0	DE282	SO	2011-11-08	FIELD
	TB-110811	DE282	SO	2011-11-08	FIELD
5DS	DUP04-SA5DS-QC-110911	DE283	SO	2011-11-09	FIELD
5DS	EB-SA5DS-SB-110911	DE283	WQ	2011-11-09	FIELD
5DS	SL-005-SA5DS-SB-1.0-2.0	DE283	SO	2011-11-09	FIELD
5DS	SL-006-SA5DS-SS-0.0-0.5	DE283	SO	2011-09-27	FIELD
5DS	SL-021-SA5DS-SB-2.0-3.0	DE283	SO	2011-11-09	FIELD
5DS	SL-022-SA5DS-SB-4.0-5.0	DE283	SO	2011-11-09	FIELD
	TB-110911	DE283	SO	2011-11-09	FIELD
5DS	EB-SA5DS-SB-111011	DE284	WQ	2011-11-10	FIELD
5DS	SL-028-SA5DS-SB-1.9-2.9	DE285	SO	2011-11-11	FIELD
5DS	SL-029-SA5DS-SB-3.5-4.5	DE285	SO	2011-11-11	FIELD
5DS	SL-002-SA5DS-SB-1.8-2.8	DE286	SO	2011-11-14	FIELD
5DS	SL-031-SA5DS-SB-4.0-5.0	DE286	SO	2011-11-14	FIELD
5DS	SL-031-SA5DS-SB-9.0-10.0	DE286	SO	2011-11-14	FIELD
5DS	SL-001-SA5DS-SS-0.0-0.5	DX142	SO	2011-09-26	FIELD
5DS	SL-002-SA5DS-SS-0.0-0.5	DX142	SO	2011-09-26	FIELD
5DS	SL-026-SA5DS-SS-0.0-0.5	DX142	SO	2011-09-26	FIELD
5DS	SL-027-SA5DS-SS-0.0-0.5	DX142	SO	2011-09-26	FIELD
5DS	SL-028-SA5DS-SS-0.0-0.5	DX142	SO	2011-09-26	FIELD
5DS	SL-029-SA5DS-SS-0.0-0.5	DX142	SO	2011-09-26	FIELD
5DS	SL-030-SA5DS-SS-0.0-0.5	DX142	SO	2011-09-26	FIELD
5DS	SL-031-SA5DS-SS-0.0-0.5	DX142	SO	2011-09-26	FIELD
5DS	DUP01-SA5DS-QC-092611	DX143	SO	2011-09-26	FIELD
5DS	SL-004-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-005-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-019-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-020-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-021-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-022-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-023-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-024-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-025-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-032-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-26	FIELD
5DS	SL-038-SA5DS-SS-0.0-0.5	DX143	SO	2011-09-27	FIELD
5DS	SL-007-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-008-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-009-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-010-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-013-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-014-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-015-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-016-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-017-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	SL-033-SA5DS-SS-0.0-0.5	DX144	SO	2011-09-28	FIELD
5DS	DUP-02-SA5DS-QC-092811	DX146	SO	2011-09-28	FIELD
5DS	EB-SA5DS-SS-092811	DX146	AQ	2011-09-28	FIELD
5DS	SL-034-SA5DS-SS-0.0-0.5	DX146	SO	2011-09-28	FIELD
5DS	SL-040-SA5DS-SS-0.0-0.5	DX146	SO	2011-09-28	FIELD
5DS	EB-SA5DS-SB-101811	DX149	WQ	2011-10-18	FIELD
5DS	SL-013-SA5DS-SB-4.0-5.0	DX149	SO	2011-10-18	FIELD
5DS	SL-015-SA5DS-SB-3.5-4.5	DX149	SO	2011-10-18	FIELD
5DS	SL-036-SA5DS-SB-4.0-5.0	DX149	SO	2011-10-14	FIELD
5DS	SL-036-SA5DS-SB-9.0-10.0	DX149	SO	2011-10-14	FIELD
5DS	SL-037-SA5DS-SB-4.0-5.0	DX149	SO	2011-10-14	FIELD
5DS	SL-037-SA5DS-SB-9.0-10.0	DX149	SO	2011-10-14	FIELD

Appendix C. Samples by SDG for Subarea 5D South

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
5DS	SL-038-SA5DS-SB-4.0-5.0	DX149	SO	2011-10-14	FIELD
5DS	SL-038-SA5DS-SB-9.0-10.0	DX149	SO	2011-10-14	FIELD
5DS	SL-016-SA5DS-SB-4.0-5.0	DX150	SO	2011-10-19	FIELD
5DS	SL-026-SA5DS-SB-4.0-5.0	DX150	SO	2011-10-20	FIELD
5DS	SL-026-SA5DS-SB-9.0-10.0	DX150	SO	2011-10-20	FIELD
5DS	SL-040-SA5DS-SB-4.0-5.0	DX150	SO	2011-10-20	FIELD
5DS	SL-040-SA5DS-SB-9.0-10.0	DX150	SO	2011-10-20	FIELD
5DS	DUP03-SA5DS-QC-101711	DX151	SO	2011-10-17	FIELD
5DS	SL-033-SA5DS-SB-2.0-3.0	DX151	SO	2011-10-17	FIELD
5DS	SL-034-SA5DS-SB-4.0-5.0	DX151	SO	2011-10-17	FIELD
5DS	SL-034-SA5DS-SB-9.0-10.0	DX151	SO	2011-10-17	FIELD
5DS	SL-039-SA5DS-SB-3.0-4.0	DX151	SO	2011-10-17	FIELD
5DS	DUP04-SA5DS-QC-110911	DX154	SO	2011-11-09	FIELD
5DS	EB-SA5DS-SB-111011	DX154	WQ	2011-11-10	FIELD
5DS	SL-005-SA5DS-SB-1.0-2.0	DX154	SO	2011-11-09	FIELD
5DS	SL-006-SA5DS-SS-0.0-0.5	DX154	SO	2011-09-27	FIELD
5DS	SL-010-SA5DS-SB-2.0-3.0	DX154	SO	2011-11-08	FIELD
5DS	SL-019-SA5DS-SB-2.0-3.0	DX154	SO	2011-11-08	FIELD
5DS	SL-021-SA5DS-SB-2.0-3.0	DX154	SO	2011-11-09	FIELD
5DS	SL-022-SA5DS-SB-4.0-5.0	DX154	SO	2011-11-09	FIELD
5DS	SL-002-SA5DS-SB-1.8-2.8	DX155	SO	2011-11-14	FIELD
5DS	SL-028-SA5DS-SB-1.9-2.9	DX155	SO	2011-11-11	FIELD
5DS	SL-029-SA5DS-SB-3.5-4.5	DX155	SO	2011-11-11	FIELD
5DS	SL-031-SA5DS-SB-4.0-5.0	DX155	SO	2011-11-14	FIELD
5DS	SL-031-SA5DS-SB-9.0-10.0	DX155	SO	2011-11-14	FIELD

SAMPLE DELIVERY GROUP

DE151

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3050B	6010B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3050B	6020	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3060A	7199	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3546	1625C	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8015B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8015M	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8082	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8270C	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	3550B	8270C SIM	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	5035	8015M	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	5035	8260B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	5035	8260B SIM	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	8330	8330A	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	300.0	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	314.0	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	6850	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	7471A	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	8015B	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	8015M	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	8315A	III
16-May-2011	SL-003-SA5DN-SB-0.5-1.5	6288938	N	METHOD	9012B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3050B	6010B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3050B	6020	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3060A	7199	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3546	1625C	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8015M	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8082	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8270C	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	3550B	8270C SIM	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	5035	8015M	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	5035	8260B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	5035	8260B SIM	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	8330	8330A	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	300.0	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	314.0	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	7471A	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	8015B	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	8015M	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	8315A	III
16-May-2011	SL-003-SA5DN-SB-8.0-9.0	6288939	N	METHOD	9012B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3050B	6010B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3050B	6020	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3060A	7199	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3550B	8082	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3550B	8270C	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	3550B	8270C SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	5035	8260B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	5035	8260B SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	METHOD	300.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	METHOD	314.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5	6288929	N	METHOD	7471A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3050B	6010B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3050B	6020	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3060A	7199	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3550B	8082	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3550B	8270C	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	3550B	8270C SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	5035	8260B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	5035	8260B SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	METHOD	300.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	METHOD	314.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MS	6288930	MS	METHOD	7471A	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3050B	6010B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3050B	6020	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3550B	8082	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3550B	8270C	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	3550B	8270C SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	5035	8260B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	5035	8260B SIM	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5MSD	6288931	MSD	METHOD	7471A	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	3050B	6010B	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	3050B	6020	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	3060A	7199	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	METHOD	300.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	METHOD	314.0	III
16-May-2011	SL-042-SA5A-SB-3.5-4.5DUP	6288932	DUP	METHOD	7471A	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3050B	6020	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3060A	7199	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3550B	8082	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3550B	8270C	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	3550B	8270C SIM	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	5035	8260B	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	5035	8260B SIM	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	METHOD	300.0	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	METHOD	314.0	III
16-May-2011	DUP-17-SA5A-QC-051611	6288933	FD	METHOD	7471A	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3050B	6010B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3050B	6020	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3060A	7199	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3546	1625C	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8015B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8015M	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8082	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8270C	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	3550B	8270C SIM	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	5035	8015M	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	5035	8260B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	5035	8260B SIM	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	8330	8330A	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	300.0	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	314.0	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	7471A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	8015B	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	8015M	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	8315A	III
16-May-2011	SL-004-SA5DN-SB-3.5-4.5	6288940	N	METHOD	9012B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3050B	6010B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3050B	6020	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3060A	7199	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3546	1625C	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8015B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8015M	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8082	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8270C	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	3550B	8270C SIM	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	5035	8015M	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	5035	8260B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	5035	8260B SIM	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	8330	8330A	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	300.0	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	314.0	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	7471A	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	8015B	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	8015M	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	8315A	III
16-May-2011	SL-004-SA5DN-SB-9.0-10.0	6288941	N	METHOD	9012B	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3005A	6010B	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3020A	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3510C	8082	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3510C	8270C	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	3510C	8270C SIM	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	5030B	8260B	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	5030B	8260B SIM	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	Gen Prep	300.0	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	Gen Prep	314.0	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	Gen Prep	7199	III
16-May-2011	EB15-SA5A-SB-051611	6288935	EB	METHOD	7470A	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3050B	6010B	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3050B	6020	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3060A	7199	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3550B	8082	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3550B	8270C	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	3550B	8270C SIM	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	5035	8260B	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	5035	8260B SIM	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	METHOD	300.0	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	METHOD	314.0	III
16-May-2011	SL-002-SA5DN-SB-4.0-5.0	6288936	N	METHOD	7471A	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3050B	6010B	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3050B	6020	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3060A	7199	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3550B	8082	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3550B	8270C	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	METHOD	300.0	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	METHOD	314.0	III
16-May-2011	SL-002-SA5DN-SB-9.0-10.0	6288937	N	METHOD	7471A	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3050B	6010B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3050B	6020	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3060A	7199	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3546	1625C	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8015B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8015M	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8082	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8270C	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	3550B	8270C SIM	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	5035	8015M	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	5035	8260B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	5035	8260B SIM	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	8330	8330A	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	300.0	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	314.0	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	7471A	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	8015B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	8015M	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	8315A	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0	6288934	N	METHOD	9012B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0MSD	P288934M321944A	MSD	METHOD	8015M	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0MSD	P288934M322047A	MSD	3550B	8015B	III
16-May-2011	SL-167-SA5A-SB-1.0-2.0MS	P288934R321931A	MS	METHOD	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-167-SA5A-SB-1.0-2.0MS	P288934R322003A	MS	3550B	8015B	III
16-May-2011	TB-051611	6288942	TB	5030B	8015M	III
16-May-2011	TB-051611	6288942	TB	5030B	8260B	III
16-May-2011	TB-051611	6288942	TB	5030B	8260B SIM	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	24.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 3:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	12.6		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.0		0.96	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.96	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.96	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.96	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.7		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.87	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	0.92	J	0.87	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: EB15-SA5A-SB-051611 *Collected:* 5/16/2011 2:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0195	J	0.0138	MDL	0.0500	PQL	mg/L	U	B

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	8.74		0.981	MDL	5.51	PQL	mg/Kg	U	F
MANGANESE	304		0.0860	MDL	0.551	PQL	mg/Kg	J	E
POTASSIUM	2180		19.8	MDL	55.1	PQL	mg/Kg	J	E
SODIUM	108	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	3.31	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	4.56	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	515		0.0896	MDL	0.574	PQL	mg/Kg	J	E
POTASSIUM	3130		20.7	MDL	57.4	PQL	mg/Kg	J	E
TIN	3.05	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	5.51	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 3:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	517		0.0886	MDL	0.568	PQL	mg/Kg	J	E
POTASSIUM	3300		20.4	MDL	56.8	PQL	mg/Kg	J	E
TIN	3.20	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	698		0.0909	MDL	0.583	PQL	mg/Kg	J	E
POTASSIUM	4160		21.0	MDL	58.3	PQL	mg/Kg	J	E
TIN	3.10	J	1.17	MDL	11.7	PQL	mg/Kg	U	B

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	237		0.0846	MDL	0.542	PQL	mg/Kg	J	E
POTASSIUM	2650		19.5	MDL	54.2	PQL	mg/Kg	J	E
TIN	3.25	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	5.09	J	0.911	MDL	5.42	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	441		0.0898	MDL	0.576	PQL	mg/Kg	J	E
POTASSIUM	4490		20.7	MDL	57.6	PQL	mg/Kg	J	E
TIN	3.18	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	174		0.0859	MDL	0.550	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory:** LL

EDD Filename: DE151_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2640		19.8	MDL	55.0	PQL	mg/Kg	J	E
TIN	2.81	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	5.21	J	0.925	MDL	5.50	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	8.21		0.975	MDL	5.48	PQL	mg/Kg	U	F
MANGANESE	252		0.0854	MDL	0.548	PQL	mg/Kg	J	E
POTASSIUM	1810		19.7	MDL	54.8	PQL	mg/Kg	J	E
TIN	3.40	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	5.24	J	0.920	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	7.69		0.926	MDL	5.20	PQL	mg/Kg	U	F
MANGANESE	269		0.0812	MDL	0.520	PQL	mg/Kg	J	E
POTASSIUM	2160		18.7	MDL	52.0	PQL	mg/Kg	J	E
SODIUM	88.9	J	38.8	MDL	104	PQL	mg/Kg	J	Z
TIN	2.92	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.97	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.207	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.918		0.0551	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory:** LL

EDD Filename: DE151_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.119	MDL	0.441	PQL	mg/Kg	J	E

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.250		0.0661	MDL	0.220	PQL	mg/Kg	J	Q
ARSENIC	6.91		0.0882	MDL	0.441	PQL	mg/Kg	J	A
BERYLLIUM	0.849		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0742	J	0.0441	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	20.9		0.132	MDL	0.441	PQL	mg/Kg	J	Q
COBALT	8.87		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	8.59		0.0727	MDL	0.441	PQL	mg/Kg	J	E
LEAD	6.44		0.0115	MDL	0.220	PQL	mg/Kg	J	Q
NICKEL	15.2		0.110	MDL	0.441	PQL	mg/Kg	J	Q
SILVER	0.391		0.0132	MDL	0.110	PQL	mg/Kg	J	E, FD

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0763	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.423		0.0552	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	196		0.119	MDL	0.442	PQL	mg/Kg	J	E

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.446		0.0662	MDL	0.221	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-002-SA5DN-SB-4.0-5.0 ***Collected:*** 5/16/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.95		0.0883	MDL	0.442	PQL	mg/Kg	J	A
BERYLLIUM	1.19		0.0177	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	39.9		0.132	MDL	0.442	PQL	mg/Kg	J	Q
COBALT	14.9		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	18.6		0.0729	MDL	0.442	PQL	mg/Kg	J	E
LEAD	13.0		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	32.7		0.110	MDL	0.442	PQL	mg/Kg	J	Q
SILVER	0.0765	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, E

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0860	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.651		0.0551	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	165		0.119	MDL	0.441	PQL	mg/Kg	J	E

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.425		0.0662	MDL	0.221	PQL	mg/Kg	J	Q
ARSENIC	10.4		0.0882	MDL	0.441	PQL	mg/Kg	J	A
BERYLLIUM	1.10		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	35.2		0.132	MDL	0.441	PQL	mg/Kg	J	Q
COBALT	10.5		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	19.8		0.0728	MDL	0.441	PQL	mg/Kg	J	E
LEAD	10.5		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	25.6		0.110	MDL	0.441	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory:** LL

EDD Filename: DE151_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-002-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 3:52:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0385	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, E

Sample ID: SL-003-SA5DN-SB-0.5-1.5 ***Collected:*** 5/16/2011 10:43:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0471	MDL	0.471	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA5DN-SB-0.5-1.5 ***Collected:*** 5/16/2011 10:43:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.723		0.0588	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA5DN-SB-0.5-1.5 ***Collected:*** 5/16/2011 10:43:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	193		0.127	MDL	0.471	PQL	mg/Kg	J	E

Sample ID: SL-003-SA5DN-SB-0.5-1.5 ***Collected:*** 5/16/2011 10:43:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.410		0.0706	MDL	0.235	PQL	mg/Kg	J	Q
ARSENIC	9.73		0.0942	MDL	0.471	PQL	mg/Kg	J	A
BERYLLIUM	1.21		0.0188	MDL	0.118	PQL	mg/Kg	J	Q
CHROMIUM	43.3		0.141	MDL	0.471	PQL	mg/Kg	J	Q
COBALT	14.9		0.0235	MDL	0.118	PQL	mg/Kg	J	Q, E
COPPER	23.1		0.0777	MDL	0.471	PQL	mg/Kg	J	E
LEAD	14.0		0.0122	MDL	0.235	PQL	mg/Kg	J	Q
NICKEL	30.3		0.118	MDL	0.471	PQL	mg/Kg	J	Q
SILVER	0.0639	J	0.0141	MDL	0.118	PQL	mg/Kg	J	Z, E

Sample ID: SL-003-SA5DN-SB-8.0-9.0 ***Collected:*** 5/16/2011 10:50:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0623	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory:** LL

EDD Filename: DE151_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 ***Collected:*** 5/16/2011 10:50:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.415		0.0548	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA5DN-SB-8.0-9.0 ***Collected:*** 5/16/2011 10:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	149		0.118	MDL	0.438	PQL	mg/Kg	J	E

Sample ID: SL-003-SA5DN-SB-8.0-9.0 ***Collected:*** 5/16/2011 10:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.246		0.0657	MDL	0.219	PQL	mg/Kg	J	Q
ARSENIC	11.2		0.0876	MDL	0.438	PQL	mg/Kg	J	A
BERYLLIUM	1.04		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	36.3		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	8.24		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	21.1		0.0723	MDL	0.438	PQL	mg/Kg	J	E
LEAD	10.4		0.0114	MDL	0.219	PQL	mg/Kg	J	Q
NICKEL	23.2		0.110	MDL	0.438	PQL	mg/Kg	J	Q
SILVER	0.0713	J	0.0131	MDL	0.110	PQL	mg/Kg	J	Z, E

Sample ID: SL-004-SA5DN-SB-3.5-4.5 ***Collected:*** 5/16/2011 12:39:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.288	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-3.5-4.5 ***Collected:*** 5/16/2011 12:39:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.609		0.0581	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5DN-SB-3.5-4.5 ***Collected:*** 5/16/2011 12:39:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	174		0.126	MDL	0.465	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.392		0.0698	MDL	0.233	PQL	mg/Kg	J	Q
ARSENIC	6.72		0.0930	MDL	0.465	PQL	mg/Kg	J	A
BERYLLIUM	1.10		0.0186	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	40.0		0.140	MDL	0.465	PQL	mg/Kg	J	Q
COBALT	11.7		0.0233	MDL	0.116	PQL	mg/Kg	J	Q, E
COPPER	21.8		0.0767	MDL	0.465	PQL	mg/Kg	J	E
LEAD	13.2		0.0121	MDL	0.233	PQL	mg/Kg	J	Q
NICKEL	25.6		0.116	MDL	0.465	PQL	mg/Kg	J	Q
SILVER	0.0679	J	0.0140	MDL	0.116	PQL	mg/Kg	J	Z, E

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0513	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.426		0.0556	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.120	MDL	0.445	PQL	mg/Kg	J	E

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.270		0.0667	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	5.52		0.0889	MDL	0.445	PQL	mg/Kg	J	A
BERYLLIUM	0.735		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	24.6		0.133	MDL	0.445	PQL	mg/Kg	J	Q
COBALT	6.83		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	12.9		0.0734	MDL	0.445	PQL	mg/Kg	J	E
LEAD	6.59		0.0116	MDL	0.222	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory:** LL

EDD Filename: DE151_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	16.3		0.111	MDL	0.445	PQL	mg/Kg	J	Q
SILVER	0.0345	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, E

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.248	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.50		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.122	MDL	0.451	PQL	mg/Kg	J	E

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.312		0.0677	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	9.05		0.0902	MDL	0.451	PQL	mg/Kg	J	A
BERYLLIUM	1.11		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0923	J	0.0451	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	28.3		0.135	MDL	0.451	PQL	mg/Kg	J	Q
COBALT	9.21		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	11.1		0.0744	MDL	0.451	PQL	mg/Kg	J	E
LEAD	8.57		0.0117	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	18.9		0.113	MDL	0.451	PQL	mg/Kg	J	Q
SILVER	0.833		0.0135	MDL	0.113	PQL	mg/Kg	J	E, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory:** LL

EDD Filename: DE151_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.154	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.573		0.0525	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.4		0.113	MDL	0.420	PQL	mg/Kg	J	E

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.269		0.0630	MDL	0.210	PQL	mg/Kg	J	Q
ARSENIC	7.02		0.0841	MDL	0.420	PQL	mg/Kg	J	A
BERYLLIUM	0.749		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	20.7		0.126	MDL	0.420	PQL	mg/Kg	J	Q
COBALT	7.70		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	27.4		0.0693	MDL	0.420	PQL	mg/Kg	J	E
LEAD	10.3		0.0109	MDL	0.210	PQL	mg/Kg	J	Q
NICKEL	14.3		0.105	MDL	0.420	PQL	mg/Kg	J	Q
SILVER	1.47		0.0126	MDL	0.105	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES *Dilution:* 1

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 Matrix: SO

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0306	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C Matrix: SO

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	287	J	200	MDL	399	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M Matrix: SO

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.8	J	0.96	MDL	2.9	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.0	J	0.89	MDL	2.7	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.93	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.4	U	5.4	MDL	11	PQL	mg/Kg	UJ	Q

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.7	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S, FD
AROCLOR 1260	1.9		0.44	MDL	1.9	PQL	ug/Kg	J	S, FD
Aroclor 5460	1.3	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, S, L

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.86	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.2		0.37	MDL	1.9	PQL	ug/Kg	J	FD
AROCLOR 1260	0.44	U	0.44	MDL	1.9	PQL	ug/Kg	UJ	FD
Aroclor 5460	1.5	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB15-SA5A-SB-051611 *Collected:* 5/16/2011 2:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYLPHENOL	2	U	2	MDL	6	PQL	ug/L	UJ	L
BENZOIC ACID	7	U	7	MDL	17	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L

Sample ID: SL-002-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 3:52:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	200	U	200	MDL	590	PQL	ug/Kg	UJ	L

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	400	U	400	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	200	U	200	MDL	600	PQL	ug/Kg	UJ	L

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-042-SA5A-SB-3.5-4.5 *Collected:* 5/16/2011 11:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	Q, L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	540	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	18	MDL	360	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8270C SIM **Matrix:** AQ

Sample ID: EB15-SA5A-SB-051611 *Collected:* 5/16/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.031	J	0.011	MDL	0.054	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB15-SA5A-SB-051611 *Collected:* 5/16/2011 2:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.033	J	0.011	MDL	0.054	PQL	ug/L	J	Z
N-NITROSODIMETHYLAMINE	0.030	J	0.011	MDL	0.054	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.9	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	0.86	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.96	J	0.80	MDL	2.0	PQL	ug/Kg	U	F
PHENANTHRENE	1.0	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.61	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.66	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.98	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.83	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.98	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory:** LL

EDD Filename: DE151_v1. **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	0.76	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8315A **Matrix:** SO

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	680	J	650	MDL	1600	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8330A **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 *Collected:* 5/16/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	86	U	86	MDL	260	PQL	ug/Kg	R	L
2,6-Diamino-4-nitrotoluene	86	U	86	MDL	260	PQL	ug/Kg	R	L

Sample ID: SL-004-SA5DN-SB-3.5-4.5 *Collected:* 5/16/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	92	U	92	MDL	280	PQL	ug/Kg	R	L
2,6-Diamino-4-nitrotoluene	92	U	92	MDL	280	PQL	ug/Kg	R	L

Sample ID: SL-004-SA5DN-SB-9.0-10.0 *Collected:* 5/16/2011 12:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	89	U	89	MDL	270	PQL	ug/Kg	R	L
2,6-Diamino-4-nitrotoluene	89	U	89	MDL	270	PQL	ug/Kg	R	L

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	83	U	83	MDL	250	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method Category: SVOA
Method: 8330A **Matrix:** SO

Sample ID: SL-167-SA5A-SB-1.0-2.0 *Collected:* 5/16/2011 4:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-Diamino-4-nitrotoluene	83	U	83	MDL	250	PQL	ug/Kg	R	L

Method Category: VOA
Method: 8015B **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	230	J	120	MDL	600	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: DUP-17-SA5A-QC-051611 *Collected:* 5/16/2011 11:37:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.4	U	7.4	MDL	8.8	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	4.1	J	0.26	MDL	4.4	PQL	ug/Kg	J	Z
TOLUENE	0.17	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: SL-002-SA5DN-SB-4.0-5.0 *Collected:* 5/16/2011 3:48:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOLUENE	0.08	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5DN-SB-0.5-1.5 *Collected:* 5/16/2011 10:43:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	3.9	J	1.3	MDL	8.4	PQL	ug/Kg	J	Z
BENZENE	0.21	J	0.10	MDL	4.2	PQL	ug/Kg	J	Z
TOLUENE	0.13	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory:** LL

EDD Filename: DE151_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-003-SA5DN-SB-8.0-9.0 ***Collected:*** 5/16/2011 10:50:00 ***Analysis Type:*** RES ***Dilution:*** 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.1	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.09	MDL	4.6	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-3.5-4.5 ***Collected:*** 5/16/2011 12:39:00 ***Analysis Type:*** RES ***Dilution:*** 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	3.2	J	1.2	MDL	8.0	PQL	ug/Kg	J	Z
BENZENE	0.17	J	0.10	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.88	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5DN-SB-9.0-10.0 ***Collected:*** 5/16/2011 12:47:00 ***Analysis Type:*** RES ***Dilution:*** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.81	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-042-SA5A-SB-3.5-4.5 ***Collected:*** 5/16/2011 11:30:00 ***Analysis Type:*** RES ***Dilution:*** 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.4	J	7.1	MDL	8.5	PQL	ug/Kg	J	Z, FD
METHYLENE CHLORIDE	3.7	J	0.26	MDL	4.3	PQL	ug/Kg	J	Z
TOLUENE	0.12	J	0.09	MDL	4.3	PQL	ug/Kg	J	Z

Sample ID: SL-167-SA5A-SB-1.0-2.0 ***Collected:*** 5/16/2011 4:17:00 ***Analysis Type:*** RES ***Dilution:*** 1.02

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ISOPROPYLBENZENE	0.66	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
TOLUENE	0.18	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE151

Method Blank Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13848BB221840	5/19/2011 6:40:00 PM	BORON	0.0181 mg/L	EB15-SA5A-SB-051611

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB15-SA5A-SB-051611(REA2)	BORON	0.0195 mg/L	0.0195U mg/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13708BB220820	5/18/2011 6:20:00 AM	PHOSPHORUS TIN	1.24 mg/Kg 1.54 mg/Kg	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-002-SA5DN-SB-9.0-10.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-3.5-4.5 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-17-SA5A-QC-051611(RES)	TIN	3.31 mg/Kg	3.31U mg/Kg
SL-002-SA5DN-SB-4.0-5.0(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-002-SA5DN-SB-9.0-10.0(RES)	TIN	3.20 mg/Kg	3.20U mg/Kg
SL-003-SA5DN-SB-0.5-1.5(RES)	TIN	3.10 mg/Kg	3.10U mg/Kg
SL-003-SA5DN-SB-8.0-9.0(RES)	TIN	3.25 mg/Kg	3.25U mg/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-042-SA5A-SB-3.5-4.5(RES)	TIN	3.40 mg/Kg	3.40U mg/Kg
SL-167-SA5A-SB-1.0-2.0(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13726AB220859A	5/18/2011 8:59:00 AM	COPPER LEAD	0.0827 mg/Kg 0.0381 mg/Kg	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-002-SA5DN-SB-9.0-10.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-3.5-4.5 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB60B211434A	5/20/2011 2:34:00 PM	METHYLENE CHLORIDE	0.39 ug/Kg	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-3.5-4.5 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-003-SA5DN-SB-8.0-9.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.6U ug/Kg
SL-004-SA5DN-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.88 ug/Kg	4.0U ug/Kg
SL-004-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.81 ug/Kg	3.9U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLG13B261713	5/20/2011 5:13:00 PM	NAPHTHALENE	1.1 ug/Kg	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-002-SA5DN-SB-9.0-10.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB15-SA5A-SB-051611 (RES)	5/16/2011 2:30:00 PM	1-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE NAPHTHALENE N-NITROSODIMETHYLAMINE	0.031 ug/L 0.033 ug/L 0.22 ug/L 0.03 ug/L	DUP-17-SA5A-QC-051611 SL-002-SA5DN-SB-4.0-5.0 SL-002-SA5DN-SB-9.0-10.0 SL-003-SA5DN-SB-0.5-1.5 SL-003-SA5DN-SB-8.0-9.0 SL-004-SA5DN-SB-3.5-4.5 SL-004-SA5DN-SB-9.0-10.0 SL-042-SA5A-SB-3.5-4.5 SL-167-SA5A-SB-1.0-2.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-004-SA5DN-SB-3.5-4.5(RES)	NAPHTHALENE	0.96 ug/Kg	2.0U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-167-SA5A-SB-1.0-2.0MS SL-167-SA5A-SB-1.0-2.0MSD (SL-167-SA5A-SB-1.0-2.0)	DIETHYLENE GLYCOL	40	44	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	ARSENIC BERYLLIUM CHROMIUM COBALT LEAD NICKEL VANADIUM	208 129 170 127 171 148 220	216 141 145 - 174 142 210	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ARSENIC BERYLLIUM CHROMIUM COBALT LEAD NICKEL VANADIUM	J(all detects) As, V No Qual, >4x
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	ANTIMONY ZINC	64 42	68 34	75.00-125.00 75.00-125.00	- -	ANTIMONY ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	MOLYBDENUM	137	130	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	BARIUM	248	282	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	ALUMINUM IRON MAGNESIUM MANGANESE TITANIUM	3976 2168 243 147 249	3125 1389 209 144 243	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MAGNESIUM MANGANESE TITANIUM	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MSD (SL-042-SA5A-SB-3.5-4.5)	4,6-DINITRO-2-METHYLPHENOL	-	-	24.00-116.00	35 (30.00)	4,6-DINITRO-2-METHYLPHEN	J(all detects)
SL-042-SA5A-SB-3.5-4.5MS SL-042-SA5A-SB-3.5-4.5MSD (SL-042-SA5A-SB-3.5-4.5)	2,4-DINITROPHENOL BENZIDINE	- 32	18 22	20.00-143.00 35.00-141.00	48 (30.00) 36 (30.00)	2,4-DINITROPHENOL BENZIDINE	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5A-SB-3.5-4.5MS (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	FLUORIDE	34	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5A-SB-3.5-4.5DUP (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	MANGANESE POTASSIUM	25 24	20.00 20.00	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5A-SB-3.5-4.5DUP (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	ANTIMONY BARIUM CADMIUM COBALT COPPER SILVER THALLIUM	27 21 200 37 35 0.6469 22	20.00 20.00 20.00 20.00 20.00 0.22 mg/Kg 20.00	J(all detects) UJ(all non-detects) Sb, Cd, Tl No Qual, OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5A-SB-3.5-4.5DUP (DUP-17-SA5A-QC-051611 SL -002-SA5DN-SB-4.0-5.0 SL -002-SA5DN-SB-9.0-10.0 SL -003-SA5DN-SB-0.5-1.5 SL -003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -042-SA5A-SB-3.5-4.5 SL -167-SA5A-SB-1.0-2.0)	MERCURY	200	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11386AQ242123A P11386AY242105A (EB15-SA5A-SB-051611)	Aroclor 5442	88	94	35.00-84.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WDLCSQ260631 P8WDLCSY260657 (EB15-SA5A-SB-051611)	4-METHYLPHENOL BENZOIC ACID	60 -	- -	61.00-103.00 10.00-69.00	- 31 (30.00)	4-METHYLPHENOL BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WGLCSY262105 (EB15-SA5A-SB-051611)	BENZO(B)FLUORANTHENE	-	124	69.00-123.00	-	BENZO(B)FLUORANTHENE	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11436AQ242127A (SL-003-SA5DN-SB-0.5-1.5)	2,4,6-TRINITROTOLUENE 2-AMINO-4,6-DINITROTOLUENE NITROBENZENE PETN	121 126 145 132	- - - -	80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00	- - - -	2,4,6-TRINITROTOLUENE 2-AMINO-4,6-DINITROTOLUEN NITROBENZENE PETN	J(all detects)
P11454AQ242357A (SL-003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -167-SA5A-SB-1.0-2.0)	NITROBENZENE PETN	132 123	- -	80.00-120.00 80.00-120.00	- -	NITROBENZENE PETN	J(all detects)
P11454AY240039A (SL-003-SA5DN-SB-8.0-9.0 SL -004-SA5DN-SB-3.5-4.5 SL -004-SA5DN-SB-9.0-10.0 SL -167-SA5A-SB-1.0-2.0)	2,4-DIAMINO-6-NITROTOLUENE 2,6-Diamino-4-nitrotoluene	- -	0 0	54.00-134.00 54.00-134.00	200 (30.00) 200 (30.00)	2,4-DIAMINO-6-NITROTOLUEN 2,6-Diamino-4-nitrotoluene	J(all detects) R(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P13726AQ220902A (DUP-17-SA5A-QC-051611 SL -002-SA5DN -SB-4.0-5.0 SL -002-SA5DN -SB-9.0-10.0 SL -003-SA5DN -SB-0.5-1.5 SL -003-SA5DN -SB-8.0-9.0 SL -004-SA5DN -SB-3.5-4.5 SL -004-SA5DN -SB-9.0-10.0 SL -042-SA5A -SB-3.5-4.5 SL -167-SA5A -SB-1.0-2.0)	ANTIMONY	149	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LHLCSQ260452 (DUP-17-SA5A-QC-051611 SL -002-SA5DN -SB-4.0-5.0 SL -002-SA5DN -SB-9.0-10.0 SL -003-SA5DN -SB-0.5-1.5 SL -003-SA5DN -SB-8.0-9.0 SL -004-SA5DN -SB-3.5-4.5 SL -004-SA5DN -SB-9.0-10.0 SL -042-SA5A -SB-3.5-4.5 SL -167-SA5A -SB-1.0-2.0)	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHENOL	24 44	- -	37.00-120.00 53.00-110.00	- -	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHEN	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB60Q211503A (DUP-17-SA5A-QC-051611 SL -002-SA5DN -SB-4.0-5.0 SL -003-SA5DN -SB-0.5-1.5 SL -003-SA5DN -SB-8.0-9.0 SL -004-SA5DN -SB-3.5-4.5 SL -004-SA5DN -SB-9.0-10.0 SL -042-SA5A -SB-3.5-4.5 SL -167-SA5A -SB-1.0-2.0)	BROMOCHLOROMETHANE	125	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8082**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
DUP-17-SA5A-QC-051611	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	J (all detects)

Method: **8315A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-004-SA5DN-SB-3.5-4.5	Butyraldehyde	129	64.00-126.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
MOISTURE	12.2	11.9	2		No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
ALUMINUM	33800	29600	13	50.00	
BORON	8.21	8.74	6	50.00	
CALCIUM	3050	2780	9	50.00	
IRON	28200	26800	5	50.00	
LITHIUM	32.1	32.4	1	50.00	
MAGNESIUM	5730	5650	1	50.00	
MANGANESE	252	304	19	50.00	
PHOSPHORUS	322	322	0	50.00	No Qualifiers Applied
POTASSIUM	1810	2180	19	50.00	
SODIUM	112	108	4	50.00	
STRONTIUM	22.9	21.9	4	50.00	
TIN	3.40	3.31	3	50.00	
TITANIUM	1450	1520	5	50.00	
Zirconium	5.24	4.56	14	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
ANTIMONY	0.312	0.250	22	50.00	
ARSENIC	9.05	6.91	27	50.00	
BARIUM	120	114	5	50.00	
BERYLLIUM	1.11	0.849	27	50.00	
CADMIUM	0.0923	0.0742	22	50.00	
CHROMIUM	28.3	20.9	30	50.00	
COBALT	9.21	8.87	4	50.00	
COPPER	11.1	8.59	25	50.00	No Qualifiers Applied
LEAD	8.57	6.44	28	50.00	
MOLYBDENUM	1.50	0.918	48	50.00	
NICKEL	18.9	15.2	22	50.00	
SELENIUM	0.248	0.207	18	50.00	
THALLIUM	0.295	0.306	4	50.00	
VANADIUM	55.1	43.0	25	50.00	
ZINC	52.4	54.4	4	50.00	
SILVER	0.833	0.391	72	50.00	J(all detects)

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
HEXAVALENT CHROMIUM	0.58	0.40	37	50.00	No Qualifiers Applied

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
Aroclor 5460	1.5	1.3	14	50.00	No Qualifiers Applied
AROCLOR 1254	3.2	1.7	61	50.00	J(all detects)
AROCLOR 1260	1.9 U	1.9	200	50.00	UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
METHYLENE CHLORIDE	3.7	4.1	10	50.00	No Qualifiers Applied
TOLUENE	0.12	0.17	34	50.00	
ACETONE	7.4	8.8 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
PH	6.53	6.43	2	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-042-SA5A-SB-3.5-4.5	DUP-17-SA5A-QC-051611			
Oxidation Reduction Potential	389	407	5		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 Laboratory: LL

EDD Filename: DE151_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5A-SB-051611	BORON	J	0.0195	0.0500	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5A-SB-051611	1-METHYLNAPHTHALENE	J	0.031	0.054	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.033	0.054	PQL	ug/L	
	N-NITROSODIMETHYLAMINE	J	0.030	0.054	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SB-3.5-4.5	N-NITROSODIMETHYLAMINE	J	287	399	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5DN-SB-0.5-1.5	Nitrate-NO3	J	1.6	1.8	PQL	mg/Kg	J (all detects)
SL-004-SA5DN-SB-3.5-4.5	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	Nitrate-NO3	J	0.92	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	SODIUM	J	108	110	PQL	mg/Kg	J (all detects)
	TIN	J	3.31	11.0	PQL	mg/Kg	
	Zirconium	J	4.56	5.51	PQL	mg/Kg	
SL-002-SA5DN-SB-4.0-5.0	TIN	J	3.05	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.51	5.74	PQL	mg/Kg	
SL-002-SA5DN-SB-9.0-10.0	TIN	J	3.20	11.4	PQL	mg/Kg	J (all detects)
SL-003-SA5DN-SB-0.5-1.5	TIN	J	3.10	11.7	PQL	mg/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	TIN	J	3.25	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.09	5.42	PQL	mg/Kg	
SL-004-SA5DN-SB-3.5-4.5	TIN	J	3.18	11.5	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SB-9.0-10.0	TIN Zirconium	J J	2.81 5.21	11.0 5.50	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	TIN Zirconium	J J	3.40 5.24	11.0 5.48	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	SODIUM TIN Zirconium	J J J	88.9 2.92 2.97	104 10.4 5.20	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	CADMIUM SELENIUM	J J	0.0742 0.207	0.110 0.441	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-002-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0763 0.0765	0.442 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-002-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.0860 0.0385	0.441 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-003-SA5DN-SB-0.5-1.5	SELENIUM SILVER	J J	0.216 0.0639	0.471 0.118	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	SELENIUM SILVER	J J	0.0623 0.0713	0.438 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-004-SA5DN-SB-3.5-4.5	SELENIUM SILVER	J J	0.288 0.0679	0.465 0.116	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-004-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.0513 0.0345	0.445 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	CADMIUM SELENIUM	J J	0.0923 0.248	0.113 0.451	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	SELENIUM	J	0.154	0.420	PQL	mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-003-SA5DN-SB-0.5-1.5	HEXAVALENT CHROMIUM	J	0.61	1.2	PQL	mg/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5DN-SB-8.0-9.0	MERCURY	J	0.0306	0.104	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5DN-SB-0.5-1.5	METHANOL	J	230	600	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5DN-SB-0.5-1.5	EFH (C15-C20)	J	1.8	2.9	PQL	mg/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	EFH (C15-C20)	J	1.0	2.7	PQL	mg/Kg	J (all detects)
SL-004-SA5DN-SB-3.5-4.5	EFH (C30-C40)	J	0.93	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	AROCLOR 1254 Aroclor 5460	J J	1.7 1.3	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	AROCLOR 1242	J	0.86	1.9	PQL	ug/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	Aroclor 5460	J	1.5	3.7	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-17-SA5A-QC-051611	METHYLENE CHLORIDE TOLUENE	J J	4.1 0.17	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-002-SA5DN-SB-4.0-5.0	TOLUENE	J	0.08	4.0	PQL	ug/Kg	J (all detects)
SL-003-SA5DN-SB-0.5-1.5	2-BUTANONE (MEK) BENZENE TOLUENE	J J J	3.9 0.21 0.13	8.4 4.2 4.2	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-003-SA5DN-SB-8.0-9.0	METHYLENE CHLORIDE TOLUENE	J J	1.1 0.12	4.6 4.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SB-3.5-4.5	2-BUTANONE (MEK)	J	3.2	8.0	PQL	ug/Kg	J (all detects)
	BENZENE	J	0.17	4.0	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.88	4.0	PQL	ug/Kg	
	TOLUENE	J	0.15	4.0	PQL	ug/Kg	
SL-004-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.81	3.9	PQL	ug/Kg	J (all detects)
SL-042-SA5A-SB-3.5-4.5	ACETONE	J	7.4	8.5	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	3.7	4.3	PQL	ug/Kg	
	TOLUENE	J	0.12	4.3	PQL	ug/Kg	
SL-167-SA5A-SB-1.0-2.0	ISOPROPYLBENZENE	J	0.66	4.4	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.18	4.4	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	380	PQL	ug/Kg	J (all detects)
SL-167-SA5A-SB-1.0-2.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	360	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5DN-SB-4.0-5.0	Di-n-octylphthalate	J	8.9	20	PQL	ug/Kg	J (all detects)
SL-004-SA5DN-SB-3.5-4.5	FLUORANTHENE	J	0.86	2.0	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.96	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	2.0	PQL	ug/Kg	
SL-004-SA5DN-SB-9.0-10.0	2-METHYLNAPHTHALENE	J	0.81	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.61	1.9	PQL	ug/Kg	
SL-167-SA5A-SB-1.0-2.0	ANTHRACENE	J	0.66	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.98	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.2	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.83	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.98	1.8	PQL	ug/Kg	
	PYRENE	J	0.76	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE151 **Laboratory: LL**

EDD Filename: DE151_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8315A**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-167-SA5A-SB-1.0-2.0	FORMALDEHYDE	J	680	1600	PQL	ug/Kg	J (all detects)

LDC #: 26078K4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-29-11
SDG #: DE151 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OL
2nd Reviewer:

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals as ICB/CCB
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=4

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

Validated Samples:

1	SL-042-SA5A-SB-3.5-4.5	11	SL-042-SA5A-SB-3.5-4.5MS	21		31	
2	DUP-17-SA5A-QC-051611	12	SL-042-SA5A-SB-3.5-4.5MSD	22		32	
3	SL-167-SA5A-SB-1.0-2.0	13	SL-042-SA5A-SB-3.5-4.5DUP	23		33	
4	EB15-SA5A-SB-051611	14		24		34	
5	SL-002-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-002-SA5DN-SB-9.0-10.0	16		26		36	
7	SL-003-SA5DN-SB-0.5-1.5	17		27		37	
8	SL-003-SA5DN-SB-8.0-6.0	18		28		38	
9	SL-004-SA5DN-SB-3.5-4.5	19		29		39	
10	SL-004-SA5DN-SB-9.0-10.0	20		30		40	

Notes:

LDC #: 26078K4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: AC
2nd Reviewer: EC

METHOD: Trace Metals (EPA SW846 6010B/7000)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 5/16/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil Reason Code: F

Analyte	Blank ID	Sample Identification																		
	4B	Action Level	1	2	3															
B	19.5	9.75	8.2	8.7	7.7															

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE151
Matrix: SOIL Level (low/med): LOW

74X

Background Lab Sample ID: 6288929BKG Matrix Spike Lab Sample ID: 6288930MS Matrix Spike Duplicate Lab Sample ID: 6288931MSD
% Solids for Sample: 87.8
Batch Id(s): P13708B, P13726A, P13711B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		33759.8957		42468.5102		40807.8858		219.0293	225.5351	MG/KG	3976		3125		4			20	P
Antimony	121	0.3124		1.1552		1.2362		1.3142	1.3532	MG/KG	64	N	68	N	7		75 - 125	20	MS
Arsenic	75	9.0507		13.6105		13.9223		2.1903	2.2554	MG/KG	208		216		2			20	MS
Barium	137	119.6013		146.7496		151.4243		10.9515	11.2768	MG/KG	248		282		3			20	MS
Beryllium	9	1.1096		2.2429		2.3817		0.8761	0.9021	MG/KG	129	N	141	N	6		75 - 125	20	MS
Boron		8.2070		215.8709		225.6614		219.0293	225.5351	MG/KG	95		96		4		84 - 115	20	P
Cadmium	111	0.0923	B	1.3950		1.4928		1.0951	1.1277	MG/KG	119		124		7		75 - 125	20	MS
Calcium		3054.5284		3511.9743		3574.8427		438.0585	451.0702	MG/KG	104		115		2			20	P
Chromium	52	28.3272		46.9380		44.7011		10.9515	11.2768	MG/KG	170	N	145	N	5		75 - 125	20	MS
Cobalt	59	9.2086		78.9162		75.4640		54.7573	56.3838	MG/KG	127	N	118		4		75 - 125	20	MS
Copper	63	11.1008		24.5094		24.2676		10.9515	11.2768	MG/KG	122		117		1		75 - 125	20	MS
Iron		28185.0118		30559.4117		29750.8085		109.5146	112.7675	MG/KG	2168		1389		3			20	P
Lead	208	8.5703		14.1931		14.4703		3.2854	3.3830	MG/KG	171	N	174	N	2		75 - 125	20	MS
Lithium		32.1294		146.3784		147.6229		109.5146	112.7675	MG/KG	104		102		1		82 - 114	20	P
Magnesium		5733.0822		6266.3998		6203.4236		219.0293	225.5351	MG/KG	243		209		1			20	P
Manganese		252.2144		332.5368		333.5077		54.7573	56.3838	MG/KG	147		144		0			20	P
Mercury		0.0033	U	0.1721		0.1926		0.1799	0.1870	MG/KG	96		103		11		65 - 135	20	CV
Molybdenum	98	1.5021		16.4951		16.1889		10.9515	11.2768	MG/KG	137	N	130	N	2		75 - 125	20	MS
Nickel	60	18.9404		35.1542		35.0030		10.9515	11.2768	MG/KG	148	N	142	N	0		75 - 125	20	MS
Phosphorus		321.8120		426.9417		420.4707		109.5146	112.7675	MG/KG	96		87		2		75 - 125	20	P
Potassium		1813.6707		3008.1128		2954.4521		1095.1463	1127.6754	MG/KG	109		101		2		75 - 125	20	P
Selenium	78	0.2476	B	2.8189		2.8034		2.1903	2.2554	MG/KG	117		113		1		75 - 125	20	MS
Silver	107	0.8329		14.4012		14.2087		10.9515	11.2768	MG/KG	124		119		1		75 - 125	20	MS
Sodium		112.3872		1210.2320		1235.8917		1095.1463	1127.6754	MG/KG	100		100		2		75 - 125	20	P
Strontium		22.9346		135.1509		137.0351		109.5146	112.7675	MG/KG	102		101		1		75 - 115	20	P
Thallium	203	0.2948		0.8137		0.8604		0.4381	0.4511	MG/KG	118		125		6		75 - 125	20	MS
Tin		3.3982	B	380.3104		398.3919		438.0585	451.0702	MG/KG	86		88		5		80 - 110	20	P
Titanium		1450.5388		1723.0222		1724.0420		109.5146	112.7675	MG/KG	249		243		0			20	P
Vanadium	51	55.0531		79.1791		78.7343		10.9515	11.2768	MG/KG	220		210		1			20	MS
Zinc	66	52.4369		57.0571		56.2936		10.9515	11.2768	MG/KG	42		34		1			20	MS
Zirconium		5.2392	B	108.2092		111.6218		109.5146	112.7675	MG/KG	94		94		3		75 - 125	20	P

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METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE151
Matrix: SOIL Level (low/med): LOW

<5xRL

Background Lab Sample ID: 6288929BKG
% Solids for Duplicate: 88.0
Batch ID(s): P13708B, P13726A, P13711B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6288932DUP
% Solids for Sample: 87.8

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			33759.8957		35312.3197		4		P
Antimony	121	0.2	0.3124		0.2387		27		MS
Arsenic	75		9.0507		8.5750		5		MS
Barium	137		119.6013		97.1833		21	*	MS
Beryllium	9		1.1096		0.9856		12		MS
Boron		5.5	8.2070		8.6560		5		P
Cadmium	111		0.0923	B	0.0438	U	200		MS
Calcium			3054.5284		2945.5224		4		P
Chromium	52		28.3272		25.6264		10		MS
Cobalt	59		9.2086		6.3343		37	*	MS
Copper	63		11.1008		7.8237		35	*	MS
Iron			28185.0118		27927.6118		1		P
Lead	208		8.5703		7.7690		10		MS
Lithium			32.1294		31.4529		2		P
Magnesium			5733.0822		5456.8281		5		P
Manganese			252.2144		195.6296		25	*	P
Mercury			0.0033	U	0.0050	B	200		CV
Molybdenum	98		1.5021		1.7032		13		MS
Nickel	60		18.9404		15.5073		20		MS
Phosphorus			321.8120		290.5623		10		P
Potassium			1813.6707		1420.1148		24	*	P
Selenium	78		0.2476	B	0.2315	B	7		MS
Silver	107	0.1	0.8329		0.1860		127	*	MS
Sodium		109.5	112.3872		108.8894	B	3		P
Strontium			22.9346		22.6495		1		P
Thallium	203	0.1	0.2948		0.2368		22		MS
Tin			3.3982	B	3.2750	B	4		P
Titanium			1450.5388		1370.3750		6		P
Vanadium	51		55.0531		50.2891		9		MS
Zinc	66		52.4369		43.1488		19		MS
Zirconium		5.5	5.2392	B	5.6266		7		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

→ out by difference (0.6469 (≤0.72))

DE151 4741

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE151
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6288929BKG Serial Dilution Lab Sample ID: 6288929L
Batch ID(s): P13708B, P13726A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		308268.3600		324173.7500		5		P
Antimony	121	1.3850		1.5000	U	100		MS
Arsenic	75	40.1300		44.6450		11	E	MS
Barium	137	530.3000		515.0000		3		MS
Beryllium	9	4.9200		5.0850		3		MS
Boron		74.9400		150.8000	B	101		P
Cadmium	111	0.4092	B	1.0000	U	100		MS
Calcium		27891.5100		29716.6000		7		P
Chromium	52	125.6000		136.3000		9		MS
Cobalt	59	40.8300		40.1900		2		MS
Copper	63	49.2200		48.2550		2		MS
Iron		257362.9800		260313.1000		1		P
Lead	208	38.0000		36.7200		3		MS
Lithium		293.3800		319.6500		9		P
Magnesium		52349.9200		54910.9000		5		P
Manganese		2303.0200		2496.0000		8		P
Molybdenum	98	6.6600		6.4350		3		MS
Nickel	60	83.9800		78.5000		7		MS
Phosphorus		2938.5300		3020.4000		3		P
Potassium		16560.9900		17540.9000		6		P
Selenium	78	1.0980	B	1.0745	B	2		MS
Silver	107	3.6930		3.6345		2		MS
Sodium		1026.2300		1865.0000	U	100		P
Strontium		209.4200		223.0500		7		P
Thallium	203	1.3070		1.1620	B	11		MS
Tin		31.0300	B	50.0000	U	100		P
Titanium		13245.1600		14336.0000		8		P
Vanadium	51	244.1000		259.7000		6		MS
Zinc	66	232.5000		316.8500		36		MS
Zirconium		47.8400	B	61.3000	B	28		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE151 4743
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE152

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	3050B	6010B	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	3050B	6020	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	3060A	7199	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	3550B	8081A	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	3550B	8082	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	3550B	8151A	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	3550B	8270C	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	3550B	8270C SIM	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	METHOD	300.0	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	METHOD	314.0	III
16-May-2011	SL-254-SA5A-SS-0.0-0.5	6290752	N	METHOD	7471A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	3050B	6010B	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	3050B	6020	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	3060A	7199	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	3550B	8081A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	3550B	8082	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	3550B	8151A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	3550B	8270C	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	3550B	8270C SIM	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	METHOD	300.0	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	METHOD	314.0	III
17-May-2011	SL-072-SA5DN-SS-0-0.5	6290756	N	METHOD	7471A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	3050B	6010B	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	3050B	6020	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	3060A	7199	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	3550B	8082	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	3550B	8151A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	3550B	8270C	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	3550B	8270C SIM	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	METHOD	300.0	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	METHOD	314.0	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MS	6290757	MS	METHOD	7471A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290758	MSD	3050B	6010B	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290758	MSD	3050B	6020	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290758	MSD	3550B	8081A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290758	MSD	3550B	8082	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290758	MSD	3550B	8151A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290758	MSD	3550B	8270C	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290758	MSD	3550B	8270C SIM	III
17-May-2011	SL-072-SA5DN-SS-0-0.5MSD	6290758	MSD	METHOD	7471A	III
17-May-2011	SL-072-SA5DN-SS-0-0.5DUP	6290759	DUP	3050B	6010B	III
17-May-2011	SL-072-SA5DN-SS-0-0.5DUP	6290759	DUP	3050B	6020	III
17-May-2011	SL-072-SA5DN-SS-0-0.5DUP	6290759	DUP	3060A	7199	III
17-May-2011	SL-072-SA5DN-SS-0-0.5DUP	6290759	DUP	METHOD	300.0	III
17-May-2011	SL-072-SA5DN-SS-0-0.5DUP	6290759	DUP	METHOD	314.0	III
17-May-2011	SL-072-SA5DN-SS-0-0.5DUP	6290759	DUP	METHOD	7471A	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	3050B	6010B	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	3050B	6020	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	3060A	7199	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	3550B	8081A	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	3550B	8151A	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	3550B	8270C	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	3550B	8270C SIM	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	METHOD	300.0	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	METHOD	314.0	III
17-May-2011	DUP-01-SA5DN-QC-051711	6290753	FD	METHOD	7471A	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	3050B	6010B	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	3050B	6020	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	3060A	7199	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	3550B	8081A	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	3550B	8082	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	3550B	8151A	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	3550B	8270C	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	3550B	8270C SIM	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	METHOD	300.0	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	METHOD	314.0	III
17-May-2011	SL-075-SA5DN-SS-0.0-0.5	6290761	N	METHOD	7471A	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	3050B	6010B	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	3050B	6020	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	3060A	7199	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	3550B	8081A	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	3550B	8082	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	3550B	8151A	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	3550B	8270C	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	3550B	8270C SIM	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	METHOD	314.0	III
17-May-2011	SL-076-SA5DN-SS-0.0-0.5	6290762	N	METHOD	7471A	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	3050B	6010B	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	3050B	6020	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	3060A	7199	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	3550B	8081A	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	3550B	8082	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	3550B	8151A	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	3550B	8270C	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	3550B	8270C SIM	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	8330	8330A	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	METHOD	300.0	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	METHOD	314.0	III
17-May-2011	SL-074-SA5DN-SS-0.0-0.5	6290760	N	METHOD	7471A	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3050B	6010B	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3050B	6020	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3060A	7199	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3546	1625C	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3550B	8015B	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3550B	8015M	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3550B	8081A	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3550B	8082	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3550B	8151A	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3550B	8270C	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	3550B	8270C SIM	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	8330	8330A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	METHOD	300.0	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	METHOD	314.0	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	METHOD	7471A	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	METHOD	8015B	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	METHOD	8015M	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	METHOD	8315A	III
17-May-2011	SL-067-SA5DN-SS-0.0-0.5	6290755	N	METHOD	9012B	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	3050B	6010B	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	3050B	6020	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	3060A	7199	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	3550B	8081A	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	3550B	8082	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	3550B	8151A	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	3550B	8270C	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	3550B	8270C SIM	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	8330	8330A	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	METHOD	300.0	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	METHOD	314.0	III
17-May-2011	SL-079-SA5DN-SS-0.0-0.5	6290763	N	METHOD	7471A	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	3050B	6010B	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	3050B	6020	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	3060A	7199	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	3550B	8081A	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	3550B	8082	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	3550B	8151A	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	3550B	8270C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	3550B	8270C SIM	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	8330	8330A	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	METHOD	300.0	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	METHOD	314.0	III
17-May-2011	SL-080-SA5DN-SS-0.0-0.5	6290764	N	METHOD	7471A	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	3005A	6010B	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	3020A	6020	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	3510C	8081A	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	3510C	8082	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	3510C	8270C	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	3510C	8270C SIM	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	Gen Prep	300.0	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	Gen Prep	314.0	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	Gen Prep	7199	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	METHOD	7470A	III
17-May-2011	EB01-SA5DN-SS-051711	6290770	EB	METHOD	8151A	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	3050B	6010B	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	3050B	6020	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	3060A	7199	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	3550B	8081A	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	3550B	8082	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	3550B	8151A	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	3550B	8270C	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	3550B	8270C SIM	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	8330	8330A	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	METHOD	314.0	III
17-May-2011	SL-082-SA5DN-SS-0.0-0.5	6290766	N	METHOD	7471A	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	3050B	6010B	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	3050B	6020	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	3060A	7199	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	3550B	8081A	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	3550B	8082	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	3550B	8151A	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	3550B	8270C	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	3550B	8270C SIM	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	8330	8330A	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	METHOD	300.0	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	METHOD	314.0	III
17-May-2011	SL-081-SA5DN-SS-0-0.5	6290765	N	METHOD	7471A	III
17-May-2011	SL-081-SA5DN-SS-0-0.5DUP	P290765D271408B	DUP	METHOD	300.0	III
17-May-2011	SL-081-SA5DN-SS-0-0.5DUP	P290765D272007B	DUP	METHOD	314.0	III
17-May-2011	SL-081-SA5DN-SS-0-0.5MS	P290765R271423B	MS	METHOD	300.0	III
17-May-2011	SL-081-SA5DN-SS-0-0.5MS	P290765R272029B	MS	METHOD	314.0	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	3050B	6010B	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	3050B	6020	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	3060A	7199	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	3550B	8081A	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	3550B	8082	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	3550B	8151A	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	3550B	8270C	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	8330	8330A	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	METHOD	300.0	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	METHOD	314.0	III
17-May-2011	SL-084-SA5DN-SS-0.0-0.5	6290768	N	METHOD	7471A	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	3050B	6010B	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	3050B	6020	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	3060A	7199	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	3550B	8081A	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	3550B	8082	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	3550B	8151A	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	3550B	8270C	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	3550B	8270C SIM	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	8330	8330A	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	METHOD	300.0	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	METHOD	314.0	III
17-May-2011	SL-083-SA5DN-SS-0.0-0.5	6290767	N	METHOD	7471A	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	3050B	6010B	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	3050B	6020	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	3060A	7199	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	3550B	8081A	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	3550B	8082	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	3550B	8151A	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	3550B	8270C	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	3550B	8270C SIM	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	8330	8330A	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	METHOD	314.0	III
17-May-2011	SL-206-SA5DN-SS-0.0-0.5	6290769	N	METHOD	7471A	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3050B	6010B	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3050B	6020	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3060A	7199	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3546	1625C	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3550B	8015B	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3550B	8015M	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3550B	8081A	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3550B	8082	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3550B	8151A	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3550B	8270C	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	3550B	8270C SIM	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	8330	8330A	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	METHOD	300.0	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	METHOD	314.0	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	METHOD	6850	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	METHOD	7471A	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	METHOD	8015B	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	METHOD	8015M	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	METHOD	8315A	III
17-May-2011	SL-066-SA5DN-SS-0-0.5	6290754	N	METHOD	9012B	III
17-May-2011	SL-066-SA5DN-SS-0-0.5MSD	P290754M240744A	MSD	8330	8330A	III
17-May-2011	SL-066-SA5DN-SS-0-0.5MS	P290754R240536A	MS	8330	8330A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory:** LL

EDD Filename: PrepDE152_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-081-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 9012B **Matrix:** SO

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.20	J	0.20	MDL	0.54	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: EB01-SA5DN-SS-051711 *Collected:* 5/17/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0184	J	0.0138	MDL	0.0500	PQL	mg/L	U	B

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4640		19.5	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.64	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.15	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	5390		19.2	MDL	53.5	PQL	mg/Kg	J	Q
TIN	2.82	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.43	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4400		19.6	MDL	54.5	PQL	mg/Kg	J	Q
TIN	3.13	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.71	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 8:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4330		19.9	MDL	55.3	PQL	mg/Kg	J	Q
TIN	2.71	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.74	J	0.929	MDL	5.53	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-074-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4570		19.8	MDL	55.1	PQL	mg/Kg	J	Q
TIN	2.84	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.19	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3540		21.7	MDL	60.2	PQL	mg/Kg	J	Q
TIN	2.92	J	1.20	MDL	12.0	PQL	mg/Kg	U	B
Zirconium	1.96	J	1.01	MDL	6.02	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4070		19.0	MDL	52.7	PQL	mg/Kg	J	Q
TIN	2.75	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.18	J	0.886	MDL	5.27	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4470		19.3	MDL	53.6	PQL	mg/Kg	J	Q
TIN	2.77	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.75	J	0.900	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-080-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 11:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4590		19.8	MDL	55.0	PQL	mg/Kg	J	Q
SODIUM	99.5	J	41.0	MDL	110	PQL	mg/Kg	J	Z
TIN	2.88	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-081-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 1:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3980		18.7	MDL	51.9	PQL	mg/Kg	J	Q
TIN	2.65	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.76	J	0.871	MDL	5.19	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4520		19.7	MDL	54.7	PQL	mg/Kg	J	Q
SODIUM	104	J	40.8	MDL	109	PQL	mg/Kg	J	Z
TIN	3.00	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.60	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4260		19.7	MDL	54.7	PQL	mg/Kg	J	Q
SODIUM	103	J	40.8	MDL	109	PQL	mg/Kg	J	Z
TIN	2.83	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.63	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4290		19.9	MDL	55.3	PQL	mg/Kg	J	Q
TIN	2.78	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.19	J	0.928	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	94.2	J	40.8	MDL	109	PQL	mg/Kg	J	Z
TIN	2.69	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.56	J	0.918	MDL	5.46	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3270		17.8	MDL	49.4	PQL	mg/Kg	J	Q
SODIUM	63.4	J	36.8	MDL	98.7	PQL	mg/Kg	J	Z
TIN	2.46	J	0.987	MDL	9.87	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.227	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.41		0.0540	MDL	0.108	PQL	mg/Kg	J	Q, FD

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.3		0.117	MDL	0.432	PQL	mg/Kg	J	E, E

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.379		0.0649	MDL	0.216	PQL	mg/Kg	J	Q, E, FD
ARSENIC	5.41		0.0865	MDL	0.432	PQL	mg/Kg	J	Q
BERYLLIUM	0.620		0.0173	MDL	0.108	PQL	mg/Kg	J	E
CADMIUM	0.349		0.0432	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	23.8		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
COBALT	7.74		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	16.0		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E
LEAD	10.8		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
NICKEL	20.6		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E
SILVER	0.0382	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 **Collected:** 5/17/2011 8:45:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.270		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	48.4		0.0238	MDL	0.108	PQL	mg/Kg	J	E, A
ZINC	112		0.605	MDL	3.24	PQL	mg/Kg	J	E

Sample ID: SL-066-SA5DN-SS-0-0.5 **Collected:** 5/17/2011 3:25:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.244	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA5DN-SS-0-0.5 **Collected:** 5/17/2011 3:25:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.813		0.0540	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-066-SA5DN-SS-0-0.5 **Collected:** 5/17/2011 3:25:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	182		0.117	MDL	0.432	PQL	mg/Kg	J	E, E

Sample ID: SL-066-SA5DN-SS-0-0.5 **Collected:** 5/17/2011 3:25:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.698		0.0648	MDL	0.216	PQL	mg/Kg	J	Q, E
ARSENIC	8.28		0.0864	MDL	0.432	PQL	mg/Kg	J	Q
BERYLLIUM	0.993		0.0173	MDL	0.108	PQL	mg/Kg	J	E
CADMIUM	0.762		0.0432	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	36.0		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
COBALT	15.6		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	27.1		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E
LEAD	20.4		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
NICKEL	27.7		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E
SILVER	0.0866	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.464		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	66.0		0.0238	MDL	0.108	PQL	mg/Kg	J	E, A
ZINC	152		0.605	MDL	3.24	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.218	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.775		0.0540	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	170		0.117	MDL	0.432	PQL	mg/Kg	J	E, E

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.529		0.0648	MDL	0.216	PQL	mg/Kg	J	Q, E
ARSENIC	9.81		0.0864	MDL	0.432	PQL	mg/Kg	J	Q
BERYLLIUM	0.992		0.0173	MDL	0.108	PQL	mg/Kg	J	E
CADMIUM	0.607		0.0432	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	33.3		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
COBALT	11.2		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	23.4		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E
LEAD	19.3		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
NICKEL	24.1		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E
SILVER	0.0517	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.415		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	61.8		0.0238	MDL	0.108	PQL	mg/Kg	J	E, A
ZINC	130		0.605	MDL	3.24	PQL	mg/Kg	J	E

Sample ID: SL-072-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 8:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.209	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-072-SA5DN-SS-0-0.5** ***Collected:*** **5/17/2011 8:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.655		0.0548	MDL	0.110	PQL	mg/Kg	J	Q, FD

Sample ID: **SL-072-SA5DN-SS-0-0.5** ***Collected:*** **5/17/2011 8:40:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.118	MDL	0.438	PQL	mg/Kg	J	E, E

Sample ID: **SL-072-SA5DN-SS-0-0.5** ***Collected:*** **5/17/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.900		0.0657	MDL	0.219	PQL	mg/Kg	J	Q, E, FD
ARSENIC	5.98		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
BERYLLIUM	0.727		0.0175	MDL	0.110	PQL	mg/Kg	J	E
CADMIUM	0.307		0.0438	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	28.1		0.131	MDL	0.438	PQL	mg/Kg	J	Q, A
COBALT	10.1		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	17.8		0.0723	MDL	0.438	PQL	mg/Kg	J	Q, E
LEAD	12.8		0.0114	MDL	0.219	PQL	mg/Kg	J	Q
NICKEL	19.8		0.110	MDL	0.438	PQL	mg/Kg	J	Q, E
SILVER	0.0349	J	0.0131	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.297		0.0329	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	57.1		0.0241	MDL	0.110	PQL	mg/Kg	J	E, A
ZINC	153		0.613	MDL	3.29	PQL	mg/Kg	J	E

Sample ID: **SL-074-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 10:00:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.203	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: **SL-074-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 10:00:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.647		0.0551	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-074-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.119	MDL	0.441	PQL	mg/Kg	J	E, E

Sample ID: SL-074-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.375		0.0662	MDL	0.221	PQL	mg/Kg	J	Q, E
ARSENIC	5.89		0.0882	MDL	0.441	PQL	mg/Kg	J	Q
BERYLLIUM	0.866		0.0176	MDL	0.110	PQL	mg/Kg	J	E
CADMIUM	0.549		0.0441	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	29.0		0.132	MDL	0.441	PQL	mg/Kg	J	Q, A
COBALT	10.4		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	17.7		0.0728	MDL	0.441	PQL	mg/Kg	J	Q, E
LEAD	11.8		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	20.6		0.110	MDL	0.441	PQL	mg/Kg	J	Q, E
SILVER	0.0526	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.364		0.0331	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	54.4		0.0243	MDL	0.110	PQL	mg/Kg	J	E, A
ZINC	91.8		0.617	MDL	3.31	PQL	mg/Kg	J	E

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.217		0.0472	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.137	J	0.0472	MDL	0.472	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.402		0.0590	MDL	0.118	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	149		0.127	MDL	0.472	PQL	mg/Kg	J	E, E

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.288		0.0708	MDL	0.236	PQL	mg/Kg	J	Q, E
ARSENIC	5.49		0.0944	MDL	0.472	PQL	mg/Kg	J	Q
BERYLLIUM	0.829		0.0189	MDL	0.118	PQL	mg/Kg	J	E
CHROMIUM	28.5		0.142	MDL	0.472	PQL	mg/Kg	J	Q, A
COBALT	8.85		0.0236	MDL	0.118	PQL	mg/Kg	J	Q, E
COPPER	14.4		0.0779	MDL	0.472	PQL	mg/Kg	J	Q, E
LEAD	9.36		0.0123	MDL	0.236	PQL	mg/Kg	J	Q
NICKEL	19.9		0.118	MDL	0.472	PQL	mg/Kg	J	Q, E
SILVER	0.0527	J	0.0142	MDL	0.118	PQL	mg/Kg	J	Z, Q
THALLIUM	0.334		0.0354	MDL	0.118	PQL	mg/Kg	J	Q
VANADIUM	52.8		0.0260	MDL	0.118	PQL	mg/Kg	J	E, A
ZINC	61.8		0.661	MDL	3.54	PQL	mg/Kg	J	E

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.206	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.796		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	143		0.285	MDL	1.05	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-076-SA5DN-SS-0.0-0.5 **Collected:** 5/17/2011 9:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.548		0.0633	MDL	0.211	PQL	mg/Kg	J	Q, E
ARSENIC	9.67		0.0843	MDL	0.422	PQL	mg/Kg	J	Q
BERYLLIUM	1.05		0.0169	MDL	0.105	PQL	mg/Kg	J	E
CADMIUM	0.706		0.0422	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	36.3		0.127	MDL	0.422	PQL	mg/Kg	J	Q, A
COBALT	13.8		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	22.9		0.0696	MDL	0.422	PQL	mg/Kg	J	Q, E
LEAD	17.0		0.0110	MDL	0.211	PQL	mg/Kg	J	Q
NICKEL	25.6		0.105	MDL	0.422	PQL	mg/Kg	J	Q, E
SILVER	0.0797	J	0.0127	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.396		0.0316	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	71.1		0.0232	MDL	0.105	PQL	mg/Kg	J	E, A
ZINC	129		0.590	MDL	3.16	PQL	mg/Kg	J	E

Sample ID: SL-079-SA5DN-SS-0.0-0.5 **Collected:** 5/17/2011 10:45:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.192	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA5DN-SS-0.0-0.5 **Collected:** 5/17/2011 10:45:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.747		0.0546	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-079-SA5DN-SS-0.0-0.5 **Collected:** 5/17/2011 10:45:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	172		0.118	MDL	0.437	PQL	mg/Kg	J	E, E

Sample ID: SL-079-SA5DN-SS-0.0-0.5 **Collected:** 5/17/2011 10:45:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.483		0.0656	MDL	0.219	PQL	mg/Kg	J	Q, E
ARSENIC	8.08		0.0874	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.928		0.0175	MDL	0.109	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-079-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.748		0.0437	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	32.7		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
COBALT	11.9		0.0219	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	22.4		0.0721	MDL	0.437	PQL	mg/Kg	J	Q, E
LEAD	16.0		0.0114	MDL	0.219	PQL	mg/Kg	J	Q
NICKEL	24.3		0.109	MDL	0.437	PQL	mg/Kg	J	Q, E
SILVER	0.0972	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.409		0.0328	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	62.2		0.0240	MDL	0.109	PQL	mg/Kg	J	E, A
ZINC	140		0.612	MDL	3.28	PQL	mg/Kg	J	E

Sample ID: SL-080-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 11:10:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.200	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-080-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 11:10:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.633		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-080-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 11:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	169		0.119	MDL	0.440	PQL	mg/Kg	J	E, E

Sample ID: SL-080-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.456		0.0660	MDL	0.220	PQL	mg/Kg	J	Q, E
ARSENIC	7.37		0.0880	MDL	0.440	PQL	mg/Kg	J	Q
BERYLLIUM	0.948		0.0176	MDL	0.110	PQL	mg/Kg	J	E
CADMIUM	0.640		0.0440	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	31.6		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
COBALT	11.4		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-080-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	19.6		0.0726	MDL	0.440	PQL	mg/Kg	J	Q, E
LEAD	13.6		0.0114	MDL	0.220	PQL	mg/Kg	J	Q
NICKEL	23.6		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E
SILVER	0.0782	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.379		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	58.7		0.0242	MDL	0.110	PQL	mg/Kg	J	E, A
ZINC	121		0.616	MDL	3.30	PQL	mg/Kg	J	E

Sample ID: SL-081-SA5DN-SS-0-0.5 ***Collected:*** 5/17/2011 1:30:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA5DN-SS-0-0.5 ***Collected:*** 5/17/2011 1:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.651		0.0529	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-081-SA5DN-SS-0-0.5 ***Collected:*** 5/17/2011 1:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	160		0.114	MDL	0.423	PQL	mg/Kg	J	E, E

Sample ID: SL-081-SA5DN-SS-0-0.5 ***Collected:*** 5/17/2011 1:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.412		0.0635	MDL	0.212	PQL	mg/Kg	J	Q, E
ARSENIC	6.49		0.0846	MDL	0.423	PQL	mg/Kg	J	Q
BERYLLIUM	0.802		0.0169	MDL	0.106	PQL	mg/Kg	J	E
CADMIUM	0.514		0.0423	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	28.1		0.127	MDL	0.423	PQL	mg/Kg	J	Q, A
COBALT	9.85		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	19.4		0.0698	MDL	0.423	PQL	mg/Kg	J	Q, E
LEAD	14.3		0.0110	MDL	0.212	PQL	mg/Kg	J	Q
NICKEL	20.0		0.106	MDL	0.423	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-081-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 1:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0670	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.360		0.0317	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	55.4		0.0233	MDL	0.106	PQL	mg/Kg	J	E, A
ZINC	113		0.592	MDL	3.17	PQL	mg/Kg	J	E

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	146		1.49	MDL	7.97	PQL	mg/Kg	J	E

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.223	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.776		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	178		0.115	MDL	0.425	PQL	mg/Kg	J	E, E

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.726		0.0637	MDL	0.212	PQL	mg/Kg	J	Q, E
ARSENIC	9.98		0.0850	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	1.11		0.0170	MDL	0.106	PQL	mg/Kg	J	E
CADMIUM	0.766		0.0425	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	37.2		0.127	MDL	0.425	PQL	mg/Kg	J	Q, A
COBALT	17.0		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	24.0		0.0701	MDL	0.425	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-082-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 1:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	22.9		0.0110	MDL	0.212	PQL	mg/Kg	J	Q
NICKEL	27.3		0.106	MDL	0.425	PQL	mg/Kg	J	Q, E
SILVER	0.0727	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.398		0.0319	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	70.9		0.0234	MDL	0.106	PQL	mg/Kg	J	E, A

Sample ID: SL-083-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 2:25:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.423		0.0644	MDL	0.215	PQL	mg/Kg	J	Q, E

Sample ID: SL-083-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 2:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 2:25:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.567		0.0536	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 2:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	129		0.116	MDL	0.429	PQL	mg/Kg	J	E, E

Sample ID: SL-083-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 2:25:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.90		0.0858	MDL	0.429	PQL	mg/Kg	J	Q
BERYLLIUM	0.745		0.0172	MDL	0.107	PQL	mg/Kg	J	E
CADMIUM	0.498		0.0429	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	26.6		0.129	MDL	0.429	PQL	mg/Kg	J	Q, A
COBALT	9.82		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	18.0		0.0708	MDL	0.429	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-083-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.0		0.0112	MDL	0.215	PQL	mg/Kg	J	Q
NICKEL	19.3		0.107	MDL	0.429	PQL	mg/Kg	J	Q, E
SILVER	0.0720	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.325		0.0322	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	51.2		0.0236	MDL	0.107	PQL	mg/Kg	J	E, A
ZINC	102		0.601	MDL	3.22	PQL	mg/Kg	J	E

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.445		0.0650	MDL	0.217	PQL	mg/Kg	J	Q, E
CADMIUM	0.559		0.0434	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.514		0.0542	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.117	MDL	0.434	PQL	mg/Kg	J	E, E

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.85		0.0867	MDL	0.434	PQL	mg/Kg	J	Q
BERYLLIUM	0.727		0.0173	MDL	0.108	PQL	mg/Kg	J	E
CHROMIUM	25.4		0.130	MDL	0.434	PQL	mg/Kg	J	Q, A
COBALT	8.76		0.0217	MDL	0.108	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	16.9		0.0715	MDL	0.434	PQL	mg/Kg	J	Q, E
LEAD	13.9		0.0113	MDL	0.217	PQL	mg/Kg	J	Q
NICKEL	17.4		0.108	MDL	0.434	PQL	mg/Kg	J	Q, E
SILVER	0.0570	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.311		0.0325	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	51.1		0.0238	MDL	0.108	PQL	mg/Kg	J	E, A
ZINC	128		0.607	MDL	3.25	PQL	mg/Kg	J	E

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* REA10 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.185	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0631	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0407	MDL	0.407	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.430		0.0508	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.8		0.110	MDL	0.407	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0610	MDL	0.203	PQL	mg/Kg	J	Z, Q, E
ARSENIC	3.27		0.0813	MDL	0.407	PQL	mg/Kg	J	Q
BERYLLIUM	0.389		0.0163	MDL	0.102	PQL	mg/Kg	J	E
CADMIUM	0.253		0.0407	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	15.8		0.122	MDL	0.407	PQL	mg/Kg	J	Q, A
COBALT	4.76		0.0203	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	7.90		0.0671	MDL	0.407	PQL	mg/Kg	J	Q, E
LEAD	9.94		0.0106	MDL	0.203	PQL	mg/Kg	J	Q
NICKEL	9.97		0.102	MDL	0.407	PQL	mg/Kg	J	Q, E
SILVER	0.0586	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.186		0.0305	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	29.7		0.0224	MDL	0.102	PQL	mg/Kg	J	E, A
ZINC	68.4		0.569	MDL	3.05	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.79	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7199** ***Matrix:*** **SO**

Sample ID: **SL-072-SA5DN-SS-0-0.5** ***Collected:*** **5/17/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-074-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 10:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-076-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 9:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-080-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-082-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-083-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 2:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-084-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 1:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

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

Sample ID: **SL-206-SA5DN-SS-0.0-0.5** ***Collected:*** **5/17/2011 2:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0053	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z, FD

Sample ID: SL-072-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0032	U	0.0032	MDL	0.112	PQL	mg/Kg	UJ	FD

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.102	J	0.0034	MDL	0.119	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0066	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.9	J	0.88	MDL	2.6	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.19	U	0.19	MDL	0.92	PQL	ug/Kg	UJ	FD
DELTA-BHC	0.32	U	0.32	MDL	0.92	PQL	ug/Kg	UJ	FD

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.1		0.073	MDL	0.37	PQL	ug/Kg	J	S
4,4'-DDT	1.3		0.073	MDL	0.37	PQL	ug/Kg	J	S

Sample ID: SL-072-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.040	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, FD
BETA-BHC	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	R	Q
DELTA-BHC	0.18	J	0.040	MDL	0.19	PQL	ug/Kg	J	Z, FD

Sample ID: SL-074-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.099	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.16	J	0.080	MDL	0.41	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.36	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z, S
4,4'-DDT	1.7		0.072	MDL	0.37	PQL	ug/Kg	J	S
gamma-BHC (Lindane)	0.076	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-079-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.15	J	0.066	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-080-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.4	J	0.89	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-081-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 1:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.39		0.071	MDL	0.37	PQL	ug/Kg	J	S
4,4'-DDT	1.5		0.071	MDL	0.37	PQL	ug/Kg	J	S
Chlordane	2.6	J	0.86	MDL	3.7	PQL	ug/Kg	J	Z, S
DIELDRIN	0.47		0.071	MDL	0.37	PQL	ug/Kg	J	S

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.6	J	0.73	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.9		0.073	MDL	0.38	PQL	ug/Kg	J	S

Sample ID: SL-083-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.066	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.36	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, S
4,4'-DDT	1.5		0.074	MDL	0.38	PQL	ug/Kg	J	S
Chlordane	3.3	J	0.90	MDL	3.8	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.58		0.075	MDL	0.39	PQL	ug/Kg	J	S
4,4'-DDT	1.1		0.075	MDL	0.39	PQL	ug/Kg	J	S
MIREX	0.47		0.075	MDL	0.39	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	2.0		0.43	MDL	1.9	PQL	ug/Kg	J	FD
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	FD

Sample ID: SL-072-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.7		0.44	MDL	1.9	PQL	ug/Kg	J	FD
Aroclor 5460	1.8	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, FD

Sample ID: SL-074-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.8	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.47	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-079-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-083-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.5	J	0.40	MDL	1.7	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: AQ**

Sample ID: EB01-SA5DN-SS-051711 *Collected:* 5/17/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.086	U	0.086	MDL	0.32	PQL	ug/L	UJ	L
DINOSEB	0.11	U	0.11	MDL	0.54	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.10	J	0.090	MDL	0.19	PQL	ug/Kg	J	Z, S, FD
2,4-DB	3.0		0.68	MDL	1.9	PQL	ug/Kg	J	S
DICHLOROPROP	0.88	U	0.88	MDL	1.9	PQL	ug/Kg	UJ	FD
MCPA	340		84	MDL	270	PQL	ug/Kg	J	S, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	2400		84	MDL	280	PQL	ug/Kg	J	S
MCPP	350		83	MDL	280	PQL	ug/Kg	J	S

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	120	J	82	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-072-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.091	U	0.091	MDL	0.19	PQL	ug/Kg	UJ	FD
DICHLOROPROP	1.3	J	0.89	MDL	1.9	PQL	ug/Kg	J	Z, FD
MCPA	480	U	480	MDL	480	PQL	ug/Kg	UJ	FD

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.2	J	0.75	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	170	J	82	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-080-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	200	J	84	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-081-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	7.3		0.67	MDL	1.8	PQL	ug/Kg	J	S
MCPA	470		82	MDL	270	PQL	ug/Kg	J	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	1100		84	MDL	280	PQL	ug/Kg	J	S

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	1.1	J	0.90	MDL	1.9	PQL	ug/Kg	J	Z
MCPP	88	J	84	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	980		86	MDL	280	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB01-SA5DN-SS-051711 *Collected:* 5/17/2011 12:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	18	MDL	370	PQL	ug/Kg	J	Z
Butylbenzylphthalate	51	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	110	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	57	J	18	MDL	180	PQL	ug/Kg	J	Z
Butylbenzylphthalate	19	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	120	J	18	MDL	180	PQL	ug/Kg	J	Z
Dimethylphthalate	42	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	55	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-072-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	R	Q, Q
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-079-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	29	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	28	J	18	MDL	180	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB01-SA5DN-SS-051711 *Collected:* 5/17/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.032	J	0.010	MDL	0.051	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.032	J	0.010	MDL	0.051	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.30	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.17	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	0.26	J	0.051	MDL	1.0	PQL	ug/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Method Category: SVOA

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

Sample ID: DUP-01-SA5DN-QC-051711 *Collected:* 5/17/2011 8:45:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	3.7	U	3.7	MDL	9.1	PQL	ug/Kg	UJ	FD
2-METHYLNAPHTHALENE	3.7	U	3.7	MDL	9.1	PQL	ug/Kg	UJ	FD
ACENAPHTHENE	5.6	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.8	U	1.8	MDL	9.1	PQL	ug/Kg	UJ	FD
ANTHRACENE	5.9	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	18		3.7	MDL	9.1	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	9.7		3.7	MDL	9.1	PQL	ug/Kg	J	FD
Di-n-octylphthalate	42	J	33	MDL	99	PQL	ug/Kg	J	Z, FD
FLUORENE	3.7	U	3.7	MDL	9.1	PQL	ug/Kg	UJ	FD
NAPHTHALENE	3.7	U	3.7	MDL	9.1	PQL	ug/Kg	UJ	FD
PHENANTHRENE	57		3.7	MDL	9.1	PQL	ug/Kg	J	FD

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.9	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	7.7	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	9.0	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
Di-n-octylphthalate	42	J	33	MDL	98	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	6.9	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.81	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.4	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-072-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.80	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q, FD
2-METHYLNAPHTHALENE	0.84	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, Q, FD
ACENAPHTHENE	3.5		0.74	MDL	1.8	PQL	ug/Kg	J	Q, Q
ACENAPHTHYLENE	0.59	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z, Q, FD
ANTHRACENE	4.5		0.37	MDL	1.8	PQL	ug/Kg	J	Q
BENZO(G,H,I)PERYLENE	8.2		0.74	MDL	1.8	PQL	ug/Kg	J	Q, FD
Butylbenzylphthalate	7.3	J	6.6	MDL	20	PQL	ug/Kg	J	Z, Q
DIBENZO(A,H)ANTHRACENE	2.5		0.74	MDL	1.8	PQL	ug/Kg	J	Q, Q, FD
Diethylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	Q
Dimethylphthalate	14	J	6.6	MDL	20	PQL	ug/Kg	J	Z, Q, Q, Q
Di-n-butylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	Q
Di-n-octylphthalate	9.3	J	6.6	MDL	20	PQL	ug/Kg	J	Z, Q, FD
FLUORANTHENE	66		0.74	MDL	1.8	PQL	ug/Kg	J	Q, Q
FLUORENE	2.3		0.74	MDL	1.8	PQL	ug/Kg	J	Q, FD
NAPHTHALENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q, FD
PHENANTHRENE	33		0.74	MDL	1.8	PQL	ug/Kg	J	Q, FD
PYRENE	54		0.74	MDL	1.8	PQL	ug/Kg	J	Q

Sample ID: SL-074-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	8.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.7	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	9.1	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PHENANTHRENE	5.6	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-075-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	2.2	J	2.0	MDL	10	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	5.6	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-076-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	5.9	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	3.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
CHRYSENE	7.2	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
PHENANTHRENE	5.6	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-079-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	6.6	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	7.8	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.0	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	33	MDL	99	PQL	ug/Kg	J	Z
PHENANTHRENE	8.3	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-080-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	5.2	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
CHRYSENE	6.9	J	1.8	MDL	9.2	PQL	ug/Kg	J	Z
FLUORANTHENE	8.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PHENANTHRENE	4.3	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PYRENE	7.5	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-081-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 1:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.62	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.85	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.5	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	0.41	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	5.1	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	6.7	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
CHRYSENE	7.0	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
PHENANTHRENE	5.1	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-083-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	6.1	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.49	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.96	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.73	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.35	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	16	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Butylbenzylphthalate	6.9	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.1	J	6.1	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-254-SA5A-SS-0.0-0.5 *Collected:* 5/16/2011 5:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	86	U	86	MDL	260	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	86	U	86	MDL	260	PQL	ug/Kg	R	L, E

Sample ID: SL-067-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	88	U	88	MDL	260	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	88	U	88	MDL	260	PQL	ug/Kg	R	L, E

Sample ID: SL-074-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	86	U	86	MDL	260	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	86	U	86	MDL	260	PQL	ug/Kg	R	L, E

Sample ID: SL-079-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	85	U	85	MDL	250	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	85	U	85	MDL	250	PQL	ug/Kg	R	L, E

Sample ID: SL-080-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	89	U	89	MDL	270	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	89	U	89	MDL	270	PQL	ug/Kg	R	L, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-081-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	86	U	86	MDL	260	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	86	U	86	MDL	260	PQL	ug/Kg	R	L, E

Sample ID: SL-082-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	88	U	88	MDL	270	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	88	U	88	MDL	270	PQL	ug/Kg	R	L, E

Sample ID: SL-083-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	88	U	88	MDL	270	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	88	U	88	MDL	270	PQL	ug/Kg	R	L, E

Sample ID: SL-084-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 1:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	90	U	90	MDL	270	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	90	U	90	MDL	270	PQL	ug/Kg	R	L, E

Sample ID: SL-206-SA5DN-SS-0.0-0.5 *Collected:* 5/17/2011 2:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	89	U	89	MDL	270	PQL	ug/Kg	R	L, E
2,6-Diamino-4-nitrotoluene	89	U	89	MDL	270	PQL	ug/Kg	R	L, E

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-066-SA5DN-SS-0-0.5 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	150	J	110	MDL	550	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8015B** ***Matrix:*** **SO**

Sample ID: SL-067-SA5DN-SS-0.0-0.5 ***Collected:*** 5/17/2011 10:15:00 ***Analysis Type:*** REA3 ***Dilution:*** 10

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
m-Terphenyl	17	U	17	MDL	39	PQL	mg/Kg	UJ	S
O-TERPHENYL	17	U	17	MDL	39	PQL	mg/Kg	UJ	S
p-Terphenyl	17	U	17	MDL	39	PQL	mg/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: PrepDE152_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE152

Method Blank Outlier Report

Lab Reporting Batch ID: DE152 Laboratory: LL

EDD Filename: DE152_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13848BB221840	5/19/2011 6:40:00 PM	BORON	0.0181 mg/L	EB01-SA5DN-SS-051711

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB01-SA5DN-SS-051711(RES)	BORON	0.0184 mg/L	0.0184U mg/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13808CB221758	5/20/2011 5:58:00 PM	PHOSPHORUS TIN	1.41 mg/Kg 1.66 mg/Kg	DUP-01-SA5DN-QC-051711 SL-066-SA5DN-SS-0-0.5 SL-067-SA5DN-SS-0.0-0.5 SL-072-SA5DN-SS-0-0.5 SL-074-SA5DN-SS-0.0-0.5 SL-075-SA5DN-SS-0.0-0.5 SL-076-SA5DN-SS-0.0-0.5 SL-079-SA5DN-SS-0.0-0.5 SL-080-SA5DN-SS-0.0-0.5 SL-081-SA5DN-SS-0-0.5 SL-082-SA5DN-SS-0.0-0.5 SL-083-SA5DN-SS-0.0-0.5 SL-084-SA5DN-SS-0.0-0.5 SL-254-SA5A-SS-0.0-0.5
P13908BB221256	5/20/2011 12:56:00 PM	PHOSPHORUS TIN	1.29 mg/Kg 1.65 mg/Kg	SL-206-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-01-SA5DN-QC-051711(REA)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-066-SA5DN-SS-0-0.5(REA)	TIN	2.82 mg/Kg	2.62U mg/Kg
SL-067-SA5DN-SS-0.0-0.5(REA)	TIN	3.13 mg/Kg	3.13U mg/Kg
SL-072-SA5DN-SS-0-0.5(REA)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-074-SA5DN-SS-0.0-0.5(REA)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-075-SA5DN-SS-0.0-0.5(REA)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-076-SA5DN-SS-0.0-0.5(REA)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-079-SA5DN-SS-0.0-0.5(REA)	TIN	2.77 mg/Kg	2.77U mg/Kg
SL-080-SA5DN-SS-0.0-0.5(REA)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-081-SA5DN-SS-0-0.5(REA)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-082-SA5DN-SS-0.0-0.5(REA)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-083-SA5DN-SS-0.0-0.5(REA)	TIN	2.83 mg/Kg	2.63U mg/Kg
SL-084-SA5DN-SS-0.0-0.5(REA)	TIN	2.78 mg/Kg	2.78U mg/Kg
SL-206-SA5DN-SS-0.0-0.5(REA3)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-254-SA5A-SS-0.0-0.5(REA)	TIN	2.46 mg/Kg	2.46U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE152 Laboratory: LL

EDD Filename: DE152_v1. eQAPP Name: CDM_SSFL_110509

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-072-SA5DN-SS-0-0.5MSD (SL-072-SA5DN-SS-0-0.5)	2,4,5-TP (Silvex)	-	-	10.00-183.00	38 (35.00)	2,4,5-TP (Silvex)	J (all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-072-SA5DN-SS-0-0.5MS SL-072-SA5DN-SS-0-0.5MSD (SL-072-SA5DN-SS-0-0.5)	4,4'-DDD	-	-	16.00-163.00	64 (50.00)	4,4'-DDD	J(all detects)
	4,4'-DDT	210	178	10.00-176.00	-	4,4'-DDT	
	DIELDRIN	-	-	19.00-154.00	84 (50.00)	DIELDRIN	
	ENDOSULFAN II	-	-	28.00-154.00	56 (50.00)	ENDOSULFAN II	
	ENDRIN	-	-	11.00-149.00	58 (50.00)	ENDRIN	
	METHOXYCHLOR	-	-	32.00-147.00	53 (50.00)	METHOXYCHLOR	
SL-072-SA5DN-SS-0-0.5MSD (SL-072-SA5DN-SS-0-0.5)	BETA-BHC	-	0	14.00-147.00	200 (50.00)	BETA-BHC	J(all detects) R(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-066-SA5DN-SS-0-0.5MS SL-066-SA5DN-SS-0-0.5MSD (SL-066-SA5DN-SS-0-0.5)	NITROBENZENE	128	128	80.00-125.00	-	NITROBENZENE	J(all detects)
	PETN	126	125	80.00-121.00	-	PETN	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-072-SA5DN-SS-0-0.5MS SL-072-SA5DN-SS-0-0.5MSD (DUP-01-SA5DN-QC-051711 SL-066-SA5DN-SS-0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-072-SA5DN-SS-0-0.5 SL-074-SA5DN-SS-0.0-0.5 SL-075-SA5DN-SS-0.0-0.5 SL-076-SA5DN-SS-0.0-0.5 SL-079-SA5DN-SS-0.0-0.5 SL-080-SA5DN-SS-0.0-0.5 SL-081-SA5DN-SS-0-0.5 SL-082-SA5DN-SS-0.0-0.5 SL-083-SA5DN-SS-0.0-0.5 SL-084-SA5DN-SS-0.0-0.5 SL-254-SA5A-SS-0.0-0.5)	ARSENIC	-	162	75.00-125.00	-	ARSENIC	J(all detects) V, Zn No Qual,>4x
	CADMIUM	-	127	75.00-125.00	-	CADMIUM	
	CHROMIUM	-	142	75.00-125.00	-	CHROMIUM	
	COBALT	-	128	75.00-125.00	-	COBALT	
	COPPER	-	153	75.00-125.00	-	COPPER	
	LEAD	-	153	75.00-125.00	-	LEAD	
	NICKEL	133	160	75.00-125.00	-	NICKEL	
	SILVER	-	126	75.00-125.00	-	SILVER	
	THALLIUM	-	127	75.00-125.00	-	THALLIUM	
	VANADIUM	-	166	75.00-125.00	-	VANADIUM	
	ZINC	-	372	75.00-125.00	-	ZINC	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-072-SA5DN-SS-0-0.5MS **SL-072-SA5DN-SS-0-0.5MSD** (DUP-01-SA5DN-QC-051711 SL-066-SA5DN-SS-0-0.5 SL-067-SA5DN-SS-0.0-0.5 SL-072-SA5DN-SS-0-0.5 SL-074-SA5DN-SS-0.0-0.5 SL-075-SA5DN-SS-0.0-0.5 SL-076-SA5DN-SS-0.0-0.5 SL-079-SA5DN-SS-0.0-0.5 SL-080-SA5DN-SS-0.0-0.5 SL-081-SA5DN-SS-0-0.5 SL-082-SA5DN-SS-0.0-0.5 SL-083-SA5DN-SS-0.0-0.5 SL-084-SA5DN-SS-0.0-0.5 SL-254-SA5A-SS-0.0-0.5)	ANTIMONY	29	32	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike=75%
SL-072-SA5DN-SS-0-0.5MSD (DUP-01-SA5DN-QC-051711 SL-066-SA5DN-SS-0-0.5 SL-067-SA5DN-SS-0.0-0.5 SL-072-SA5DN-SS-0-0.5 SL-074-SA5DN-SS-0.0-0.5 SL-075-SA5DN-SS-0.0-0.5 SL-076-SA5DN-SS-0.0-0.5 SL-079-SA5DN-SS-0.0-0.5 SL-080-SA5DN-SS-0.0-0.5 SL-081-SA5DN-SS-0-0.5 SL-082-SA5DN-SS-0.0-0.5 SL-083-SA5DN-SS-0.0-0.5 SL-084-SA5DN-SS-0.0-0.5 SL-254-SA5A-SS-0.0-0.5)	MOLYBDENUM	-	130	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-072-SA5DN-SS-0-0.5MS **SL-072-SA5DN-SS-0-0.5MSD** (DUP-01-SA5DN-QC-051711 SL-066-SA5DN-SS-0-0.5 SL-067-SA5DN-SS-0.0-0.5 SL-072-SA5DN-SS-0-0.5 SL-074-SA5DN-SS-0.0-0.5 SL-075-SA5DN-SS-0.0-0.5 SL-076-SA5DN-SS-0.0-0.5 SL-079-SA5DN-SS-0.0-0.5 SL-080-SA5DN-SS-0.0-0.5 SL-081-SA5DN-SS-0-0.5 SL-082-SA5DN-SS-0.0-0.5 SL-083-SA5DN-SS-0.0-0.5 SL-084-SA5DN-SS-0.0-0.5 SL-254-SA5A-SS-0.0-0.5)	BARIUM	54	364	75.00-125.00	23 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-072-SA5DN-SS-0-0.5MS SL-072-SA5DN-SS-0-0.5MSD (DUP-01-SA5DN-QC-051711 SL-066-SA5DN-SS-0-0.5 SL-067-SA5DN-SS-0.0-0.5 SL-072-SA5DN-SS-0-0.5 SL-074-SA5DN-SS-0.0-0.5 SL-075-SA5DN-SS-0.0-0.5 SL-076-SA5DN-SS-0.0-0.5 SL-079-SA5DN-SS-0.0-0.5 SL-080-SA5DN-SS-0.0-0.5 SL-081-SA5DN-SS-0-0.5 SL-082-SA5DN-SS-0.0-0.5 SL-083-SA5DN-SS-0.0-0.5 SL-084-SA5DN-SS-0.0-0.5 SL-254-SA5A-SS-0.0-0.5)	ALUMINUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	3024 2835 465 137 188 457	3328 2878 597 172 203 453	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Fe, Mg, Mn, Ti No Qual, >4x
SL-072-SA5DN-SS-0-0.5MS SL-072-SA5DN-SS-0-0.5MSD (DUP-01-SA5DN-QC-051711 SL-066-SA5DN-SS-0-0.5 SL-067-SA5DN-SS-0.0-0.5 SL-072-SA5DN-SS-0-0.5 SL-074-SA5DN-SS-0.0-0.5 SL-075-SA5DN-SS-0.0-0.5 SL-076-SA5DN-SS-0.0-0.5 SL-079-SA5DN-SS-0.0-0.5 SL-080-SA5DN-SS-0.0-0.5 SL-081-SA5DN-SS-0-0.5 SL-082-SA5DN-SS-0.0-0.5 SL-083-SA5DN-SS-0.0-0.5 SL-084-SA5DN-SS-0.0-0.5 SL-254-SA5A-SS-0.0-0.5)	CALCIUM PHOSPHORUS	-338 4	889 29	75.00-125.00 75.00-125.00	- -	CALCIUM PHOSPHORUS	No Qual, >4x

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-072-SA5DN-SS-0-0.5MSD (SL-072-SA5DN-SS-0-0.5)	2-METHYLNAPHTHALENE	-	-	28.00-121.00	49 (30.00)	2-METHYLNAPHTHALENE	
	ACENAPHTHYLENE	-	-	55.00-126.00	47 (30.00)	ACENAPHTHYLENE	
	ANTHRACENE	-	-	46.00-136.00	36 (30.00)	ANTHRACENE	
	Butylbenzylphthalate	-	174	73.00-140.00	-	Butylbenzylphthalate	J(all detects)
	Di-n-octylphthalate	-	-	40.00-192.00	79 (30.00)	Di-n-octylphthalate	
	FLUORENE	-	-	45.00-121.00	41 (30.00)	FLUORENE	
	PHENANTHRENE	-	-	12.00-165.00	34 (30.00)	PHENANTHRENE	
	PYRENE	-	-	15.00-153.00	39 (30.00)	PYRENE	
SL-072-SA5DN-SS-0-0.5MS SL-072-SA5DN-SS-0-0.5MSD (SL-072-SA5DN-SS-0-0.5)	1-METHYLNAPHTHALENE	57	-	72.00-123.00	45 (30.00)	1-METHYLNAPHTHALENE	
	ACENAPHTHENE	60	-	63.00-105.00	31 (30.00)	ACENAPHTHENE	
	BENZO(G,H,I)PERYLENE	25	23	33.00-141.00	-	BENZO(G,H,I)PERYLENE	
	BIS(2-ETHYLHEXYL)PHTHALAT	19	-	39.00-167.00	72 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	
	DIBENZO(A,H)ANTHRACENE	33	-	41.00-130.00	31 (30.00)	DIBENZO(A,H)ANTHRACENE	J(all detects)
	Diethylphthalate	73	-	87.00-131.00	34 (30.00)	Diethylphthalate	UJ(all non-detects)
	Dimethylphthalate	45	1501	74.00-118.00	180 (30.00)	Dimethylphthalate	
	Di-n-butylphthalate	71	-	78.00-160.00	58 (30.00)	Di-n-butylphthalate	
	FLUORANTHENE	-	8	26.00-166.00	43 (30.00)	FLUORANTHENE	
	NAPHTHALENE	51	-	61.00-102.00	49 (30.00)	NAPHTHALENE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-072-SA5DN-SS-0-0.5MSD (SL-072-SA5DN-SS-0-0.5)	2,4-DINITROPHENOL BENZOIC ACID HEXACHLOROCYCLOPENTADI	- - -	- - -	20.00-143.00 10.00-173.00 10.00-153.00	49 (30.00) 35 (30.00) 42 (30.00)	2,4-DINITROPHENOL BENZOIC ACID HEXACHLOROCYCLOPENTAD	J(all detects)
SL-072-SA5DN-SS-0-0.5MS SL-072-SA5DN-SS-0-0.5MSD (SL-072-SA5DN-SS-0-0.5)	BENZIDINE	0	17	35.00-141.00	200 (30.00)	BENZIDINE	J(all detects) R(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-081-SA5DN-SS-0-0.5MS (SL-081-SA5DN-SS-0-0.5 SL -082-SA5DN-SS-0.0-0.5 SL -083-SA5DN-SS-0.0-0.5 SL -084-SA5DN-SS-0.0-0.5 SL -206-SA5DN-SS-0.0-0.5)	FLUORIDE	60	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE152 Laboratory: LL

EDD Filename: DE152_v1. eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-072-SA5DN-SS-0-0.5DUP	ANTIMONY	0.5936	0.43 mg/Kg	
(DUP-01-SA5DN-QC-051711	BARIUM	31	20.00	
SL-066-SA5DN-SS-0-0.5	BERYLLIUM	29	20.00	
SL-067-SA5DN-SS-0.0-0.5	COBALT	24	20.00	
SL-072-SA5DN-SS-0-0.5	COPPER	26	20.00	
SL-074-SA5DN-SS-0.0-0.5	MOLYBDENUM	33	20.00	
SL-075-SA5DN-SS-0.0-0.5	NICKEL	26	20.00	
SL-076-SA5DN-SS-0.0-0.5	SELENIUM	28	20.00	J (all detects) UJ (all non-detects)
SL-079-SA5DN-SS-0.0-0.5	VANADIUM	23	20.00	
SL-080-SA5DN-SS-0.0-0.5	ZINC	28	20.00	
SL-081-SA5DN-SS-0-0.5				Mo, Se No Qual, OK by difference
SL-082-SA5DN-SS-0.0-0.5				
SL-083-SA5DN-SS-0.0-0.5				
SL-084-SA5DN-SS-0.0-0.5				
SL-254-SA5A-SS-0.0-0.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-072-SA5DN-SS-0-0.5DUP	HEXAVALENT CHROMIUM	75	20.00	
(DUP-01-SA5DN-QC-051711				
SL-066-SA5DN-SS-0-0.5				
SL-067-SA5DN-SS-0.0-0.5				
SL-072-SA5DN-SS-0-0.5				
SL-074-SA5DN-SS-0.0-0.5				
SL-075-SA5DN-SS-0.0-0.5				
SL-076-SA5DN-SS-0.0-0.5				No Qual, OK by difference
SL-079-SA5DN-SS-0.0-0.5				
SL-080-SA5DN-SS-0.0-0.5				
SL-081-SA5DN-SS-0-0.5				
SL-082-SA5DN-SS-0.0-0.5				
SL-083-SA5DN-SS-0.0-0.5				
SL-084-SA5DN-SS-0.0-0.5				
SL-206-SA5DN-SS-0.0-0.5				
SL-254-SA5A-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11386AQ242123A P11386AY242105A (EB01 -SA5DN -SS-051711)	Aroclor 5442	88	94	35.00-84.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects)

Method: 8151A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11430AQ242200A P11430AY242227A (EB01 -SA5DN -SS-051711)	DICAMBA DINOSEB	48 -	52 -	68.00-135.00 32.00-91.00	- 69 (30.00)	DICAMBA DINOSEB	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WKLCSY260513 (EB01 -SA5DN -SS-051711)	BENZOIC ACID	-	-	10.00-69.00	31 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WLLCSQ262206 P8WLLCSY262236 (EB01 -SA5DN -SS-051711)	BENZO(B)FLUORANTHENE	124	127	69.00-123.00	-	BENZO(B)FLUORANTHENE	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11454AQ242357A (SL-066-SA5DN -SS-0-0.5 SL -067-SA5DN -SS-0.0-0.5 SL -074-SA5DN -SS-0.0-0.5 SL -079-SA5DN -SS-0.0-0.5 SL -080-SA5DN -SS-0.0-0.5 SL -081-SA5DN -SS-0-0.5 SL -082-SA5DN -SS-0.0-0.5 SL -083-SA5DN -SS-0.0-0.5 SL -084-SA5DN -SS-0.0-0.5 SL -206-SA5DN -SS-0.0-0.5)	NITROBENZENE PETN	132 123	- -	80.00-120.00 80.00-120.00	- -	NITROBENZENE PETN	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11454AY240039A (SL-066-SA5DN -SS-0-0.5 SL -067-SA5DN -SS-0.0-0.5 SL -074-SA5DN -SS-0.0-0.5 SL -079-SA5DN -SS-0.0-0.5 SL -080-SA5DN -SS-0.0-0.5 SL -081-SA5DN -SS-0-0.5 SL -082-SA5DN -SS-0.0-0.5 SL -083-SA5DN -SS-0.0-0.5 SL -084-SA5DN -SS-0.0-0.5 SL -206-SA5DN -SS-0.0-0.5)	2,4-DIAMINO-6-NITROTOLUENE 2,6-Diamino-4-nitrotoluene	- -	0 0	54.00-134.00 54.00-134.00	200 (30.00) 200 (30.00)	2,4-DIAMINO-6-NITROTOLUEN 2,6-Diamino-4-nitrotoluene	J(all detects) R(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P13826AQ221003A (DUP-01-SA5DN -QC-051711 SL -066-SA5DN -SS-0-0.5 SL -067-SA5DN -SS-0.0-0.5 SL -072-SA5DN -SS-0-0.5 SL -074-SA5DN -SS-0.0-0.5 SL -075-SA5DN -SS-0.0-0.5 SL -076-SA5DN -SS-0.0-0.5 SL -079-SA5DN -SS-0.0-0.5 SL -080-SA5DN -SS-0.0-0.5 SL -081-SA5DN -SS-0-0.5 SL -082-SA5DN -SS-0.0-0.5 SL -083-SA5DN -SS-0.0-0.5 SL -084-SA5DN -SS-0.0-0.5 SL -254-SA5A -SS-0.0-0.5)	ANTIMONY	144	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-067-SA5DN-SS-0.0-0.5	n-Triacontane-d62	49	50.00-150.00	All Target Analytes	No Qual., Diluted out

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-01-SA5DN-QC-051711	DECACHLOROBIPHENYL	369	20.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-066-SA5DN-SS-0-0.5	DECACHLOROBIPHENYL	131	20.00-120.00	All Target Analytes	J(all detects)
SL-067-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	189	20.00-120.00	All Target Analytes	J(all detects)
SL-076-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	162	20.00-120.00	All Target Analytes	J(all detects)
SL-081-SA5DN-SS-0-0.5	DECACHLOROBIPHENYL	138	20.00-120.00	All Target Analytes	J(all detects)
SL-082-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	123	20.00-120.00	All Target Analytes	J(all detects)
SL-084-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	151	20.00-120.00	All Target Analytes	J(all detects)
SL-206-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	145	20.00-120.00	All Target Analytes	J(all detects)

Method: 8151A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-01-SA5DN-QC-051711	2,4-Dichlorophenylacetic acid	165	36.00-156.00	All Target Analytes	J(all detects)
SL-066-SA5DN-SS-0-0.5	2,4-Dichlorophenylacetic acid	158	36.00-156.00	All Target Analytes	J(all detects)
SL-081-SA5DN-SS-0-0.5	2,4-Dichlorophenylacetic acid	168	36.00-156.00	All Target Analytes	J(all detects)
SL-082-SA5DN-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	206	36.00-156.00	All Target Analytes	J(all detects)
SL-206-SA5DN-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	186	36.00-156.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE152 Laboratory: LL

EDD Filename: DE152_v1. eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
MOISTURE	10.5	9.3	12		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
FLUORIDE	1.9	2.4	23	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
ALUMINUM	19600	21200	8	50.00	No Qualifiers Applied
BORON	20.2	20.8	3	50.00	
CALCIUM	28100	24400	14	50.00	
IRON	26200	28100	7	50.00	
LITHIUM	19.7	21.9	11	50.00	
MAGNESIUM	5740	6200	8	50.00	
MANGANESE	335	345	3	50.00	
PHOSPHORUS	634	617	3	50.00	
POTASSIUM	4330	4640	7	50.00	
SODIUM	124	154	22	50.00	
STRONTIUM	61.2	62.8	3	50.00	
TIN	2.71	2.64	3	50.00	
TITANIUM	1050	1180	12	50.00	
Zirconium	2.74	2.15	24	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
ARSENIC	5.98	5.41	10	50.00	No Qualifiers Applied
BARIUM	125	95.3	27	50.00	
BERYLLIUM	0.727	0.620	16	50.00	
CADMIUM	0.307	0.349	13	50.00	
CHROMIUM	28.1	23.8	17	50.00	
COBALT	10.1	7.74	26	50.00	
COPPER	17.8	16.0	11	50.00	
LEAD	12.8	10.8	17	50.00	
NICKEL	19.8	20.6	4	50.00	
SELENIUM	0.209	0.227	8	50.00	
SILVER	0.0349	0.0382	9	50.00	
THALLIUM	0.297	0.270	10	50.00	
VANADIUM	57.1	48.4	16	50.00	
ZINC	153	112	31	50.00	
ANTIMONY	0.900	0.379	81	50.00	J(all detects)
MOLYBDENUM	0.655	2.41	115	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
HEXAVALENT CHROMIUM	0.70	0.79	12	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
MERCURY	0.112 U	0.0053	200	50.00	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
ALPHA-BHC	0.040	0.92 U	200	50.00	J(all detects)
DELTA-BHC	0.18	0.92 U	200	50.00	UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
AROCLOR 1260	4.7	2.0	81	50.00	J(all detects)
Aroclor 5460	1.8	3.6 U	200	50.00	UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
2,4-DB	2.6	3.0	14	50.00	No Qualifiers Applied
2,4,5-T	0.19 U	0.10	200	50.00	J(all detects) UJ(all non-detects)
DICHLOROPROP	1.3	1.9 U	200	50.00	
MCPA	480 U	340	200	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
ACENAPHTHENE	3.5	5.6	46	50.00	No Qualifiers Applied
ANTHRACENE	4.5	5.9	27	50.00	
BENZO(A)ANTHRACENE	19	27	35	50.00	
BENZO(A)PYRENE	23	33	36	50.00	
BENZO(B)FLUORANTHENE	38	48	23	50.00	
BENZO(K)FLUORANTHENE	18	15	18	50.00	
CHRYSENE	30	46	42	50.00	
FLUORANTHENE	66	84	24	50.00	
INDENO(1,2,3-CD)PYRENE	7.5	11	38	50.00	
PYRENE	54	63	15	50.00	
1-METHYLNAPHTHALENE	0.80	9.1 U	200	50.00	J(all detects) UJ(all non-detects)
2-METHYLNAPHTHALENE	0.84	9.1 U	200	50.00	
ACENAPHTHYLENE	0.59	9.1 U	200	50.00	
BENZO(G,H,I)PERYLENE	8.2	18	75	50.00	
DIBENZO(A,H)ANTHRACENE	2.5	9.7	118	50.00	
Di-n-octylphthalate	9.3	42	127	50.00	
FLUORENE	2.3	9.1 U	200	50.00	
NAPHTHALENE	1.5	9.1 U	200	50.00	
PHENANTHRENE	33	57	53	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
BIS(2-ETHYLHEXYL)PHTHALATE	29	33	13	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-072-SA5DN-SS-0-0.5	DUP-01-SA5DN-QC-051711			
PH	7.96	8.04	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE152 Laboratory: LL

EDD Filename: DE152_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA5DN-SS-051711	BORON	J	0.0184	0.0500	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA5DN-SS-051711	1-METHYLNAPHTHALENE	J	0.032	0.051	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.032	0.051	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.30	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.17	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.26	1.0	PQL	ug/L	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-01-SA5DN-QC-051711	TIN	J	2.64	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.15	5.40	PQL	mg/Kg	
SL-066-SA5DN-SS-0-0.5	TIN	J	2.82	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.43	5.35	PQL	mg/Kg	
SL-067-SA5DN-SS-0.0-0.5	TIN	J	3.13	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.71	5.45	PQL	mg/Kg	
SL-072-SA5DN-SS-0-0.5	TIN	J	2.71	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.74	5.53	PQL	mg/Kg	
SL-074-SA5DN-SS-0.0-0.5	TIN	J	2.84	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.19	5.51	PQL	mg/Kg	
SL-075-SA5DN-SS-0.0-0.5	TIN	J	2.92	12.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.96	6.02	PQL	mg/Kg	
SL-076-SA5DN-SS-0.0-0.5	TIN	J	2.75	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.18	5.27	PQL	mg/Kg	
SL-079-SA5DN-SS-0.0-0.5	TIN	J	2.77	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.75	5.36	PQL	mg/Kg	
SL-080-SA5DN-SS-0.0-0.5	SODIUM	J	99.5	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.88	11.0	PQL	mg/Kg	
SL-081-SA5DN-SS-0-0.5	TIN	J	2.65	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.76	5.19	PQL	mg/Kg	
SL-082-SA5DN-SS-0.0-0.5	SODIUM	J	104	109	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	10.9	PQL	mg/Kg	
	Zirconium	J	2.60	5.47	PQL	mg/Kg	
SL-083-SA5DN-SS-0.0-0.5	SODIUM	J	103	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.83	10.9	PQL	mg/Kg	
	Zirconium	J	2.63	5.47	PQL	mg/Kg	
SL-084-SA5DN-SS-0.0-0.5	TIN	J	2.78	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.19	5.53	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-206-SA5DN-SS-0.0-0.5	SODIUM	J	94.2	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	10.9	PQL	mg/Kg	
	Zirconium	J	2.56	5.46	PQL	mg/Kg	
SL-254-SA5A-SS-0.0-0.5	SODIUM	J	63.4	98.7	PQL	mg/Kg	J (all detects)
	TIN	J	2.46	9.87	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-01-SA5DN-QC-051711	SELENIUM	J	0.227	0.432	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0382	0.108	PQL	mg/Kg	
SL-066-SA5DN-SS-0-0.5	SELENIUM	J	0.244	0.432	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0866	0.108	PQL	mg/Kg	
SL-067-SA5DN-SS-0.0-0.5	SELENIUM	J	0.218	0.432	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0517	0.108	PQL	mg/Kg	
SL-072-SA5DN-SS-0-0.5	SELENIUM	J	0.209	0.438	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0349	0.110	PQL	mg/Kg	
SL-074-SA5DN-SS-0.0-0.5	SELENIUM	J	0.203	0.441	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0526	0.110	PQL	mg/Kg	
SL-075-SA5DN-SS-0.0-0.5	SELENIUM	J	0.137	0.472	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0527	0.118	PQL	mg/Kg	
SL-076-SA5DN-SS-0.0-0.5	SELENIUM	J	0.206	0.422	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0797	0.105	PQL	mg/Kg	
SL-079-SA5DN-SS-0.0-0.5	SELENIUM	J	0.192	0.437	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0972	0.109	PQL	mg/Kg	
SL-080-SA5DN-SS-0.0-0.5	SELENIUM	J	0.200	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0782	0.110	PQL	mg/Kg	
SL-081-SA5DN-SS-0-0.5	SELENIUM	J	0.157	0.423	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0670	0.106	PQL	mg/Kg	
SL-082-SA5DN-SS-0.0-0.5	SELENIUM	J	0.223	0.425	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0727	0.106	PQL	mg/Kg	
SL-083-SA5DN-SS-0.0-0.5	SELENIUM	J	0.134	0.429	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0720	0.107	PQL	mg/Kg	
SL-084-SA5DN-SS-0.0-0.5	SELENIUM	J	0.176	0.434	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0570	0.108	PQL	mg/Kg	
SL-206-SA5DN-SS-0.0-0.5	SELENIUM	J	0.185	0.437	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0631	0.109	PQL	mg/Kg	
SL-254-SA5A-SS-0.0-0.5	ANTIMONY	J	0.136	0.203	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.126	0.407	PQL	mg/Kg	
	SILVER	J	0.0586	0.102	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-01-SA5DN-QC-051711	HEXAVALENT CHROMIUM	J	0.79	1.1	PQL	mg/Kg	J (all detects)
SL-066-SA5DN-SS-0-0.5	HEXAVALENT CHROMIUM	J	0.63	1.1	PQL	mg/Kg	J (all detects)
SL-067-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.61	1.1	PQL	mg/Kg	J (all detects)
SL-072-SA5DN-SS-0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.1	PQL	mg/Kg	J (all detects)
SL-074-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-076-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.1	PQL	mg/Kg	J (all detects)
SL-080-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.60	1.1	PQL	mg/Kg	J (all detects)
SL-082-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.61	1.1	PQL	mg/Kg	J (all detects)
SL-083-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-084-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-206-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-254-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.48	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-01-SA5DN-QC-051711	MERCURY	J	0.0053	0.110	PQL	mg/Kg	J (all detects)
SL-075-SA5DN-SS-0.0-0.5	MERCURY	J	0.102	0.119	PQL	mg/Kg	J (all detects)
SL-254-SA5A-SS-0.0-0.5	MERCURY	J	0.0066	0.102	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SS-0-0.5	Isopropanol	J	150	550	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SS-0-0.5	EFH (C15-C20)	J	1.9	2.6	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-072-SA5DN-SS-0-0.5	ALPHA-BHC DELTA-BHC	J J	0.040 0.18	0.19 0.19	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-074-SA5DN-SS-0.0-0.5	ENDRIN KETONE	J	0.099	0.37	PQL	ug/Kg	J (all detects)
SL-075-SA5DN-SS-0.0-0.5	ENDOSULFAN II	J	0.16	0.41	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SS-0.0-0.5	4,4'-DDE gamma-BHC (Lindane)	J J	0.36 0.076	0.37 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-079-SA5DN-SS-0.0-0.5	BETA-BHC	J	0.15	0.18	PQL	ug/Kg	J (all detects)
SL-080-SA5DN-SS-0.0-0.5	Chlordane	J	3.4	3.8	PQL	ug/Kg	J (all detects)
SL-081-SA5DN-SS-0-0.5	Chlordane	J	2.6	3.7	PQL	ug/Kg	J (all detects)
SL-082-SA5DN-SS-0.0-0.5	4,4'-DDT	J	2.6	3.8	PQL	ug/Kg	J (all detects)
SL-083-SA5DN-SS-0.0-0.5	HEPTACHLOR EPOXIDE	J	0.066	0.18	PQL	ug/Kg	J (all detects)
SL-084-SA5DN-SS-0.0-0.5	4,4'-DDE Chlordane	J J	0.36 3.3	0.38 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-072-SA5DN-SS-0-0.5	Aroclor 5460	J	1.8	3.7	PQL	ug/Kg	J (all detects)
SL-074-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.8	1.9	PQL	ug/Kg	J (all detects)
SL-075-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.4	2.1	PQL	ug/Kg	J (all detects)
SL-079-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.7	1.9	PQL	ug/Kg	J (all detects)
SL-083-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.1	1.9	PQL	ug/Kg	J (all detects)
SL-206-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.4	1.9	PQL	ug/Kg	J (all detects)
SL-254-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.5	1.7	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-01-SA5DN-QC-051711	2,4,5-T	J	0.10	0.19	PQL	ug/Kg	J (all detects)
SL-067-SA5DN-SS-0.0-0.5	MCPP	J	120	270	PQL	ug/Kg	J (all detects)
SL-072-SA5DN-SS-0-0.5	DICHLOROPROP	J	1.3	1.9	PQL	ug/Kg	J (all detects)
SL-075-SA5DN-SS-0.0-0.5	2,4-DB	J	1.2	2.1	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SS-0.0-0.5	MCPP	J	170	270	PQL	ug/Kg	J (all detects)
SL-080-SA5DN-SS-0.0-0.5	MCPA	J	200	280	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA5DN-SS-0.0-0.5	DICHLOROPROP	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	MCPP	J	88	280	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-01-SA5DN-QC-051711	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	370	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	51	180	PQL	ug/Kg	
SL-066-SA5DN-SS-0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	360	PQL	ug/Kg	J (all detects)
SL-067-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	110	180	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	57	180	PQL	ug/Kg	
	Butylbenzylphthalate	J	19	180	PQL	ug/Kg	
	CHRYSENE	J	120	180	PQL	ug/Kg	
	Dimethylphthalate	J	42	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	55	180	PQL	ug/Kg	
SL-072-SA5DN-SS-0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	370	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SS-0.0-0.5	PYRENE	J	20	180	PQL	ug/Kg	J (all detects)
SL-079-SA5DN-SS-0.0-0.5	FLUORANTHENE	J	29	180	PQL	ug/Kg	J (all detects)
	PYRENE	J	28	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-01-SA5DN-QC-051711	ACENAPHTHENE	J	5.6	9.1	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	5.9	9.1	PQL	ug/Kg	
	Di-n-octylphthalate	J	42	99	PQL	ug/Kg	
SL-066-SA5DN-SS-0-0.5	ANTHRACENE	J	1.9	9.1	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	7.7	9.1	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	9.0	9.1	PQL	ug/Kg	
	Di-n-octylphthalate	J	42	98	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.9	9.1	PQL	ug/Kg	
SL-067-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.81	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.7	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.4	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.7	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-072-SA5DN-SS-0-0.5	1-METHYLNAPHTHALENE	J	0.80	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.84	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.59	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.3	20	PQL	ug/Kg	
	Dimethylphthalate	J	14	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.3	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	
SL-074-SA5DN-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	8.9	9.2	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	3.7	9.2	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	9.1	9.2	PQL	ug/Kg	
	PHENANTHRENE	J	5.6	9.2	PQL	ug/Kg	
SL-075-SA5DN-SS-0.0-0.5	CHRYSENE	J	2.2	10	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	5.6	9.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	5.9	9.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	3.7	9.0	PQL	ug/Kg	
	CHRYSENE	J	7.2	9.0	PQL	ug/Kg	
	PHENANTHRENE	J	5.6	9.0	PQL	ug/Kg	
SL-079-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	6.6	9.1	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	7.8	9.1	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.0	9.1	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	99	PQL	ug/Kg	
	PHENANTHRENE	J	8.3	9.1	PQL	ug/Kg	
SL-080-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	5.2	9.2	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	6.9	9.2	PQL	ug/Kg	
	FLUORANTHENE	J	8.9	9.2	PQL	ug/Kg	
	PHENANTHRENE	J	4.3	9.2	PQL	ug/Kg	
	PYRENE	J	7.5	9.2	PQL	ug/Kg	
SL-081-SA5DN-SS-0-0.5	ANTHRACENE	J	0.62	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.85	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	19	PQL	ug/Kg	
	CHRYSENE	J	0.41	1.8	PQL	ug/Kg	
SL-082-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	5.1	9.1	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	6.7	9.1	PQL	ug/Kg	
	CHRYSENE	J	7.0	9.1	PQL	ug/Kg	
	PHENANTHRENE	J	5.1	9.1	PQL	ug/Kg	
SL-083-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	6.1	9.1	PQL	ug/Kg	J (all detects)
SL-084-SA5DN-SS-0.0-0.5	ACENAPHTHYLENE	J	0.49	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	
	FLUORENE	J	1.1	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
SL-206-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.96	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.73	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	20	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE152 **Laboratory: LL**

EDD Filename: DE152_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-254-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.35	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	18	PQL	ug/Kg	
	Butylbenzylphthalate	J	6.9	18	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	8.1	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	

Method: 9012B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SS-0-0.5	CYANIDE	J	0.20	0.54	PQL	mg/Kg	J (all detects)

LDC #: 26078L4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/29/11
SDG #: DE152 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals by ICB/CCB
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	D
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	(Cr, V)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=16

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

Validated Samples:

1	SL-254-SA5A-SS-0.0-0.5	11	SL-081-SA5DN-SS-0.0-0.5	21		31	
2	DUP-01-SA5DN-QC-051711	12	SL-082-SA5DN-SS-0.0-0.5	22		32	
3	SL-066-SA5DN-SS-0.0-0.5	13	SL-083-SA5DN-SS-0.0-0.5	23		33	
4	SL-067-SA5DN-SS-0.0-0.5	14	SL-084-SA5DN-SS-0.0-0.5	24		34	
5	SL-072-SA5DN-SS-0.0-0.5	15	SL-206-SA5DN-SS-0.0-0.5	25		35	
6	SL-074-SA5DN-SS-0.0-0.5	16	EB01-SA5DN-SS-051711	26		36	
7	SL-075-SA5DN-SS-0.0-0.5	17	SL-072-SA5DN-SS-0.0-0.5MS	27		37	
8	SL-076-SA5DN-SS-0.0-0.5	18	SL-072-SA5DN-SS-0.0-0.5MSD	28		38	
9	SL-079-SA5DN-SS-0.0-0.5	19	SL-072-SA5DN-SS-0.0-0.5DUP	29		39	
10	SL-080-SA5DN-SS-0.0-0.5	20		30		40	

Notes: _____

LDC #: 26078L4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CR
2nd Reviewer: Q

METHOD: Trace Metals (EPA SW846 6010B/7000)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target analytes detected in the field blanks?

Blank units: ug/L **Associated sample units:** mg/Kg

Sampling date: 5/17/11 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 2-15 Reason Code: F

Analyte	Blank ID	Sample Identification																		
	16	Action Level	NO Quals																	
B	18.4	9.2																		

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE152
Matrix: SOIL Level (low/med): LOW

74X

Background Lab Sample ID: 6290756BKG Matrix Spike Lab Sample ID: 6290757MS Matrix Spike Duplicate Lab Sample ID: 6290758MSD
% Solids for Sample: 89.5
Batch Id(s): P13808C, P13826A, P13811E

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		19606.0324		26296.0993		26969.6266		221.2512	221.2512	MG/KG	3024		3328		3			20	P
Antimony	121	0.9002		1.2794		1.3113		1.3017	1.2892	MG/KG	29	N	32	N	2		75 - 125	20	MS
Arsenic	75	5.9766		8.5177		9.4478		2.1696	2.1487	MG/KG	117		162	N	10		75 - 125	20	MS
Barium	137	124.9206		130.8022		164.0524		10.8478	10.7434	MG/KG	54		364		23	*		20	MS
Beryllium	9	0.7267		1.6172		1.6059		0.8678	0.8595	MG/KG	103		102		1		75 - 125	20	MS
Boron		20.1538		239.9546		240.0841		221.2512	221.2512	MG/KG	99		99		0		84 - 115	20	P
Cadmium	111	0.3072		1.5159		1.6695		1.0848	1.0743	MG/KG	111		127	N	10		75 - 125	20	MS
Calcium		28061.5233		26566.4561		31995.6491		442.5023	442.5023	MG/KG	-338		889		19			20	P
Chromium	52	28.0644		40.4621		43.2961		10.8478	10.7434	MG/KG	114		142	N	7		75 - 125	20	MS
Cobalt	59	10.0515		70.9443		78.7495		54.2388	53.7172	MG/KG	112		128	N	10		75 - 125	20	MS
Copper	63	17.7873		30.9378		34.2716		10.8478	10.7434	MG/KG	121		153	N	10		75 - 125	20	MS
Iron		26230.4464		29366.3599		29414.3681		110.6256	110.6256	MG/KG	2835		2878		0			20	P
Lead	208	12.7681		15.4147		17.7009		3.2543	3.2230	MG/KG	81		153	N	14		75 - 125	20	MS
Lithium		19.6659		137.7764		138.3849		110.6256	110.6256	MG/KG	107		107		0		82 - 114	20	P
Magnesium		5737.9324		6765.7227		7059.0022		221.2512	221.2512	MG/KG	465		597		4			20	P
Manganese		335.2398		410.9486		430.2107		55.3128	55.3128	MG/KG	137		172		5			20	P
Mercury		0.0033	U	0.1767		0.1662		0.1813	0.1840	MG/KG	97		90		6		65 - 135	20	CV
Molybdenum	98	0.6546		13.4382		14.5767		10.8478	10.7434	MG/KG	118		130	N	8		75 - 125	20	MS
Nickel	60	19.7590		34.1487		36.9575		10.8478	10.7434	MG/KG	133	N	160	N	8		75 - 125	20	MS
Phosphorus		633.7187		638.1548		665.9295		110.6256	110.6256	MG/KG	4		29		4			20	P
Potassium		4332.0195		6411.5128		6578.7599		1106.2559	1106.2559	MG/KG	188	N	203	N	3		75 - 125	20	P
Selenium	78	0.2087	B	2.5861		2.7632		2.1696	2.1487	MG/KG	110		119		7		75 - 125	20	MS
Silver	107	0.0349	B	13.0216		13.5496		10.8478	10.7434	MG/KG	120		126	N	4		75 - 125	20	MS
Sodium		123.7513		1231.9631		1296.4710		1106.2559	1106.2559	MG/KG	100		106		5		75 - 125	20	P
Strontium		61.1925		169.5780		179.6073		110.6256	110.6256	MG/KG	98		107		6		75 - 115	20	P
Thallium	203	0.2973		0.8218		0.8431		0.4339	0.4297	MG/KG	121		127	N	3		75 - 125	20	MS
Tin		2.7092	B	390.1964		387.1132		442.5023	442.5023	MG/KG	88		87		1		80 - 110	20	P
Titanium		1054.3526		1559.6172		1555.9400		110.6256	110.6256	MG/KG	457		453		0			20	P
Vanadium	51	57.0928		67.7117		74.9463		10.8478	10.7434	MG/KG	98		166		10			20	MS
Zinc	66	153.2479		162.2824		193.2531		10.8478	10.7434	MG/KG	83		372		17			20	MS
Zirconium		2.7435	B	104.8576		105.0047		110.6256	110.6256	MG/KG	92		92		0		75 - 125	20	P

PS %R

75

METHODS:
P = ICP, Atomic Emission Spectrometer
MS = ICP, Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE152
Matrix: SOIL Level (low/med): LOW

< 5xRL

Background Lab Sample ID: 6290756BKG
% Solids for Duplicate: 89.4
Batch ID(s): P13808C, P13826A, P13811E
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6290759DUP
% Solids for Sample: 89.5

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			19606.0324		19182.9587		2		P
* Antimony	121	0.2	0.9002		0.3066		98	*	MS
Arsenic	75		5.9766		4.9098		20		MS
Barium	137		124.9206		91.3623		31	*	MS
Beryllium	9	0.1	0.7267		0.5404		29	*	MS
Boron		5.5	20.1538		20.3296		1		P
Cadmium	111	0.1	0.3072		0.2544		19		MS
Calcium			28061.5233		27524.2648		2		P
Chromium	52		28.0644		24.6025		13		MS
Cobalt	59		10.0515		7.9029		24	*	MS
Copper	63		17.7873		13.6786		26	*	MS
Iron			26230.4464		28341.2145		8		P
Lead	208		12.7681		15.4061		19		MS
Lithium			19.6659		19.9855		2		P
Magnesium			5737.9324		5833.9318		2		P
Manganese			335.2398		380.1296		13		P
Mercury			0.0033	U	0.0033	U			CV
Molybdenum	98	0.1	0.6546		0.4688		33	*	MS
Nickel	60		19.7590		15.2041		26	*	MS
Phosphorus			633.7187		526.9330		18		P
Potassium			4332.0195		4472.6402		3		P
Selenium	78		0.2087	B	0.1580	B	28		MS
Silver	107		0.0349	B	0.0333	B	5		MS
Sodium		110.6	123.7513		109.7687	B	12		P
Strontium			61.1925		60.9654		0		P
Thallium	203	0.1	0.2973		0.2903		2		MS
Tin			2.7092	B	2.7117	B	0		P
Titanium			1054.3526		1040.3006		1		P
Vanadium	51		57.0928		45.4233		23	*	MS
Zinc	66		153.2479		115.1912		28	*	MS
Zirconium			2.7435	B	3.2034	B	15		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

* out by difference: Sb (0.5936 (≤0.43))

DE152 5271

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE152
Matrix: SOIL Level (low/med): LOW

3105A

Background Lab Sample ID: 6290756BKG Serial Dilution Lab Sample ID: 6290756L
Batch ID(s): P13808C, P13826A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		177228.7300		177087.5000		0		P
Antimony	121	4.1090		4.0960	B	0		MS
Arsenic	75	27.2800		31.6000		16		MS
Barium	137	570.2000		578.0000		1		MS
Beryllium	9	3.3170		3.5995		9		MS
Boron		182.1800		205.5500	B	13		P
Cadmium	111	1.4020		1.8750	B	34		MS
Calcium		253662.1400		261110.2500		3		P
Chromium	52	128.1000		147.1500		15	E	MS
Cobalt	59	45.8800		47.7750		4		MS
Copper	63	81.1900		86.0500		6		MS
Iron		237110.1200		244797.5000		3		P
Lead	208	58.2800		60.6500		4		MS
Lithium		177.7700		187.4500		5		P
Magnesium		51868.0400		52073.3500		0		P
Manganese		3030.4000		3196.4000		5		P
Molybdenum	98	2.9880		2.6200		12		MS
Nickel	60	90.1900		99.2000		10		MS
Phosphorus		5728.5000		5838.6000		2		P
Potassium		39159.2900		40644.8500		4		P
Selenium	78	0.9527	B	1.1345	B	19		MS
Silver	107	0.1594	B	0.3000	U	100		MS
Sodium		1118.6500		1865.0000	U	100		P
Strontium		553.1500		574.5500		4		P
Thallium	203	1.3570		1.3755	B	1		MS
Tin		24.4900	B	50.0000	U	100		P
Titanium		9530.8200		9770.1000		3		P
Vanadium	51	260.6000		299.3500		15	E	MS
Zinc	66	699.5000		743.0000		6		MS
Zirconium		24.8000	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE152 5274
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE153

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	3050B	6010B	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	3050B	6020	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	3060A	7199	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	3550B	8082	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	3550B	8270C	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	3550B	8270C SIM	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	5035	8260B	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	5035	8260B SIM	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	METHOD	300.0	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	METHOD	314.0	III
17-May-2011	SL-005-SA5DN-SB-4.0-5.0	6290805	N	METHOD	7471A	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	3050B	6010B	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	3050B	6020	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	3060A	7199	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	3550B	8082	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	3550B	8270C	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	3550B	8270C SIM	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	METHOD	300.0	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	METHOD	314.0	III
17-May-2011	SL-005-SA5DN-SB-9.0-10.0	6290806	N	METHOD	7471A	III
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	3050B	6010B	III
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	3050B	6020	III
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	3060A	7199	III
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	3550B	8082	III
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	3550B	8270C	III
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	METHOD	300.0	III
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	METHOD	314.0	III
17-May-2011	SL-001-SA5DN-SB-9.0-10.0	6290804	N	METHOD	7471A	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	3050B	6010B	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	3050B	6020	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	3060A	7199	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	3550B	8082	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	3550B	8270C	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	3550B	8270C SIM	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	5035	8260B	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	5035	8260B SIM	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	METHOD	300.0	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	METHOD	314.0	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5	6290803	N	METHOD	7471A	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5DUP	P290803D271109A	DUP	METHOD	314.0	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5DUP	P290803D271650A	DUP	METHOD	300.0	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5MSD	P290803M240458A	MSD	3550B	8082	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5MS	P290803R240440A	MS	3550B	8082	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5MS	P290803R271131A	MS	METHOD	314.0	III
17-May-2011	SL001-SA5DN-SB-5.5-6.5MS	P290803R271705A	MS	METHOD	300.0	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	3050B	6010B	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	3050B	6020	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	3060A	7199	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	3550B	8082	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	3550B	8270C	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	5035	8260B	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	5035	8260B SIM	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	METHOD	300.0	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	METHOD	314.0	III
17-May-2011	SL-073-SA5DN-SB-4.0-5.0	6290809	N	METHOD	7471A	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	3050B	6010B	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	3050B	6020	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	3060A	7199	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	3550B	8082	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	3550B	8270C	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	3550B	8270C SIM	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	METHOD	300.0	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	METHOD	314.0	III
17-May-2011	SL-073-SA5DN-SB-9.0-10.0	6290810	N	METHOD	7471A	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	3050B	6010B	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	3050B	6020	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	3060A	7199	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	3550B	8082	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	3550B	8270C	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	3550B	8270C SIM	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	5035	8260B	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	5035	8260B SIM	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	METHOD	300.0	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	METHOD	314.0	III
17-May-2011	SL-068-SA5DN-SB-4.0-5	6290807	N	METHOD	7471A	III
17-May-2011	SL-068-SA5DN-SB-4.0-5DUP	P290807D271611A	DUP	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-May-2011	SL-068-SA5DN-SB-4.0-5MS	P290807R271537A	MS	3060A	7199	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	3050B	6010B	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	3050B	6020	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	3060A	7199	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	3550B	8082	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	3550B	8270C	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	3550B	8270C SIM	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	METHOD	300.0	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	METHOD	314.0	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	METHOD	6850	III
17-May-2011	SL-068-SA5DN-SB-9.0-10.0	6290808	N	METHOD	7471A	III
17-May-2011	TB-051711	6290811	TB	5030B	8260B	III
17-May-2011	TB-051711	6290811	TB	5030B	8260B SIM	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory:** LL

EDD Filename: PrepDE153_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL001-SA5DN-SB-5.5-6.5 *Collected:* 5/17/2011 12:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	15200		7.05	MDL	23.0	PQL	mg/Kg	J	E
PHOSPHORUS	253		0.644	MDL	11.5	PQL	mg/Kg	J	Q, E
POTASSIUM	3250		20.7	MDL	57.5	PQL	mg/Kg	J	Q
TIN	2.60	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-001-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 11:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5370		6.80	MDL	22.2	PQL	mg/Kg	J	E
PHOSPHORUS	254		0.622	MDL	11.1	PQL	mg/Kg	J	Q, E
POTASSIUM	2910		20.0	MDL	55.5	PQL	mg/Kg	J	Q
TIN	2.75	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.39	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	28600		7.17	MDL	23.4	PQL	mg/Kg	J	E
PHOSPHORUS	454		0.655	MDL	11.7	PQL	mg/Kg	J	Q, E
POTASSIUM	4180		21.0	MDL	58.4	PQL	mg/Kg	J	Q
TIN	2.70	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.82	J	0.982	MDL	5.84	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	24300		6.77	MDL	22.1	PQL	mg/Kg	J	E
PHOSPHORUS	283		0.619	MDL	11.0	PQL	mg/Kg	J	Q, E
POTASSIUM	3260		19.9	MDL	55.2	PQL	mg/Kg	J	Q
TIN	2.87	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.62	J	0.928	MDL	5.52	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: PrepDE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-068-SA5DN-SB-4.0-5 *Collected:* 5/17/2011 4:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	8960		6.74	MDL	22.0	PQL	mg/Kg	J	E
PHOSPHORUS	175		0.615	MDL	11.0	PQL	mg/Kg	J	Q, E
POTASSIUM	1870		19.8	MDL	55.0	PQL	mg/Kg	J	Q
TIN	2.63	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.54	J	0.923	MDL	5.50	PQL	mg/Kg	J	Z

Sample ID: SL-068-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 4:11:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6100		6.87	MDL	22.4	PQL	mg/Kg	J	E
PHOSPHORUS	257		0.628	MDL	11.2	PQL	mg/Kg	J	Q, E
POTASSIUM	2710		20.2	MDL	56.1	PQL	mg/Kg	J	Q
TIN	2.85	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 3:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4770		6.87	MDL	22.4	PQL	mg/Kg	J	E
PHOSPHORUS	131		0.627	MDL	11.2	PQL	mg/Kg	J	Q, E
POTASSIUM	2020		20.2	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.64	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.39	J	0.941	MDL	5.60	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3360		6.68	MDL	21.8	PQL	mg/Kg	J	E
PHOSPHORUS	227		0.610	MDL	10.9	PQL	mg/Kg	J	Q, E
POTASSIUM	2430		19.6	MDL	54.4	PQL	mg/Kg	J	Q
TIN	2.64	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.21	J	0.915	MDL	5.44	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: PrepDE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL001-SA5DN-SB-5.5-6.5 *Collected:* 5/17/2011 12:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z

Sample ID: SL001-SA5DN-SB-5.5-6.5 *Collected:* 5/17/2011 12:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.208	J	0.0683	MDL	0.228	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.55		0.0911	MDL	0.455	PQL	mg/Kg	J	Q
BERYLLIUM	1.18		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.418		0.0455	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	38.4		0.137	MDL	0.455	PQL	mg/Kg	J	Q
COBALT	16.4		0.0228	MDL	0.114	PQL	mg/Kg	J	Q
COPPER	23.6		0.0751	MDL	0.455	PQL	mg/Kg	J	Q
LEAD	13.6		0.0118	MDL	0.228	PQL	mg/Kg	J	E
NICKEL	33.1		0.114	MDL	0.455	PQL	mg/Kg	J	Q
SILVER	0.0732	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.465		0.0341	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	64.0		0.0250	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-001-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 11:58:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0475	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 11:58:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.109	J	0.0647	MDL	0.216	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.59		0.0862	MDL	0.431	PQL	mg/Kg	J	Q
BERYLLIUM	0.688		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.135		0.0431	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	18.4		0.129	MDL	0.431	PQL	mg/Kg	J	Q
COBALT	8.94		0.0216	MDL	0.108	PQL	mg/Kg	J	Q
COPPER	9.51		0.0711	MDL	0.431	PQL	mg/Kg	J	Q
LEAD	7.70		0.0112	MDL	0.216	PQL	mg/Kg	J	E
NICKEL	16.4		0.108	MDL	0.431	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory:** LL

EDD Filename: PrepDE153_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-001-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 11:58:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0335	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.280		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	35.9		0.0237	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-005-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 10:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.0458	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 10:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.159	J	0.0688	MDL	0.229	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.01		0.0917	MDL	0.459	PQL	mg/Kg	J	Q
BERYLLIUM	0.878		0.0183	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.441		0.0458	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	32.5		0.138	MDL	0.459	PQL	mg/Kg	J	Q
COBALT	11.2		0.0229	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	18.2		0.0757	MDL	0.459	PQL	mg/Kg	J	Q
LEAD	10.3		0.0119	MDL	0.229	PQL	mg/Kg	J	E
NICKEL	24.0		0.115	MDL	0.459	PQL	mg/Kg	J	Q
SILVER	0.0426	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.348		0.0344	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	56.9		0.0252	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-005-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 10:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.205	J	0.0676	MDL	0.225	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.32		0.0901	MDL	0.451	PQL	mg/Kg	J	Q
BERYLLIUM	0.996		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.252		0.0451	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	30.9		0.135	MDL	0.451	PQL	mg/Kg	J	Q
COBALT	8.27		0.0225	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	16.6		0.0743	MDL	0.451	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: PrepDE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-005-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 10:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	8.34		0.0117	MDL	0.225	PQL	mg/Kg	J	E
NICKEL	22.3		0.113	MDL	0.451	PQL	mg/Kg	J	Q
SILVER	0.0785	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.335		0.0338	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	52.9		0.0248	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-068-SA5DN-SB-4.0-5 *Collected:* 5/17/2011 4:08:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0829	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-068-SA5DN-SB-4.0-5 *Collected:* 5/17/2011 4:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.183	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.81		0.0879	MDL	0.440	PQL	mg/Kg	J	Q
BERYLLIUM	0.954		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.145		0.0440	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	23.1		0.132	MDL	0.440	PQL	mg/Kg	J	Q
COBALT	6.22		0.0220	MDL	0.110	PQL	mg/Kg	J	Q
COPPER	10.9		0.0725	MDL	0.440	PQL	mg/Kg	J	Q
LEAD	8.40		0.0114	MDL	0.220	PQL	mg/Kg	J	E
NICKEL	14.7		0.110	MDL	0.440	PQL	mg/Kg	J	Q
SILVER	0.0322	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.264		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	47.0		0.0242	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-068-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 4:11:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0550	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory:** LL

EDD Filename: PrepDE153_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-068-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 4:11:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0686	U	0.0686	MDL	0.229	PQL	mg/Kg	UJ	Q, E
ARSENIC	3.40		0.0915	MDL	0.457	PQL	mg/Kg	J	Q
BERYLLIUM	0.901		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.0648	J	0.0457	MDL	0.114	PQL	mg/Kg	J	Z, Q
CHROMIUM	30.2		0.137	MDL	0.457	PQL	mg/Kg	J	Q
COBALT	5.30		0.0229	MDL	0.114	PQL	mg/Kg	J	Q
COPPER	16.4		0.0755	MDL	0.457	PQL	mg/Kg	J	Q
LEAD	6.80		0.0119	MDL	0.229	PQL	mg/Kg	J	E
NICKEL	17.9		0.114	MDL	0.457	PQL	mg/Kg	J	Q
SILVER	0.0865	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.348		0.0343	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	34.3		0.0252	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-073-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 3:19:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.107	J	0.0653	MDL	0.218	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.53		0.0870	MDL	0.435	PQL	mg/Kg	J	Q
BERYLLIUM	0.710		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.0817	J	0.0435	MDL	0.109	PQL	mg/Kg	J	Z, Q
CHROMIUM	20.8		0.131	MDL	0.435	PQL	mg/Kg	J	Q
COBALT	6.29		0.0218	MDL	0.109	PQL	mg/Kg	J	Q
COPPER	9.35		0.0718	MDL	0.435	PQL	mg/Kg	J	Q
LEAD	6.61		0.0113	MDL	0.218	PQL	mg/Kg	J	E
NICKEL	12.2		0.109	MDL	0.435	PQL	mg/Kg	J	Q
SILVER	0.0546	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.237		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	41.6		0.0239	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-073-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0666	U	0.0666	MDL	0.222	PQL	mg/Kg	UJ	Q, E
ARSENIC	6.08		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	0.636		0.0178	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE153 Laboratory: LL

EDD Filename: PrepDE153_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-073-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.156		0.0444	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	17.7		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COBALT	8.50		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	12.8		0.0733	MDL	0.444	PQL	mg/Kg	J	Q
LEAD	7.02		0.0115	MDL	0.222	PQL	mg/Kg	J	E
NICKEL	16.5		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0203	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.249		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	36.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-068-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 4:11:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0040	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL001-SA5DN-SB-5.5-6.5 *Collected:* 5/17/2011 12:04:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	580	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-001-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 11:58:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory:** LL

EDD Filename: PrepDE153_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-005-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 10:04:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	200	U	200	MDL	590	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-005-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 10:08:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L

Sample ID: SL-068-SA5DN-SB-4.0-5 *Collected:* 5/17/2011 4:08:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-068-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 4:11:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 3:19:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: PrepDE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-073-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	380	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-001-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 11:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-068-SA5DN-SB-4.0-5 *Collected:* 5/17/2011 4:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	4.2	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
CHRYSENE	4.7	J	1.9	MDL	9.3	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 3:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.92	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.99	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.8	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	0.81	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA5DN-SB-9.0-10.0 *Collected:* 5/17/2011 3:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.94	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.8	J	6.8	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: PrepDE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL001-SA5DN-SB-5.5-6.5 *Collected:* 5/17/2011 12:04:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.77	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-005-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 10:04:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.78	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-068-SA5DN-SB-4.0-5 *Collected:* 5/17/2011 4:08:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.87	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-073-SA5DN-SB-4.0-5.0 *Collected:* 5/17/2011 3:19:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.1	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: PrepDE153_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: PrepDE153_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: PrepDE153_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE153

Method Blank Outlier Report

Lab Reporting Batch ID: DE153 Laboratory: LL

EDD Filename: DE153_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13908BB221256	5/20/2011 12:56:00 PM	PHOSPHORUS TIN	1.29 mg/Kg 1.65 mg/Kg	SL001-SA5DN-SB-5.5-6.5 SL-001-SA5DN-SB-9.0-10.0 SL-005-SA5DN-SB-4.0-5.0 SL-005-SA5DN-SB-9.0-10.0 SL-068-SA5DN-SB-4.0-5 SL-068-SA5DN-SB-9.0-10.0 SL-073-SA5DN-SB-4.0-5.0 SL-073-SA5DN-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL001-SA5DN-SB-5.5-6.5(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-001-SA5DN-SB-9.0-10.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-005-SA5DN-SB-4.0-5.0(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-005-SA5DN-SB-9.0-10.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-068-SA5DN-SB-4.0-5(RES)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-068-SA5DN-SB-9.0-10.0(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-073-SA5DN-SB-4.0-5.0(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-073-SA5DN-SB-9.0-10.0(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB60B211434A	5/20/2011 2:34:00 PM	METHYLENE CHLORIDE	0.39 ug/Kg	SL001-SA5DN-SB-5.5-6.5 SL-005-SA5DN-SB-4.0-5.0 SL-068-SA5DN-SB-4.0-5 SL-073-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL001-SA5DN-SB-5.5-6.5(RES)	METHYLENE CHLORIDE	0.77 ug/Kg	4.1U ug/Kg
SL-005-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.78 ug/Kg	4.5U ug/Kg
SL-068-SA5DN-SB-4.0-5(RES)	METHYLENE CHLORIDE	0.87 ug/Kg	4.5U ug/Kg
SL-073-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.1U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLG13B261713	5/20/2011 5:13:00 PM	NAPHTHALENE	1.1 ug/Kg	SL001-SA5DN-SB-5.5-6.5 SL-001-SA5DN-SB-9.0-10.0 SL-005-SA5DN-SB-4.0-5.0 SL-005-SA5DN-SB-9.0-10.0 SL-068-SA5DN-SB-4.0-5 SL-068-SA5DN-SB-9.0-10.0 SL-073-SA5DN-SB-4.0-5.0 SL-073-SA5DN-SB-9.0-10.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE153 Laboratory: LL

EDD Filename: DE153_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: DE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-068-SA5DN-SB-4.0-5DUP (SL001-SA5DN-SB-5.5-6.5 SL-001-SA5DN-SB-9.0-10.0 SL-005-SA5DN-SB-4.0-5.0 SL-005-SA5DN-SB-9.0-10.0 SL-068-SA5DN-SB-4.0-5 SL-068-SA5DN-SB-9.0-10.0 SL-073-SA5DN-SB-4.0-5.0 SL-073-SA5DN-SB-9.0-10.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual Ok by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: DE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LHLCSQ260452 (SL001-SA5DN-SB-5.5-6.5 SL-001-SA5DN-SB-9.0-10.0 SL-005-SA5DN-SB-4.0-5.0 SL-005-SA5DN-SB-9.0-10.0 SL-068-SA5DN-SB-4.0-5 SL-068-SA5DN-SB-9.0-10.0 SL-073-SA5DN-SB-4.0-5.0 SL-073-SA5DN-SB-9.0-10.0)	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHENOL	24 44	- -	37.00-120.00 53.00-110.00	- -	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHEN	J (all detects) UJ (all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB60Q211503A (SL001-SA5DN-SB-5.5-6.5 SL-005-SA5DN-SB-4.0-5.0 SL-068-SA5DN-SB-4.0-5 SL-073-SA5DN-SB-4.0-5.0)	BROMOCHLOROMETHANE	125	-	79.00-124.00	-	BROMOCHLOROMETHANE	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: DE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL001-SA5DN-SB-5.5-6.5	TIN	J	2.60	11.5	PQL	mg/Kg	J (all detects)
SL-001-SA5DN-SB-9.0-10.0	TIN	J	2.75	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.39	5.55	PQL	mg/Kg	
SL-005-SA5DN-SB-4.0-5.0	TIN	J	2.70	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.82	5.84	PQL	mg/Kg	
SL-005-SA5DN-SB-9.0-10.0	TIN	J	2.87	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.62	5.52	PQL	mg/Kg	
SL-068-SA5DN-SB-4.0-5	TIN	J	2.63	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.54	5.50	PQL	mg/Kg	
SL-068-SA5DN-SB-9.0-10.0	TIN	J	2.85	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.48	5.61	PQL	mg/Kg	
SL-073-SA5DN-SB-4.0-5.0	TIN	J	2.64	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.39	5.60	PQL	mg/Kg	
SL-073-SA5DN-SB-9.0-10.0	TIN	J	2.64	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.21	5.44	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL001-SA5DN-SB-5.5-6.5	ANTIMONY	J	0.208	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.140	0.455	PQL	mg/Kg	
	SILVER	J	0.0732	0.114	PQL	mg/Kg	
SL-001-SA5DN-SB-9.0-10.0	ANTIMONY	J	0.109	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0475	0.431	PQL	mg/Kg	
	SILVER	J	0.0335	0.108	PQL	mg/Kg	
SL-005-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.159	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.102	0.459	PQL	mg/Kg	
	SILVER	J	0.0426	0.115	PQL	mg/Kg	
SL-005-SA5DN-SB-9.0-10.0	ANTIMONY	J	0.205	0.225	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0785	0.113	PQL	mg/Kg	
SL-068-SA5DN-SB-4.0-5	ANTIMONY	J	0.183	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0829	0.440	PQL	mg/Kg	
	SILVER	J	0.0322	0.110	PQL	mg/Kg	
SL-068-SA5DN-SB-9.0-10.0	CADMIUM	J	0.0648	0.114	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0550	0.457	PQL	mg/Kg	
	SILVER	J	0.0865	0.114	PQL	mg/Kg	
SL-073-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.107	0.218	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0817	0.109	PQL	mg/Kg	
	SILVER	J	0.0546	0.109	PQL	mg/Kg	
SL-073-SA5DN-SB-9.0-10.0	SILVER	J	0.0203	0.111	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-068-SA5DN-SB-9.0-10.0	MERCURY	J	0.0040	0.108	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE153 **Laboratory: LL**

EDD Filename: DE153_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL001-SA5DN-SB-5.5-6.5	METHYLENE CHLORIDE	J	0.77	4.1	PQL	ug/Kg	J (all detects)
SL-005-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.78	4.5	PQL	ug/Kg	J (all detects)
SL-068-SA5DN-SB-4.0-5	METHYLENE CHLORIDE	J	0.87	4.5	PQL	ug/Kg	J (all detects)
SL-073-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.1	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL001-SA5DN-SB-5.5-6.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	390	PQL	ug/Kg	J (all detects)
SL-005-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	390	PQL	ug/Kg	J (all detects)
SL-068-SA5DN-SB-4.0-5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-068-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	380	PQL	ug/Kg	J (all detects)
SL-073-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	380	PQL	ug/Kg	J (all detects)
SL-073-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-001-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	20	PQL	ug/Kg	J (all detects)
SL-068-SA5DN-SB-4.0-5	BENZO(B)FLUORANTHENE	J	4.2	9.3	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	4.7	9.3	PQL	ug/Kg	
SL-073-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	0.92	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.99	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.8	20	PQL	ug/Kg	
	FLUORANTHENE	J	0.81	1.9	PQL	ug/Kg	
SL-073-SA5DN-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	0.94	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.8	20	PQL	ug/Kg	

LDC #: 26275L4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/19/11
SDG #: DE153 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: ~
2nd Reviewer: ~

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates: 5/17/11
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	~~A~~	Mn qual by 2xD/cens
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	DE148 (see attached
VII.	Duplicate Sample Analysis	SW	} ↓ qual Pb J/nJ (2)
VIII.	Laboratory Control Samples (LCS)	NA	SRM.
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	~~A~~ SW	DE148
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-001-SA5DN-SB-5.5-6.5	11		21		31	
2	SL-001-SA5DN-SB-9.0-10.0	12		22		32	
3	SL-005-SA5DN-SB-4.0-5.0	13		23		33	
4	SL-005-SA5DN-SB-9.0-10.0	14		24		34	
5	SL-068-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-068-SA5DN-SB-9.0-10.0	16		26		36	
7	SL-073-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-073-SA5DN-SB-9.0-10.0	18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE148
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6285036BKG Matrix Spike Lab Sample ID: 6285036MS Matrix Spike Duplicate Lab Sample ID: 6285036MSD
% Solids for Sample: 92.0
Batch Id(s): P13908B, P13926A, P13911A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		15799.8138		20117.3301		18792.3966		211.0595	211.0595	MG/KG	2046		1418		7			20	P
Antimony	121	0.1846	B	0.7671		0.9872		1.2788	1.2788	MG/KG	46	N	63	N	25	*	75 - 125	20	MS
Arsenic	75	4.4459		7.9518		8.9855		2.1313	2.1313	MG/KG	164	N	213	N	12		75 - 125	20	MS
Barium	137	119.9275		143.3504		160.5925		10.6564	10.6564	MG/KG	220		382		11			20	MS
Beryllium	9	0.6302		1.7008		1.8412		0.8525	0.8525	MG/KG	126	N	142	N	8		75 - 125	20	MS
Boron		13.2899		221.1228		217.1929		211.0595	211.0595	MG/KG	98		97		2		84 - 115	20	P
Cadmium	111	0.2511		1.5948		1.6319		1.0656	1.0656	MG/KG	126	N	130	N	2		75 - 125	20	MS
Calcium		3941.6304		5415.2438		4135.2279		422.1190	422.1190	MG/KG	349		46		27	*		20	P
Chromium	52	20.4774		34.0153		35.9974		10.6564	10.6564	MG/KG	127	N	146	N	6		75 - 125	20	MS
Cobalt	59	7.3636		69.7144		85.3581		53.2822	53.2822	MG/KG	117		146	N	20		75 - 125	20	MS
Copper	63	12.5085		25.8738		28.4953		10.6564	10.6564	MG/KG	125		150	N	10		75 - 125	20	MS
Iron		21754.8407		22875.2881		22025.8917		105.5298	105.5298	MG/KG	1062		257		4			20	P
Lead	208	14.0772		21.6965		24.6164		3.1969	3.1969	MG/KG	238		330		13			20	MS
Lithium		18.9496		127.5338		125.6680		105.5298	105.5298	MG/KG	103		101		1		82 - 114	20	P
Magnesium		4471.1655		5184.1684		4890.8685		211.0595	211.0595	MG/KG	338		199		6			20	P
Manganese		254.0626		343.2049		317.8240		52.7649	52.7649	MG/KG	169		121		8			20	P
Mercury		0.0032	U	0.1458		0.1275		0.1755	0.1723	MG/KG	83		74		13		65 - 135	20	CV
Molybdenum	98	0.5684		12.6918		13.8704		10.6564	10.6564	MG/KG	114		125		9		75 - 125	20	MS
Nickel	60	14.0175		27.8772		32.1398		10.6564	10.6564	MG/KG	130	N	170	N	14		75 - 125	20	MS
Phosphorus		276.9770		901.0701		441.3719		105.5298	105.5298	MG/KG	591	N	156	N	68	*	75 - 125	20	P
Potassium		2315.0000		3666.0965		3727.1486		1055.2976	1055.2976	MG/KG	128	N	134	N	2		75 - 125	20	P
Selenium	78	0.1604	B	2.4744		2.6982		2.1313	2.1313	MG/KG	109		119		9		75 - 125	20	MS
Silver	107	0.0374	B	13.1223		14.0345		10.6564	10.6564	MG/KG	123		131	N	7		75 - 125	20	MS
Sodium		84.4404	B	1205.6807		1143.9384		1055.2976	1055.2976	MG/KG	106		100		5		75 - 125	20	P
Strontium		27.6507		131.5312		128.4455		105.5298	105.5298	MG/KG	98		96		2		75 - 115	20	P
Thallium	203	0.2992		0.7434		0.8497		0.4263	0.4263	MG/KG	104		129	N	13		75 - 125	20	MS
Tin		2.8099	B	380.8854		374.3732		422.1190	422.1190	MG/KG	90		88		2		80 - 110	20	P
Titanium		985.9029		1242.6098		1327.5253		105.5298	105.5298	MG/KG	243		324		7			20	P
Vanadium	51	36.6795		53.4101		58.9727		10.6564	10.6564	MG/KG	157	N	209	N	10		75 - 125	20	MS
Zinc	66	63.3845		79.3265		91.9864		10.6564	10.6564	MG/KG	150		268		15			20	MS
Zirconium		1.0622	B	104.0808		103.6176		105.5298	105.5298	MG/KG	98		97		0		75 - 125	20	P

DE148 92.0

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

SAMPLE DELIVERY GROUP

DE154

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3050B	6010B	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3050B	6020	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3060A	7199	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3546	1625C	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3550B	8015B	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3550B	8015M	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3550B	8081A	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3550B	8082	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3550B	8151A	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3550B	8270C	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	3550B	8270C SIM	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	8330	8330A	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	METHOD	300.0	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	METHOD	314.0	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	METHOD	7471A	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	METHOD	8015B	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	METHOD	8015M	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	METHOD	8315A	III
18-May-2011	SL-090-SA5DN-SS-0.0-0.5	6292003	N	METHOD	9012B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3050B	6010B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3050B	6020	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3060A	7199	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3546	1625C	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3550B	8015B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3550B	8015M	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3550B	8082	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3550B	8151A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3550B	8270C	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	3550B	8270C SIM	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	8330	8330A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	METHOD	300.0	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	METHOD	314.0	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	METHOD	6850	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	METHOD	7471A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	METHOD	8015B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	METHOD	8015M	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	METHOD	8315A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5	6291999	N	METHOD	9012B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3050B	6010B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3050B	6020	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3060A	7199	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3546	1625C	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3550B	8015B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3550B	8015M	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3550B	8081A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3550B	8082	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3550B	8151A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3550B	8270C	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	3550B	8270C SIM	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	8330	8330A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	METHOD	314.0	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	METHOD	6850	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	METHOD	7471A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	METHOD	8015B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	METHOD	8015M	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	METHOD	8315A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5MS	6292000	MS	METHOD	9012B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5DU	6292002	DUP	3050B	6010B	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5DU	6292002	DUP	3050B	6020	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5DU	6292002	DUP	3060A	7199	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5DU	6292002	DUP	METHOD	300.0	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5DU	6292002	DUP	METHOD	314.0	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5DU	6292002	DUP	METHOD	7471A	III
18-May-2011	SL-089-SA5DN-SS-0.0-0.5DU	6292002	DUP	METHOD	9012B	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3050B	6010B	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3050B	6020	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3060A	7199	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3546	1625C	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3550B	8015B	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3550B	8015M	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3550B	8081A	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3550B	8082	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3550B	8151A	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3550B	8270C	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	3550B	8270C SIM	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	8330	8330A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	METHOD	300.0	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	METHOD	314.0	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	METHOD	7471A	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	METHOD	8015B	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	METHOD	8015M	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	METHOD	8315A	III
18-May-2011	DUP-02-SA5DN-QC-051811	6292005	FD	METHOD	9012B	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3050B	6010B	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3050B	6020	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3060A	7199	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3546	1625C	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3550B	8015B	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3550B	8015M	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3550B	8081A	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3550B	8082	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3550B	8151A	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3550B	8270C	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	3550B	8270C SIM	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	8330	8330A	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	METHOD	300.0	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	METHOD	314.0	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	METHOD	7471A	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	METHOD	8015B	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	METHOD	8015M	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	METHOD	8315A	III
18-May-2011	SL-087-SA5DN-SS-0.0-0.5	6291997	N	METHOD	9012B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3050B	6010B	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3050B	6020	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3060A	7199	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3546	1625C	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3550B	8015B	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3550B	8015M	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3550B	8081A	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3550B	8082	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3550B	8151A	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3550B	8270C	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	3550B	8270C SIM	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	8330	8330A	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	METHOD	300.0	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	METHOD	314.0	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	METHOD	7471A	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	METHOD	8015B	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	METHOD	8015M	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	METHOD	8315A	III
18-May-2011	SL-086-SA5DN-SS-0.0-0.5	6291996	N	METHOD	9012B	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	3050B	6010B	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	3050B	6020	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	3060A	7199	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	3550B	8081A	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	3550B	8082	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	3550B	8151A	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	3550B	8270C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	3550B	8270C SIM	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	8330	8330A	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	METHOD	300.0	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	METHOD	314.0	III
18-May-2011	SL-088-SA5DN-SS-0.0-0.5	6291998	N	METHOD	7471A	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3050B	6010B	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3050B	6020	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3060A	7199	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3546	1625C	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3550B	8015B	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3550B	8015M	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3550B	8081A	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3550B	8082	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3550B	8151A	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3550B	8270C	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	3550B	8270C SIM	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	8330	8330A	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	METHOD	300.0	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	METHOD	314.0	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	METHOD	7471A	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	METHOD	8015B	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	METHOD	8015M	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	METHOD	8315A	III
18-May-2011	SL-064-SA5DN-SS-0.0-0.5	6291994	N	METHOD	9012B	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3050B	6010B	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3060A	7199	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3546	1625C	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3550B	8015B	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3550B	8015M	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3550B	8081A	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3550B	8082	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3550B	8151A	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3550B	8270C	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	3550B	8270C SIM	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	8330	8330A	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	METHOD	300.0	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	METHOD	314.0	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	METHOD	7471A	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	METHOD	8015B	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	METHOD	8015M	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	METHOD	8315A	III
18-May-2011	SL-065-SA5DN-SS-0.0-0.5	6291995	N	METHOD	9012B	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	3510C	8015B	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	3510C	8015M	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	3520C	1625C	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	8330	8330A	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	Gen Prep	300.0	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	Gen Prep	8015B	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	Gen Prep	8015M	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	METHOD	8315A	III
18-May-2011	EB02-SA5DN-SS-051811	6292006	EB	METHOD	9012B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	3050B	6010B	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	3050B	6020	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	3060A	7199	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	3550B	8081A	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	3550B	8082	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	3550B	8151A	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	3550B	8270C	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	3550B	8270C SIM	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	METHOD	300.0	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	METHOD	314.0	III
18-May-2011	SL-202-SA5DN-SS-0-0.5	6292004	N	METHOD	7471A	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	3050B	6010B	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	3050B	6020	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	3060A	7199	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	3550B	8081A	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	3550B	8082	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	3550B	8151A	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	3550B	8270C	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	3550B	8270C SIM	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	METHOD	300.0	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	METHOD	314.0	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5	6291989	N	METHOD	7471A	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5DU	P291989D272016A	DUP	METHOD	300.0	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5DU	P291989D272055A	DUP	METHOD	314.0	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5MS	P291989R272030A	MS	METHOD	300.0	III
18-May-2011	SL-054-SA5DN-SS-0.0-0.5MS	P291989R272117A	MS	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	3050B	6010B	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	3050B	6020	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	3060A	7199	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	3550B	8081A	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	3550B	8082	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	3550B	8151A	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	3550B	8270C	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	3550B	8270C SIM	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	METHOD	300.0	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	METHOD	314.0	III
18-May-2011	SL-059-SA5DN-SS-0.0-0.5	6291993	N	METHOD	7471A	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	3050B	6010B	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	3050B	6020	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	3060A	7199	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	3550B	8081A	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	3550B	8082	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	3550B	8151A	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	3550B	8270C	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	3550B	8270C SIM	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	METHOD	300.0	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	METHOD	314.0	III
18-May-2011	SL-055-SA5DN-SS-0.0-0.5	6291990	N	METHOD	7471A	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	3050B	6010B	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	3050B	6020	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	3060A	7199	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	3550B	8082	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	3550B	8151A	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	3550B	8270C	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	3550B	8270C SIM	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	METHOD	300.0	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	METHOD	314.0	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	METHOD	6850	III
18-May-2011	SL-056-SA5DN-SS-0.0-0.5	6291991	N	METHOD	7471A	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	3050B	6010B	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	3050B	6020	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	3060A	7199	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	3550B	8081A	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	3550B	8082	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	3550B	8151A	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	3550B	8270C	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	3550B	8270C SIM	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	METHOD	300.0	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	METHOD	314.0	III
18-May-2011	SL-058-SA5DN-SS-0.0-0.5	6291992	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-055-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.99	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5DN-SS-0-0.5 *Collected:* 5/18/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4080		20.7	MDL	57.6	PQL	mg/Kg	J	Q
SODIUM	100	J	43.0	MDL	115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP-02-SA5DN-QC-051811 **Collected:** 5/18/2011 9:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.82	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.20	J	0.968	MDL	5.76	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5DN-SS-0.0-0.5 **Collected:** 5/18/2011 1:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3970		20.3	MDL	56.5	PQL	mg/Kg	J	Q
TIN	2.51	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.27	J	0.949	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA5DN-SS-0.0-0.5 **Collected:** 5/18/2011 2:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3870		20.1	MDL	55.8	PQL	mg/Kg	J	Q
TIN	2.50	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.91	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA5DN-SS-0.0-0.5 **Collected:** 5/18/2011 2:53:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3700		19.9	MDL	55.4	PQL	mg/Kg	J	Q
SODIUM	101	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	2.63	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.43	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-058-SA5DN-SS-0.0-0.5 **Collected:** 5/18/2011 3:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	6660		20.3	MDL	56.4	PQL	mg/Kg	J	Q
SODIUM	82.8	J	42.1	MDL	113	PQL	mg/Kg	J	Z
TIN	2.60	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.52	J	0.947	MDL	5.64	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4190		19.8	MDL	55.0	PQL	mg/Kg	J	Q
SODIUM	98.7	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.40	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.96	J	0.925	MDL	5.50	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	13.3	J	5.04	MDL	28.3	PQL	mg/Kg	J	Z
POTASSIUM	4880		102	MDL	283	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	80.6	J	42.2	MDL	113	PQL	mg/Kg	J	Z
TIN	6.34	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	5360		19.9	MDL	55.4	PQL	mg/Kg	J	Q
SODIUM	90.7	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	3.02	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.60	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4560		20.4	MDL	56.6	PQL	mg/Kg	J	Q
SODIUM	108	J	42.2	MDL	113	PQL	mg/Kg	J	Z
TIN	2.66	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.01	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-087-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3910		19.5	MDL	54.1	PQL	mg/Kg	J	Q
SODIUM	107	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.62	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.42	J	0.909	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-088-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 10:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4530		19.7	MDL	54.7	PQL	mg/Kg	J	Q
SODIUM	87.3	J	40.8	MDL	109	PQL	mg/Kg	J	Z
TIN	2.44	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.85	J	0.918	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4190		20.7	MDL	57.4	PQL	mg/Kg	J	Q
SODIUM	106	J	42.8	MDL	115	PQL	mg/Kg	J	Z
TIN	2.83	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.06	J	0.965	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SL-090-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 8:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3120		22.1	MDL	61.3	PQL	mg/Kg	J	Q
SODIUM	116	J	45.7	MDL	123	PQL	mg/Kg	J	Z
TIN	2.89	J	1.23	MDL	12.3	PQL	mg/Kg	U	B
Zirconium	2.31	J	1.03	MDL	6.13	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5DN-SS-0-0.5 ***Collected:*** 5/18/2011 1:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4100		20.0	MDL	55.7	PQL	mg/Kg	J	Q
TIN	2.64	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.83	J	0.936	MDL	5.57	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.563		0.0576	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.451		0.0349	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.60		0.0922	MDL	0.461	PQL	mg/Kg	J	Q
BERYLLIUM	0.807		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.278		0.0461	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	30.6		0.138	MDL	0.461	PQL	mg/Kg	J	Q, A
COBALT	10.7		0.0231	MDL	0.115	PQL	mg/Kg	J	Q, A
COPPER	15.4		0.0761	MDL	0.461	PQL	mg/Kg	J	Q, A
LEAD	10.8		0.0120	MDL	0.231	PQL	mg/Kg	J	Q, A
NICKEL	18.1		0.115	MDL	0.461	PQL	mg/Kg	J	Q, A
SILVER	0.0415	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q
VANADIUM	58.0		0.0254	MDL	0.115	PQL	mg/Kg	J	A
ZINC	75.1		0.645	MDL	3.46	PQL	mg/Kg	J	A

Sample ID: SL-054-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 1:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0860	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-054-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 1:50:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.417		0.0549	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 1:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.217	J	0.0658	MDL	0.219	PQL	mg/Kg	J	Z
ARSENIC	5.57		0.0878	MDL	0.439	PQL	mg/Kg	J	Q
BERYLLIUM	0.741		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.280		0.0439	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	29.0		0.132	MDL	0.439	PQL	mg/Kg	J	Q, A
COBALT	10.3		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, A
COPPER	18.0		0.0724	MDL	0.439	PQL	mg/Kg	J	Q, A
LEAD	14.9		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, A
NICKEL	19.3		0.110	MDL	0.439	PQL	mg/Kg	J	Q, A
SILVER	0.0488	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
VANADIUM	59.9		0.0241	MDL	0.110	PQL	mg/Kg	J	A
ZINC	79.9		0.614	MDL	3.29	PQL	mg/Kg	J	A

Sample ID: SL-055-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:30:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.463		0.0558	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-055-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:30:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.354		0.0332	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 Laboratory: LL

EDD Filename: PrepDE154_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-055-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.193	J	0.0670	MDL	0.223	PQL	mg/Kg	J	Z
ARSENIC	4.45		0.0893	MDL	0.447	PQL	mg/Kg	J	Q
BERYLLIUM	0.590		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.352		0.0447	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	24.3		0.134	MDL	0.447	PQL	mg/Kg	J	Q, A
COBALT	8.52		0.0223	MDL	0.112	PQL	mg/Kg	J	Q, A
COPPER	16.0		0.0737	MDL	0.447	PQL	mg/Kg	J	Q, A
LEAD	15.5		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, A
NICKEL	15.9		0.112	MDL	0.447	PQL	mg/Kg	J	Q, A
SILVER	0.303		0.0134	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	53.7		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	78.8		0.625	MDL	3.35	PQL	mg/Kg	J	A

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0924	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.634		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.395		0.0339	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	9.06		0.0886	MDL	0.443	PQL	mg/Kg	J	Q
BERYLLIUM	1.08		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.457		0.0443	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	43.0		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	13.7		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	25.9		0.0731	MDL	0.443	PQL	mg/Kg	J	Q, A
LEAD	18.5		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, A
NICKEL	29.0		0.111	MDL	0.443	PQL	mg/Kg	J	Q, A
SILVER	0.0599	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
VANADIUM	83.1		0.0244	MDL	0.111	PQL	mg/Kg	J	A
ZINC	102		0.620	MDL	3.32	PQL	mg/Kg	J	A

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.01		0.0575	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.475		0.0348	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.55		0.0920	MDL	0.460	PQL	mg/Kg	J	Q
BERYLLIUM	1.18		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.738		0.0460	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	45.7		0.138	MDL	0.460	PQL	mg/Kg	J	Q, A
COBALT	16.4		0.0230	MDL	0.115	PQL	mg/Kg	J	Q, A
COPPER	28.8		0.0759	MDL	0.460	PQL	mg/Kg	J	Q, A
LEAD	26.1		0.0120	MDL	0.230	PQL	mg/Kg	J	Q, A
NICKEL	32.1		0.115	MDL	0.460	PQL	mg/Kg	J	Q, A
SILVER	0.0739	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	85.9		0.0253	MDL	0.115	PQL	mg/Kg	J	A
ZINC	125		0.644	MDL	3.45	PQL	mg/Kg	J	A

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.761		0.0567	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.453		0.0330	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.40		0.0907	MDL	0.454	PQL	mg/Kg	J	Q
BERYLLIUM	1.05		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.663		0.0454	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	42.3		0.136	MDL	0.454	PQL	mg/Kg	J	Q, A
COBALT	15.1		0.0227	MDL	0.113	PQL	mg/Kg	J	Q, A
COPPER	25.6		0.0748	MDL	0.454	PQL	mg/Kg	J	Q, A
LEAD	15.2		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, A
NICKEL	28.0		0.113	MDL	0.454	PQL	mg/Kg	J	Q, A
SILVER	0.0550	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
VANADIUM	85.1		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	101		0.635	MDL	3.40	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	162		0.622	MDL	3.33	PQL	mg/Kg	J	A

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.748		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.356		0.0346	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	10.7		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	1.02		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.870		0.0444	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	40.7		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	13.7		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	42.5		0.0733	MDL	0.444	PQL	mg/Kg	J	Q, A
LEAD	26.6		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, A
NICKEL	26.6		0.111	MDL	0.444	PQL	mg/Kg	J	Q, A
SILVER	0.104	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
VANADIUM	75.8		0.0244	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	181		0.627	MDL	3.36	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.715		0.0559	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.463		0.0339	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	15.7		0.0895	MDL	0.448	PQL	mg/Kg	J	Q
BERYLLIUM	0.959		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.735		0.0448	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	36.3		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	11.8		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, A
COPPER	23.6		0.0738	MDL	0.448	PQL	mg/Kg	J	Q, A
LEAD	17.7		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	24.3		0.112	MDL	0.448	PQL	mg/Kg	J	Q, A
SILVER	0.0590	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
VANADIUM	67.9		0.0246	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.220	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.693		0.0560	MDL	0.112	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.440		0.0343	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.96		0.0897	MDL	0.448	PQL	mg/Kg	J	Q
BERYLLIUM	1.09		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.503		0.0448	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	40.1		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	14.9		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, A
COPPER	22.3		0.0740	MDL	0.448	PQL	mg/Kg	J	Q, A
LEAD	13.4		0.0117	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	25.6		0.112	MDL	0.448	PQL	mg/Kg	J	Q, A
SILVER	0.0490	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
VANADIUM	75.8		0.0247	MDL	0.112	PQL	mg/Kg	J	A
ZINC	94.9		0.628	MDL	3.36	PQL	mg/Kg	J	A

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.141	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.678		0.0546	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.353		0.0334	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 Laboratory: LL

EDD Filename: PrepDE154_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.12		0.0874	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.909		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.759		0.0437	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	34.1		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
COBALT	12.5		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, A
COPPER	21.6		0.0721	MDL	0.437	PQL	mg/Kg	J	Q, A
LEAD	19.1		0.0114	MDL	0.218	PQL	mg/Kg	J	Q, A
NICKEL	22.2		0.109	MDL	0.437	PQL	mg/Kg	J	Q, A
SILVER	0.0786	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
VANADIUM	68.7		0.0240	MDL	0.109	PQL	mg/Kg	J	A
ZINC	190		0.612	MDL	3.28	PQL	mg/Kg	J	A

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.33		0.0875	MDL	0.437	PQL	mg/Kg	J	Q
CADMIUM	0.264		0.0437	MDL	0.109	PQL	mg/Kg	J	Q
COBALT	8.27		0.0219	MDL	0.109	PQL	mg/Kg	J	Q, A
COPPER	14.2		0.0722	MDL	0.437	PQL	mg/Kg	J	Q, A
LEAD	7.87		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, A
NICKEL	16.7		0.109	MDL	0.437	PQL	mg/Kg	J	Q, A
ZINC	55.9		0.612	MDL	3.28	PQL	mg/Kg	J	A

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.147	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.558		0.0547	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 Laboratory: LL

EDD Filename: PrepDE154_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.485		0.0322	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	1.23		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	42.1		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
SILVER	0.0394	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
VANADIUM	79.0		0.0241	MDL	0.109	PQL	mg/Kg	J	A

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.584		0.0563	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.459		0.0341	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.06		0.0901	MDL	0.451	PQL	mg/Kg	J	Q
BERYLLIUM	0.881		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.348		0.0451	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	31.1		0.135	MDL	0.451	PQL	mg/Kg	J	Q, A
COBALT	10.1		0.0225	MDL	0.113	PQL	mg/Kg	J	Q, A
COPPER	17.1		0.0743	MDL	0.451	PQL	mg/Kg	J	Q, A
LEAD	10.4		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-089-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	20.4		0.113	MDL	0.451	PQL	mg/Kg	J	Q, A
SILVER	0.0556	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
VANADIUM	58.6		0.0248	MDL	0.113	PQL	mg/Kg	J	A
ZINC	77.8		0.631	MDL	3.38	PQL	mg/Kg	J	A

Sample ID: SL-090-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 8:40:00 ***Analysis Type:*** REA ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	370		1.68	MDL	9.01	PQL	mg/Kg	J	A

Sample ID: SL-090-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 8:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.118	J	0.0481	MDL	0.481	PQL	mg/Kg	J	Z

Sample ID: SL-090-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 8:40:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.338		0.0601	MDL	0.120	PQL	mg/Kg	J	Q

Sample ID: SL-090-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 8:40:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.385		0.0357	MDL	0.119	PQL	mg/Kg	J	Q

Sample ID: SL-090-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 8:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.05		0.0961	MDL	0.481	PQL	mg/Kg	J	Q
BERYLLIUM	0.771		0.0192	MDL	0.120	PQL	mg/Kg	J	Q
CADMIUM	0.656		0.0481	MDL	0.120	PQL	mg/Kg	J	Q
CHROMIUM	31.2		0.144	MDL	0.481	PQL	mg/Kg	J	Q, A
COBALT	9.33		0.0240	MDL	0.120	PQL	mg/Kg	J	Q, A
COPPER	107		0.0793	MDL	0.481	PQL	mg/Kg	J	Q, A
LEAD	12.8		0.0125	MDL	0.240	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	19.6		0.120	MDL	0.481	PQL	mg/Kg	J	Q, A
SILVER	0.0559	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z, Q
VANADIUM	50.7		0.0264	MDL	0.120	PQL	mg/Kg	J	A

Sample ID: SL-202-SA5DN-SS-0-0.5 *Collected:* 5/18/2011 1:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5DN-SS-0-0.5 *Collected:* 5/18/2011 1:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.701		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5DN-SS-0-0.5 *Collected:* 5/18/2011 1:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.397		0.0331	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5DN-SS-0-0.5 *Collected:* 5/18/2011 1:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.18		0.0891	MDL	0.445	PQL	mg/Kg	J	Q
BERYLLIUM	0.624		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.320		0.0445	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	27.1		0.134	MDL	0.445	PQL	mg/Kg	J	Q, A
COBALT	8.31		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	18.1		0.0735	MDL	0.445	PQL	mg/Kg	J	Q, A
LEAD	11.4		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, A
NICKEL	16.5		0.111	MDL	0.445	PQL	mg/Kg	J	Q, A
SILVER	0.0383	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q
VANADIUM	60.6		0.0245	MDL	0.111	PQL	mg/Kg	J	A
ZINC	86.5		0.624	MDL	3.34	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP-02-SA5DN-QC-051811 ***Collected:*** 5/18/2011 9:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: SL-054-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 1:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

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

Sample ID: SL-058-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 3:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 10:53:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.66	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 9:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-088-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 10:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	U	0.23	MDL	1.2	PQL	mg/Kg	UJ	FD

Sample ID: SL-202-SA5DN-SS-0-0.5 ***Collected:*** 5/18/2011 1:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

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

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

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0405	J	0.0033	MDL	0.116	PQL	mg/Kg	U	B

Sample ID: SL-054-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0138	J	0.0032	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-055-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0462	J	0.0032	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0365	J	0.0031	MDL	0.107	PQL	mg/Kg	U	B

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0289	J	0.0033	MDL	0.115	PQL	mg/Kg	U	B

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0367	J	0.0030	MDL	0.106	PQL	mg/Kg	U	B

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0265	J	0.0031	MDL	0.108	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 Laboratory: LL

EDD Filename: PrepDE154_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0344	J	0.0032	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0303	J	0.0034	MDL	0.119	PQL	mg/Kg	U	B

Sample ID: SL-202-SA5DN-SS-0-0.5 *Collected:* 5/18/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0211	J	0.0031	MDL	0.109	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 1625C Matrix: SO

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	33.9	J	20.6	MDL	41.1	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M Matrix: SO

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.1	J	2.3	MDL	6.9	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.2	J	4.5	MDL	14	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	10	J	4.5	MDL	13	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.8	U	5.8	MDL	12	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.8	U	5.8	MDL	12	PQL	mg/Kg	UJ	Q
Propylene glycol	5.8	U	5.8	MDL	12	PQL	mg/Kg	UJ	Q

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	5.0	J	4.9	MDL	15	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.42	U	0.42	MDL	0.42	PQL	ug/Kg	UJ	S, FD
4,4'-DDE	0.47		0.077	MDL	0.40	PQL	ug/Kg	J	S
4,4'-DDT	0.24	U	0.24	MDL	0.40	PQL	ug/Kg	UJ	S, FD
ALDRIN	0.077	U	0.077	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.070	U	0.070	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	0.93	U	0.93	MDL	4.0	PQL	ug/Kg	UJ	S
DELTA-BHC	0.042	U	0.042	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.10	U	0.10	MDL	0.40	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.49	U	0.49	MDL	0.49	PQL	ug/Kg	UJ	S, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP-02-SA5DN-QC-051811 ***Collected:*** 5/18/2011 9:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.070	U	0.070	MDL	0.19	PQL	ug/Kg	UJ	S, FD
HEPTACHLOR EPOXIDE	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.40	U	0.40	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
TOXAPHENE	2.6	U	2.6	MDL	7.7	PQL	ug/Kg	UJ	S

Sample ID: SL-054-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 1:50:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.2	J	0.90	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
4,4'-DDE	0.19	U	0.19	MDL	0.39	PQL	ug/Kg	UJ	S
4,4'-DDT	1.1		0.075	MDL	0.39	PQL	ug/Kg	J	S
ALDRIN	0.075	U	0.075	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	1.9	J	0.91	MDL	3.9	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.041	U	0.041	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.083	U	0.083	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.10	U	0.10	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.26	U	0.26	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.073	U	0.073	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.21	U	0.21	MDL	0.39	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 Laboratory: LL

EDD Filename: PrepDE154_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-055-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOXAPHENE	2.5	U	2.5	MDL	7.5	PQL	ug/Kg	UJ	S

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
4,4'-DDE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
4,4'-DDT	0.35	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, S
ALDRIN	0.074	U	0.074	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	2.3	U	2.3	MDL	3.8	PQL	ug/Kg	UJ	S
DELTA-BHC	0.041	U	0.041	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
TOXAPHENE	2.5	U	2.5	MDL	7.4	PQL	ug/Kg	UJ	S

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.090	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.26	J	0.075	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.17	J	0.075	MDL	0.38	PQL	ug/Kg	J	Z
MIREX	0.23	J	0.075	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	S
4,4'-DDE	0.84		0.076	MDL	0.39	PQL	ug/Kg	J	S
ALDRIN	0.076	U	0.076	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.069	U	0.069	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	13		0.92	MDL	3.9	PQL	ug/Kg	J	S
DELTA-BHC	0.042	U	0.042	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.21	U	0.21	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.16	U	0.16	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.069	U	0.069	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.069	U	0.069	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.27	U	0.27	MDL	0.39	PQL	ug/Kg	UJ	S
TOXAPHENE	2.5	U	2.5	MDL	7.6	PQL	ug/Kg	UJ	S

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.5		0.075	MDL	0.38	PQL	ug/Kg	J	S
BETA-BHC	0.82		0.068	MDL	0.19	PQL	ug/Kg	J	S
Chlordane	5.2		0.90	MDL	3.8	PQL	ug/Kg	J	S
gamma-BHC (Lindane)	0.10	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.15	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
4,4'-DDE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
4,4'-DDT	0.10	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z, S
ALDRIN	0.077	U	0.077	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.070	U	0.070	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	1.3	J	0.93	MDL	4.0	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.042	U	0.042	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.18	U	0.18	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.070	U	0.070	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.40	U	0.40	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	S
TOXAPHENE	2.6	U	2.6	MDL	7.7	PQL	ug/Kg	UJ	S

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
4,4'-DDE	0.096	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.86		0.074	MDL	0.38	PQL	ug/Kg	J	S
ALDRIN	0.074	U	0.074	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	1.6	J	0.90	MDL	3.8	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.13	U	0.13	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.049	U	0.049	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.18	U	0.18	MDL	0.38	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	S
TOXAPHENE	2.5	U	2.5	MDL	7.4	PQL	ug/Kg	UJ	S

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
4,4'-DDE	0.23	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.31	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, S
ALDRIN	0.074	U	0.074	MDL	0.19	PQL	ug/Kg	R	S
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	R	S
BETA-BHC	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	R	S
Chlordane	0.90	U	0.90	MDL	3.8	PQL	ug/Kg	R	S
DELTA-BHC	0.041	U	0.041	MDL	0.19	PQL	ug/Kg	R	S
DIELDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	R	S
ENDOSULFAN II	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	R	S
HEPTACHLOR	0.12	J	0.068	MDL	0.19	PQL	ug/Kg	J	Z, S
HEPTACHLOR EPOXIDE	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	R	S
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	R	S
MIREX	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
TOXAPHENE	2.5	U	2.5	MDL	7.4	PQL	ug/Kg	R	S

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.26	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z, FD
4,4'-DDE	0.39	J	0.077	MDL	0.39	PQL	ug/Kg	J	Q
4,4'-DDT	1.2		0.077	MDL	0.39	PQL	ug/Kg	J	Q, FD
BETA-BHC	0.070	U	0.070	MDL	0.19	PQL	ug/Kg	R	Q
ENDRIN KETONE	0.32	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z, Q, Q, FD
HEPTACHLOR	0.10	J	0.070	MDL	0.19	PQL	ug/Kg	J	Z, FD

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.17	J	0.082	MDL	0.42	PQL	ug/Kg	J	Z
MIREX	0.26	J	0.082	MDL	0.42	PQL	ug/Kg	J	Z
TOXAPHENE	4.3	J	2.7	MDL	8.2	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	2.0		0.45	MDL	2.0	PQL	ug/Kg	J	FD
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 Laboratory: LL

EDD Filename: PrepDE154_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-054-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.2	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-056-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	1.6	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	6.1	J	2.3	MDL	9.8	PQL	ug/Kg	J	Z

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.4	J	2.2	MDL	9.6	PQL	ug/Kg	J	Z
Aroclor 5460	18	J	5.6	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.4	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.45	U	0.45	MDL	2.0	PQL	ug/Kg	UJ	FD
Aroclor 5460	3.4	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	8.6		0.41	MDL	2.1	PQL	ug/Kg	J	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 Laboratory: LL

EDD Filename: PrepDE154_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A Matrix: SO

Sample ID: DUP-02-SA5DN-QC-051811 *Collected:* 5/18/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	0.72	U	0.72	MDL	2.0	PQL	ug/Kg	UJ	FD

Sample ID: SL-055-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.13	J	0.085	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.54	J	0.46	MDL	1.4	PQL	ug/Kg	J	Z

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.72	J	0.45	MDL	1.4	PQL	ug/Kg	J	Z
DICHLOROPROP	1.2	J	0.90	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	2.1		0.72	MDL	2.0	PQL	ug/Kg	J	Q, FD

Method Category: SVOA

Method: 8270C Matrix: SO

Sample ID: SL-054-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 1:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	27	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	23	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	19	MDL	370	PQL	ug/Kg	J	Z
CHRYSENE	23	J	19	MDL	190	PQL	ug/Kg	J	Z
Di-n-butylphthalate	54	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-054-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 1:50:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	25	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:30:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	380	PQL	ug/Kg	J	Z
Di-n-butylphthalate	19	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-056-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:53:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	37	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-058-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 3:15:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L
CHRYSENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:08:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 10:28:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	37	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	34	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	44	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-064-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 10:28:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	37	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	25	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	53	J	19	MDL	380	PQL	ug/Kg	J	Z
Butylbenzylphthalate	19	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	43	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	79	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	47	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	79	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-065-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 10:53:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
ACENAPHTHENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
ANTHRACENE	36	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	130	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	120	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	140	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	92	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	67	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	45	J	19	MDL	370	PQL	ug/Kg	J	Z
CARBAZOLE	29	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	160	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	71	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	180	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 9:50:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BENZO(G,H,I)PERYLENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	J	Z
FLUORANTHENE	25	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	410	U	410	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	20	MDL	410	PQL	ug/Kg	J	Z

Sample ID: SL-202-SA5DN-SS-0-0.5 *Collected:* 5/18/2011 1:10:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP-02-SA5DN-QC-051811 ***Collected:*** 5/18/2011 9:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.42	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD
ANTHRACENE	1.4	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	3.7		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	0.95	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	3.1		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	9.4	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	5.0		0.38	MDL	1.9	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
PHENANTHRENE	6.8		0.76	MDL	1.9	PQL	ug/Kg	J	FD
PYRENE	6.5		0.76	MDL	1.9	PQL	ug/Kg	J	FD

Sample ID: SL-054-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 1:50:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.6	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	7.1	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	3.9	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	6.0	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z

Sample ID: SL-056-SA5DN-SS-0.0-0.5 ***Collected:*** 5/18/2011 2:53:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.6	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	7.0	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	5.4	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z
CHRYSENE	5.9	J	1.9	MDL	9.4	PQL	ug/Kg	J	Z
FLUORANTHENE	5.2	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z
PYRENE	4.4	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-058-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.87	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHENE	0.98	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	16	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.8	J	6.9	MDL	21	PQL	ug/Kg	J	Z
FLUORENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 2:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.48	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.8	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	3.8	J	1.9	MDL	9.5	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.9	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z

Sample ID: SL-065-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORENE	5.6	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.59	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.93	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.8	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-087-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	2.2	J	1.9	MDL	9.3	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	5.8	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z

Sample ID: SL-088-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	FD
ANTHRACENE	1.7	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	2.8		0.77	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	3.8		0.77	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	12		0.77	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	FD
CHRYSENE	10		0.38	MDL	1.9	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	1.5	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	13		0.77	MDL	1.9	PQL	ug/Kg	J	FD
PYRENE	13		0.77	MDL	1.9	PQL	ug/Kg	J	FD

Sample ID: SL-090-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.5	J	4.1	MDL	10	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	7.4	J	4.1	MDL	10	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.9	J	4.1	MDL	10	PQL	ug/Kg	J	Z
CHRYSENE	5.7	J	2.0	MDL	10	PQL	ug/Kg	J	Z
FLUORANTHENE	7.5	J	4.1	MDL	10	PQL	ug/Kg	J	Z
PYRENE	5.6	J	4.1	MDL	10	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory:** LL

EDD Filename: PrepDE154_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-202-SA5DN-SS-0-0.5 *Collected:* 5/18/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	7.9	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	8.9	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	6.7	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.7	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
PHENANTHRENE	5.8	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix:** AQ

Sample ID: EB02-SA5DN-SS-051811 *Collected:* 5/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	R	L
2,6-Diamino-4-nitrotoluene	0.20	U	0.20	MDL	0.60	PQL	ug/L	R	L

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-086-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
RDX	120	J	55	MDL	130	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-089-SA5DN-SS-0.0-0.5 *Collected:* 5/18/2011 9:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.1	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8015B** ***Matrix:*** **SO**

Sample ID: **SL-089-SA5DN-SS-0.0-0.5** ***Collected:*** **5/18/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ETHANOL	120	U	120	MDL	580	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: PrepDE154_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE154

Method Blank Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14308BB221117	5/26/2011 11:17:00 AM	ALUMINUM	5.95 mg/Kg	DUP-02-SA5DN-QC-051811
		CALCIUM	12.5 mg/Kg	SL-054-SA5DN-SS-0.0-0.5
		PHOSPHORUS	1.19 mg/Kg	SL-055-SA5DN-SS-0.0-0.5
		STRONTIUM	0.0620 mg/Kg	SL-056-SA5DN-SS-0.0-0.5
		TIN	1.45 mg/Kg	SL-058-SA5DN-SS-0.0-0.5
				SL-059-SA5DN-SS-0.0-0.5
				SL-064-SA5DN-SS-0.0-0.5
				SL-065-SA5DN-SS-0.0-0.5
				SL-086-SA5DN-SS-0.0-0.5
				SL-087-SA5DN-SS-0.0-0.5
				SL-088-SA5DN-SS-0.0-0.5
				SL-089-SA5DN-SS-0.0-0.5
				SL-090-SA5DN-SS-0.0-0.5
				SL-202-SA5DN-SS-0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-02-SA5DN-QC-051811(RES)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-054-SA5DN-SS-0.0-0.5(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-055-SA5DN-SS-0.0-0.5(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-056-SA5DN-SS-0.0-0.5(RES)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-058-SA5DN-SS-0.0-0.5(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-059-SA5DN-SS-0.0-0.5(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-064-SA5DN-SS-0.0-0.5(RES)	TIN	6.34 mg/Kg	6.34U mg/Kg
SL-065-SA5DN-SS-0.0-0.5(RES)	TIN	3.02 mg/Kg	3.02U mg/Kg
SL-086-SA5DN-SS-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-087-SA5DN-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-088-SA5DN-SS-0.0-0.5(RES)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-089-SA5DN-SS-0.0-0.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-090-SA5DN-SS-0.0-0.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-202-SA5DN-SS-0-0.5(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg

Method: **7471A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14311BB220609	5/25/2011 6:09:00 AM	MERCURY	0.0096 mg/Kg	DUP-02-SA5DN-QC-051811
				SL-054-SA5DN-SS-0.0-0.5
				SL-055-SA5DN-SS-0.0-0.5
				SL-056-SA5DN-SS-0.0-0.5
				SL-058-SA5DN-SS-0.0-0.5
				SL-059-SA5DN-SS-0.0-0.5
				SL-064-SA5DN-SS-0.0-0.5
				SL-065-SA5DN-SS-0.0-0.5
				SL-086-SA5DN-SS-0.0-0.5
				SL-087-SA5DN-SS-0.0-0.5
				SL-088-SA5DN-SS-0.0-0.5
				SL-089-SA5DN-SS-0.0-0.5
				SL-090-SA5DN-SS-0.0-0.5
				SL-202-SA5DN-SS-0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **7471A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-02-SA5DN-QC-051811(RES)	MERCURY	0.0405 mg/Kg	0.0405U mg/Kg
SL-054-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0138 mg/Kg	0.0138U mg/Kg
SL-055-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0462 mg/Kg	0.0462U mg/Kg
SL-056-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0365 mg/Kg	0.0365U mg/Kg
SL-058-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0289 mg/Kg	0.0289U mg/Kg
SL-059-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0367 mg/Kg	0.0367U mg/Kg
SL-088-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0265 mg/Kg	0.0265U mg/Kg
SL-089-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0344 mg/Kg	0.0344U mg/Kg
SL-090-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0303 mg/Kg	0.0303U mg/Kg
SL-202-SA5DN-SS-0-0.5(RES)	MERCURY	0.0211 mg/Kg	0.0211U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	ETHANOL	42	33	48.00-130.00	24 (20.00)	ETHANOL	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	ENDOSULFAN SULFATE	-	-	21.00-160.00	56 (50.00)	ENDOSULFAN SULFATE	J(all detects)
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	4,4'-DDT BETA-BHC ENDRIN KETONE	-34 0 17	-33 - -1	10.00-176.00 14.00-147.00 22.00-165.00	- 200 (50.00) -	4,4'-DDT BETA-BHC ENDRIN KETONE	J(all detects) R(all non-detects)
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	4,4'-DDE	12	17	18.00-161.00	-	4,4'-DDE	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	2,4-DB	-	9	10.00-201.00	-	2,4-DB	J(all detects) UJ(all non-detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	m-Terphenyl	63	62	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	36 44 48	56 - -	59.00-109.00 63.00-107.00 63.00-107.00	45 (20.00) 47 (20.00) 45 (20.00)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J(all detects) UJ(all non-detects)
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	- 248	286 541	49.00-123.00 49.00-123.00	30 (20.00) 21 (20.00)	EFH (C21-C30) EFH (C30-C40)	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	2,4-DINITROPHENOL	-	-	20.00-143.00	36 (30.00)	2,4-DINITROPHENOL	J(all detects)
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	BENZIDINE	17	21	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MSD (SL-089-SA5DN-SS-0.0-0.5)	ACENAPHTHENE	-	110	63.00-105.00	-	ACENAPHTHENE	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MS	ARSENIC	321	271	75.00-125.00	-	ARSENIC	J(all detects) V, Zn No Qual, >4x
SL-089-SA5DN-SS-0.0-0.5MSD	BERYLLIUM	172	160	75.00-125.00	-	BERYLLIUM	
(DUP-02-SA5DN-QC-051811	CADMIUM	181	160	75.00-125.00	-	CADMIUM	
SL-054-SA5DN-SS-0.0-0.5	CHROMIUM	298	274	75.00-125.00	-	CHROMIUM	
SL-055-SA5DN-SS-0.0-0.5	COBALT	169	153	75.00-125.00	-	COBALT	
SL-056-SA5DN-SS-0.0-0.5	COPPER	234	203	75.00-125.00	-	COPPER	
SL-058-SA5DN-SS-0.0-0.5	LEAD	335	288	75.00-125.00	-	LEAD	
SL-059-SA5DN-SS-0.0-0.5	NICKEL	257	235	75.00-125.00	-	NICKEL	
SL-064-SA5DN-SS-0.0-0.5	SILVER	148	142	75.00-125.00	-	SILVER	
SL-065-SA5DN-SS-0.0-0.5	VANADIUM	447	406	75.00-125.00	-	VANADIUM	
SL-086-SA5DN-SS-0.0-0.5	ZINC	639	426	75.00-125.00	-	ZINC	
SL-087-SA5DN-SS-0.0-0.5							
SL-088-SA5DN-SS-0.0-0.5							
SL-089-SA5DN-SS-0.0-0.5							
SL-090-SA5DN-SS-0.0-0.5							
SL-202-SA5DN-SS-0-0.5)							
SL-089-SA5DN-SS-0.0-0.5MS	MOLYBDENUM	164	148	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-089-SA5DN-SS-0.0-0.5MSD							
(DUP-02-SA5DN-QC-051811							
SL-054-SA5DN-SS-0.0-0.5							
SL-055-SA5DN-SS-0.0-0.5							
SL-056-SA5DN-SS-0.0-0.5							
SL-058-SA5DN-SS-0.0-0.5							
SL-059-SA5DN-SS-0.0-0.5							
SL-064-SA5DN-SS-0.0-0.5							
SL-065-SA5DN-SS-0.0-0.5							
SL-086-SA5DN-SS-0.0-0.5							
SL-087-SA5DN-SS-0.0-0.5							
SL-088-SA5DN-SS-0.0-0.5							
SL-089-SA5DN-SS-0.0-0.5							
SL-090-SA5DN-SS-0.0-0.5							
SL-202-SA5DN-SS-0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MS (DUP-02-SA5DN-QC-051811 SL-054-SA5DN-SS-0.0-0.5 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)	BARIUM	5	-	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MS	ALUMINUM	1655	2096	75.00-125.00	-	ALUMINUM	J(all detects) Al, Mn, Ti No Qual, >4x
SL-089-SA5DN-SS-0.0-0.5MSD	MANGANESE	146	150	75.00-125.00	-	MANGANESE	
(DUP-02-SA5DN-QC-051811	POTASSIUM	-	158	75.00-125.00	-	POTASSIUM	
SL-054-SA5DN-SS-0.0-0.5	TITANIUM	221	341	75.00-125.00	-	TITANIUM	
SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)							
SL-089-SA5DN-SS-0.0-0.5MS	CALCIUM	22	-	75.00-125.00	-	CALCIUM	No Qual, >4x
SL-089-SA5DN-SS-0.0-0.5MSD	IRON	-1102	-675	75.00-125.00	-	IRON	
(DUP-02-SA5DN-QC-051811 SL-054-SA5DN-SS-0.0-0.5 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (DUP-02-SA5DN-QC-051811 SL-054-SA5DN-SS-0.0-0.5 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)	MAGNESIUM	47	193	75.00-125.00	-	MAGNESIUM	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-054-SA5DN-SS-0.0-0.5MS (SL-054-SA5DN-SS-0.0-0.5 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5)	FLUORIDE	77	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-089-SA5DN-SS-0.0-0.5MS (DUP-02-SA5DN-QC-051811 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)	FLUORIDE	28	-	80.00-120.00	-	FLUORIDE	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-089-SA5DN-SS-0.0-0.5MS SL-089-SA5DN-SS-0.0-0.5MSD (DUP-02-SA5DN-QC-051811 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)	THALLIUM	158	129	75.00-125.00	-	THALLIUM	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-089-SA5DN-SS-0.0-0.5DUP (DUP-02-SA5DN-QC-051811 SL-054-SA5DN-SS-0.0-0.5 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)	Zirconium	28	20.00	No Qual, OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-089-SA5DN-SS-0.0-0.5DUP (DUP-02-SA5DN-QC-051811 SL-054-SA5DN-SS-0.0-0.5 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)	HEXAVALENT CHROMIUM	200	20.00	No Qual, OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-089-SA5DN-SS-0.0-0.5DUP (DUP-02-SA5DN-QC-051811 SL-054-SA5DN-SS-0.0-0.5 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5 SL-089-SA5DN-SS-0.0-0.5 SL-090-SA5DN-SS-0.0-0.5 SL-202-SA5DN-SS-0-0.5)	MERCURY	55	20.00	No Qual, OK by difference

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-054-SA5DN-SS-0.0-0.5DUP (SL-054-SA5DN-SS-0.0-0.5 SL-055-SA5DN-SS-0.0-0.5 SL-056-SA5DN-SS-0.0-0.5 SL-058-SA5DN-SS-0.0-0.5 SL-059-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SS-0.0-0.5 SL-086-SA5DN-SS-0.0-0.5 SL-087-SA5DN-SS-0.0-0.5 SL-088-SA5DN-SS-0.0-0.5)	FLUORIDE	25	20.00	No Qual, OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11435AY241922A	2,4-DIAMINO-6-NITROTOLUENE	-	7	50.00-122.00	164 (30.00)	2,4-DIAMINO-6-NITROTOLUEN	J(all detects)
(EB02-SA5DN-SS-051811)	2,6-Diamino-4-nitrotoluene	-	7	50.00-122.00	164 (30.00)	2,6-Diamino-4-nitrotoluene	R(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11436AQ242127A	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	
(DUP-02-SA5DN-QC-051811	2-AMINO-4,6-DINITROTOLUENE	126	-	80.00-120.00	-	2-AMINO-4,6-DINITROTOLUEN	
SL-064-SA5DN-SS-0.0-0.5	NITROBENZENE	145	-	80.00-120.00	-	NITROBENZENE	
SL-065-SA5DN-SS-0.0-0.5	PETN	132	-	80.00-120.00	-	PETN	
SL-086-SA5DN-SS-0.0-0.5							J (all detects)
SL-087-SA5DN-SS-0.0-0.5							
SL-088-SA5DN-SS-0.0-0.5							
SL-089-SA5DN-SS-0.0-0.5							
SL-090-SA5DN-SS-0.0-0.5)							

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LBLCSQ262116	2,4-DINITROPHENOL	32	-	37.00-120.00	-	2,4-DINITROPHENOL	
(SL-054-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	58	-	60.00-106.00	-	N-NITROSODIMETHYLAMINE	
SL-055-SA5DN-SS-0.0-0.5							
SL-056-SA5DN-SS-0.0-0.5							
SL-058-SA5DN-SS-0.0-0.5							
SL-059-SA5DN-SS-0.0-0.5							
SL-064-SA5DN-SS-0.0-0.5							
SL-065-SA5DN-SS-0.0-0.5							J(all detects)
SL-086-SA5DN-SS-0.0-0.5							UJ(all non-detects)
SL-087-SA5DN-SS-0.0-0.5							
SL-088-SA5DN-SS-0.0-0.5							
SL-089-SA5DN-SS-0.0-0.5							
SL-090-SA5DN-SS-0.0-0.5							
SL-202-SA5DN-SS-0-0.5)							

Surrogate Outlier Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-064-SA5DN-SS-0.0-0.5	n-Triacontane-d62	28	50.00-150.00	All Target Analytes	No Qual, diluted out

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-02-SA5DN-QC-051811	TETRACHLORO-M-XYLENE	40	50.00-130.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-055-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	26	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-056-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	39	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-064-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	18	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-065-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	187	20.00-120.00	All Target Analytes	J(all detects)
SL-086-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	45	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-087-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	34	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-088-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-090-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	576	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-089-SA5DN-SS-0.0-0.5	Terphenyl-d14	139	45.00-135.00	No Affected Compounds	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
MOISTURE	13.8	14.1	2		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
N-NITROSODIMETHYLAMINE	49.9	44.0	13	50.00	No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
FLUORIDE	2.3	2.3	0	50.00	No Qualifiers Applied
Nitrate-NO3	2.2	3.4	43	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
ALUMINUM	26700	25100	6	50.00	No Qualifiers Applied
BORON	23.0	20.3	12	50.00	
CALCIUM	4690	4480	5	50.00	
IRON	29700	27800	7	50.00	
LITHIUM	21.9	21.0	4	50.00	
MAGNESIUM	5860	5720	2	50.00	
MANGANESE	398	454	13	50.00	
PHOSPHORUS	254	252	1	50.00	
POTASSIUM	4190	4080	3	50.00	
SODIUM	106	100	6	50.00	
STRONTIUM	31.3	30.0	4	50.00	
TIN	2.83	2.82	0	50.00	
TITANIUM	1170	1150	2	50.00	
Zirconium	3.06	2.20	33	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
ANTIMONY	0.274	0.279	2	50.00	No Qualifiers Applied
ARSENIC	6.06	5.60	8	50.00	
BARIUM	141	141	0	50.00	
BERYLLIUM	0.881	0.807	9	50.00	
CADMIUM	0.348	0.278	22	50.00	
CHROMIUM	31.1	30.6	2	50.00	
COBALT	10.1	10.7	6	50.00	
COPPER	17.1	15.4	10	50.00	
LEAD	10.4	10.8	4	50.00	
MOLYBDENUM	0.584	0.563	4	50.00	
NICKEL	20.4	18.1	12	50.00	
SELENIUM	0.177	0.152	15	50.00	
SILVER	0.0556	0.0415	29	50.00	
THALLIUM	0.459	0.451	2	50.00	
VANADIUM	58.6	58.0	1	50.00	
ZINC	77.8	75.1	4	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
HEXAVALENT CHROMIUM	1.2 U	0.54	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
MERCURY	0.0344	0.0405	16	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
EFH (C15-C20)	3.6	2.3	44	50.00	No Qualifiers Applied
EFH (C21-C30)	10	9.3	7	50.00	
EFH (C30-C40)	28	36	25	50.00	

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
4,4'-DDE	0.39	0.47	19	50.00	No Qualifiers Applied
4,4'-DDD	0.26	0.42 U	200	50.00	J(all detects) UJ(all non-detects)
4,4'-DDT	1.2	0.40 U	200	50.00	
ENDRIN KETONE	0.32	0.49 U	200	50.00	
HEPTACHLOR	0.10	0.19 U	200	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
AROCLOR 1260	2.0 U	2.0	200	50.00	J(all detects)
Aroclor 5460	3.4	3.8 U	200	50.00	UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
2,4-DB	2.1	2.0 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
ANTHRACENE	1.7	1.4	19	50.00	No Qualifiers Applied
ACENAPHTHYLENE	1.9 U	0.42	200	50.00	
BENZO(A)ANTHRACENE	2.8	1.3	73	50.00	
BENZO(A)PYRENE	3.8	1.4	92	50.00	
BENZO(B)FLUORANTHENE	12	3.7	106	50.00	
BENZO(G,H,I)PERYLENE	1.6	0.95	51	50.00	J(all detects)
BENZO(K)FLUORANTHENE	1.9 U	3.1	200	50.00	UJ(all non-detects)
CHRYSENE	10	5.0	67	50.00	
INDENO(1,2,3-CD)PYRENE	1.5	1.9 U	200	50.00	
PHENANTHRENE	13	6.8	63	50.00	
PYRENE	13	6.5	67	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-089-SA5DN-SS-0.0-0.5	DUP-02-SA5DN-QC-051811			
PH	6.56	6.52	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-090-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	33.9	41.1	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5DN-QC-051811	SODIUM	J	100	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.82	11.5	PQL	mg/Kg	
	Zirconium	J	2.20	5.76	PQL	mg/Kg	
SL-054-SA5DN-SS-0.0-0.5	TIN	J	2.51	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.27	5.65	PQL	mg/Kg	
SL-055-SA5DN-SS-0.0-0.5	TIN	J	2.50	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.91	5.58	PQL	mg/Kg	
SL-056-SA5DN-SS-0.0-0.5	SODIUM	J	101	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.63	11.1	PQL	mg/Kg	
	Zirconium	J	3.43	5.54	PQL	mg/Kg	
SL-058-SA5DN-SS-0.0-0.5	SODIUM	J	82.8	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.60	11.3	PQL	mg/Kg	
	Zirconium	J	3.52	5.64	PQL	mg/Kg	
SL-059-SA5DN-SS-0.0-0.5	SODIUM	J	98.7	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.40	11.0	PQL	mg/Kg	
	Zirconium	J	2.96	5.50	PQL	mg/Kg	
SL-064-SA5DN-SS-0.0-0.5	BORON	J	13.3	28.3	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.6	113	PQL	mg/Kg	
	TIN	J	6.34	11.3	PQL	mg/Kg	
SL-065-SA5DN-SS-0.0-0.5	SODIUM	J	90.7	111	PQL	mg/Kg	J (all detects)
	TIN	J	3.02	11.1	PQL	mg/Kg	
	Zirconium	J	2.60	5.54	PQL	mg/Kg	
SL-086-SA5DN-SS-0.0-0.5	SODIUM	J	108	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.66	11.3	PQL	mg/Kg	
	Zirconium	J	3.01	5.66	PQL	mg/Kg	
SL-087-SA5DN-SS-0.0-0.5	SODIUM	J	107	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.62	10.8	PQL	mg/Kg	
	Zirconium	J	2.42	5.41	PQL	mg/Kg	
SL-088-SA5DN-SS-0.0-0.5	SODIUM	J	87.3	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.44	10.9	PQL	mg/Kg	
	Zirconium	J	1.85	5.47	PQL	mg/Kg	
SL-089-SA5DN-SS-0.0-0.5	SODIUM	J	106	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.83	11.5	PQL	mg/Kg	
	Zirconium	J	3.06	5.74	PQL	mg/Kg	
SL-090-SA5DN-SS-0.0-0.5	SODIUM	J	116	123	PQL	mg/Kg	J (all detects)
	TIN	J	2.89	12.3	PQL	mg/Kg	
	Zirconium	J	2.31	6.13	PQL	mg/Kg	
SL-202-SA5DN-SS-0-0.5	TIN	J	2.64	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.83	5.57	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5DN-QC-051811	SELENIUM	J	0.152	0.461	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0415	0.115	PQL	mg/Kg	
SL-054-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.217	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0860	0.439	PQL	mg/Kg	
	SILVER	J	0.0488	0.110	PQL	mg/Kg	
SL-055-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.193	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.102	0.447	PQL	mg/Kg	
SL-056-SA5DN-SS-0.0-0.5	SELENIUM	J	0.0924	0.443	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0599	0.111	PQL	mg/Kg	
SL-058-SA5DN-SS-0.0-0.5	SELENIUM	J	0.181	0.460	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0739	0.115	PQL	mg/Kg	
SL-059-SA5DN-SS-0.0-0.5	SELENIUM	J	0.119	0.454	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0550	0.113	PQL	mg/Kg	
SL-064-SA5DN-SS-0.0-0.5	SELENIUM	J	0.119	0.444	PQL	mg/Kg	J (all detects)
	SILVER	J	0.104	0.111	PQL	mg/Kg	
SL-065-SA5DN-SS-0.0-0.5	SELENIUM	J	0.163	0.448	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0590	0.112	PQL	mg/Kg	
SL-086-SA5DN-SS-0.0-0.5	SELENIUM	J	0.220	0.448	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0490	0.112	PQL	mg/Kg	
SL-087-SA5DN-SS-0.0-0.5	SELENIUM	J	0.141	0.437	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0786	0.109	PQL	mg/Kg	
SL-088-SA5DN-SS-0.0-0.5	SELENIUM	J	0.147	0.437	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0394	0.109	PQL	mg/Kg	
SL-089-SA5DN-SS-0.0-0.5	SELENIUM	J	0.177	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0556	0.113	PQL	mg/Kg	
SL-090-SA5DN-SS-0.0-0.5	SELENIUM	J	0.118	0.481	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0559	0.120	PQL	mg/Kg	
SL-202-SA5DN-SS-0-0.5	SELENIUM	J	0.143	0.445	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0383	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5DN-QC-051811	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)
SL-054-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-058-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-065-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.66	1.1	PQL	mg/Kg	J (all detects)
SL-086-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.2	PQL	mg/Kg	J (all detects)
SL-088-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.55	1.1	PQL	mg/Kg	J (all detects)
SL-202-SA5DN-SS-0-0.5	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5DN-QC-051811	MERCURY	J	0.0405	0.116	PQL	mg/Kg	J (all detects)
SL-054-SA5DN-SS-0.0-0.5	MERCURY	J	0.0138	0.112	PQL	mg/Kg	J (all detects)
SL-055-SA5DN-SS-0.0-0.5	MERCURY	J	0.0462	0.113	PQL	mg/Kg	J (all detects)
SL-056-SA5DN-SS-0.0-0.5	MERCURY	J	0.0365	0.107	PQL	mg/Kg	J (all detects)
SL-058-SA5DN-SS-0.0-0.5	MERCURY	J	0.0289	0.115	PQL	mg/Kg	J (all detects)
SL-059-SA5DN-SS-0.0-0.5	MERCURY	J	0.0367	0.106	PQL	mg/Kg	J (all detects)
SL-088-SA5DN-SS-0.0-0.5	MERCURY	J	0.0265	0.108	PQL	mg/Kg	J (all detects)
SL-089-SA5DN-SS-0.0-0.5	MERCURY	J	0.0344	0.112	PQL	mg/Kg	J (all detects)
SL-090-SA5DN-SS-0.0-0.5	MERCURY	J	0.0303	0.119	PQL	mg/Kg	J (all detects)
SL-202-SA5DN-SS-0-0.5	MERCURY	J	0.0211	0.109	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-064-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	4.1	6.9	PQL	mg/Kg	J (all detects)
SL-065-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.2	14	PQL	mg/Kg	J (all detects)
SL-087-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	10	13	PQL	mg/Kg	J (all detects)
SL-090-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	5.0	15	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5DN-SS-0.0-0.5	Chlordane	J	2.2	3.8	PQL	ug/Kg	J (all detects)
SL-055-SA5DN-SS-0.0-0.5	Chlordane	J	1.9	3.9	PQL	ug/Kg	J (all detects)
SL-056-SA5DN-SS-0.0-0.5	4,4'-DDT	J	0.35	0.38	PQL	ug/Kg	J (all detects)
SL-058-SA5DN-SS-0.0-0.5	HEPTACHLOR EPOXIDE	J	0.090	0.19	PQL	ug/Kg	J (all detects)
SL-059-SA5DN-SS-0.0-0.5	4,4'-DDT ENDRIN ALDEHYDE MIREX	J J J	0.26 0.17 0.23	0.38 0.38 0.38	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-065-SA5DN-SS-0.0-0.5	gamma-BHC (Lindane) HEPTACHLOR EPOXIDE	J J	0.10 0.15	0.19 0.19	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-086-SA5DN-SS-0.0-0.5	4,4'-DDT Chlordane	J J	0.10 1.3	0.40 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-087-SA5DN-SS-0.0-0.5	4,4'-DDE Chlordane	J J	0.096 1.6	0.38 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-088-SA5DN-SS-0.0-0.5	4,4'-DDE	J	0.23	0.38	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.31	0.38	PQL	ug/Kg	
	HEPTACHLOR	J	0.12	0.19	PQL	ug/Kg	
SL-089-SA5DN-SS-0.0-0.5	4,4'-DDD	J	0.26	0.39	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.32	0.39	PQL	ug/Kg	
	HEPTACHLOR	J	0.10	0.19	PQL	ug/Kg	
SL-090-SA5DN-SS-0.0-0.5	4,4'-DDT	J	0.17	0.42	PQL	ug/Kg	J (all detects)
	MIREX	J	0.26	0.42	PQL	ug/Kg	
	TOXAPHENE	J	4.3	8.2	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.2	3.7	PQL	ug/Kg	J (all detects)
SL-056-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.6	3.7	PQL	ug/Kg	
SL-064-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	6.1	9.8	PQL	ug/Kg	J (all detects)
SL-065-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	4.4	9.6	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	18	19	PQL	ug/Kg	
SL-086-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.4	3.8	PQL	ug/Kg	J (all detects)
SL-089-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.4	3.8	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-055-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.13	0.19	PQL	ug/Kg	J (all detects)
SL-064-SA5DN-SS-0.0-0.5	DICAMBA	J	0.54	1.4	PQL	ug/Kg	J (all detects)
SL-065-SA5DN-SS-0.0-0.5	DICAMBA	J	0.72	1.4	PQL	ug/Kg	J (all detects)
	DICHLOROPROP	J	1.2	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	27	190	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	23	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	370	PQL	ug/Kg	
	CHRYSENE	J	23	190	PQL	ug/Kg	
	Di-n-butylphthalate	J	54	190	PQL	ug/Kg	
	FLUORANTHENE	J	22	190	PQL	ug/Kg	
	PYRENE	J	25	190	PQL	ug/Kg	
SL-055-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	380	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	19	190	PQL	ug/Kg	
SL-056-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	37	370	PQL	ug/Kg	J (all detects)
SL-058-SA5DN-SS-0.0-0.5	CHRYSENE	J	22	190	PQL	ug/Kg	J (all detects)
SL-059-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	370	PQL	ug/Kg	J (all detects)
SL-064-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	37	190	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	34	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	44	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	37	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	25	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	53	380	PQL	ug/Kg	
	Butylbenzylphthalate	J	19	190	PQL	ug/Kg	
	CHRYSENE	J	43	190	PQL	ug/Kg	
	FLUORANTHENE	J	79	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	22	190	PQL	ug/Kg	
	PHENANTHRENE	J	47	190	PQL	ug/Kg	
	PYRENE	J	79	190	PQL	ug/Kg	
SL-065-SA5DN-SS-0.0-0.5	ACENAPHTHENE	J	21	190	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	36	190	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	130	190	PQL	ug/Kg	
	BENZO(A)PYRENE	J	120	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	140	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	92	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	67	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	45	370	PQL	ug/Kg	
	CARBAZOLE	J	29	190	PQL	ug/Kg	
	CHRYSENE	J	160	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	71	190	PQL	ug/Kg	
	PHENANTHRENE	J	180	190	PQL	ug/Kg	
SL-086-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	380	PQL	ug/Kg	J (all detects)
SL-087-SA5DN-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	22	180	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	370	PQL	ug/Kg	
SL-088-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	370	PQL	ug/Kg	J (all detects)
SL-089-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	25	190	PQL	ug/Kg	
SL-090-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	410	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-02-SA5DN-QC-051811	ACENAPHTHYLENE	J	0.42	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.95	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.4	21	PQL	ug/Kg	
SL-054-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	4.6	9.3	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	7.1	9.3	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	3.9	9.3	PQL	ug/Kg	
SL-055-SA5DN-SS-0.0-0.5	DIBENZO(A,H)ANTHRACENE	J	6.0	9.4	PQL	ug/Kg	J (all detects)
SL-056-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	4.6	9.4	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	7.0	9.4	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	5.4	9.4	PQL	ug/Kg	
	CHRYSENE	J	5.9	9.4	PQL	ug/Kg	
	FLUORANTHENE	J	5.2	9.4	PQL	ug/Kg	
	PYRENE	J	4.4	9.4	PQL	ug/Kg	
SL-058-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.87	1.9	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	0.98	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	16	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.8	21	PQL	ug/Kg	
	FLUORENE	J	1.0	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
SL-059-SA5DN-SS-0.0-0.5	ANTHRACENE	J	0.48	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.8	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.9	PQL	ug/Kg	
	PYRENE	J	1.8	1.9	PQL	ug/Kg	
SL-064-SA5DN-SS-0.0-0.5	ANTHRACENE	J	3.8	9.5	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	3.9	9.5	PQL	ug/Kg	
SL-065-SA5DN-SS-0.0-0.5	FLUORENE	J	5.6	9.3	PQL	ug/Kg	J (all detects)
SL-086-SA5DN-SS-0.0-0.5	ANTHRACENE	J	0.59	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.93	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	
SL-087-SA5DN-SS-0.0-0.5	ACENAPHTHYLENE	J	2.2	9.3	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	5.8	9.3	PQL	ug/Kg	
SL-088-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
	PYRENE	J	1.3	1.8	PQL	ug/Kg	
SL-089-SA5DN-SS-0.0-0.5	ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.6	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.5	1.9	PQL	ug/Kg	
SL-090-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	4.5	10	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	7.4	10	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.9	10	PQL	ug/Kg	
	CHRYSENE	J	5.7	10	PQL	ug/Kg	
	FLUORANTHENE	J	7.5	10	PQL	ug/Kg	
	PYRENE	J	5.6	10	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE154 **Laboratory: LL**

EDD Filename: DE154_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-202-SA5DN-SS-0-0.5	BENZO(A)ANTHRACENE	J	7.9	9.3	PQL	ug/Kg	
	BENZO(A)PYRENE	J	8.9	9.3	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	6.7	9.3	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	5.7	9.3	PQL	ug/Kg	
	PHENANTHRENE	J	5.8	9.3	PQL	ug/Kg	

Method: 8330A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-086-SA5DN-SS-0.0-0.5	RDX	J	120	130	PQL	ug/Kg	J (all detects)

LDC #: 26275M4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE154 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	AR, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn > 4X
VII.	Duplicate Sample Analysis	A	Hg, Zr < 5X
VIII.	Laboratory Control Samples (LCS)	A	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr, Co, Cu, Pb, Ni, V, Zn
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	-	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-054-SA5DN-SS-0.0-0.5	11	SL-089-SA5DN-SS-0.0-0.5	21		31	
2	SL-055-SA5DN-SS-0.0-0.5	12	SL-090-SA5DN-SS-0.0-0.5	22		32	
3	SL-056-SA5DN-SS-0.0-0.5	13	SL-202-SA5DN-SS-0.0-0.5	23		33	
4	SL-058-SA5DN-SS-0.0-0.5	14	DUP-02-SA5DN-QC-051811	24		34	
5	SL-059-SA5DN-SS-0.0-0.5	15	SL-089-SA5DN-SS-0.0-0.5MS	25		35	
6	SL-064-SA5DN-SS-0.0-0.5	16	SL-089-SA5DN-SS-0.0-0.5MSD	26		36	
7	SL-065-SA5DN-SS-0.0-0.5	17	SL-089-SA5DN-SS-0.0-0.5DUP	27		37	
8	SL-086-SA5DN-SS-0.0-0.5	18		28		38	
9	SL-087-SA5DN-SS-0.0-0.5	19		29		39	
10	SL-088-SA5DN-SS-0.0-0.5	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE154
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6291999BKG Matrix Spike Lab Sample ID: 6292000MS Matrix Spike Duplicate Lab Sample ID: 6292001MSD
% Solids for Sample: 86.2
Batch Id(s): P14308B, P14326A, P14311B, P15326B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		26715.5717		30556.5754		31391.7098		232.0186	223.0948	MG/KG	1655		2096		3			20	P
Antimony	121	0.2741		1.7006		1.4955		1.3783	1.3516	MG/KG	103		90		13		75 - 125	20	MS
Arsenic	75	6.0573		13.4318		12.1551		2.2972	2.2526	MG/KG	321	N	271	N	10		75 - 125	20	MS
Barium	137	140.5402		141.1178		151.6906		11.4861	11.2630	MG/KG	5		99		7			20	MS
Beryllium	9	0.8812		2.4580		2.3202		0.9189	0.9010	MG/KG	172	N	160	N	6		75 - 125	20	MS
Boron		22.9652		248.4002		236.9177		232.0186	223.0948	MG/KG	97		96		5		84 - 115	20	P
Cadmium	111	0.3485		2.4327		2.1485		1.1486	1.1263	MG/KG	181	N	160	N	12		75 - 125	20	MS
Calcium		4691.5198		4791.9211		5077.7775		464.0371	446.1895	MG/KG	22		87		6			20	P
Chromium	52	31.1085		65.3328		61.9467		11.4861	11.2630	MG/KG	298	N	274	N	5		75 - 125	20	MS
Cobalt	59	10.1052		107.1420		96.2314		57.4303	56.3152	MG/KG	169	N	153	N	11		75 - 125	20	MS
Copper	63	17.0658		43.8997		39.9162		11.4861	11.2630	MG/KG	234	N	203	N	10		75 - 125	20	MS
Iron		29740.2231		28462.0870		28987.7733		116.0093	111.5474	MG/KG	-1102		-675		2			20	P
Lead	208	10.4206		21.9683		20.1676		3.4458	3.3789	MG/KG	335	N	288	N	9		75 - 125	20	MS
Lithium		21.9235		141.2030		136.7861		116.0093	111.5474	MG/KG	103		103		3		82 - 114	20	P
Magnesium		5857.7428		5967.9513		6287.8581		232.0186	223.0948	MG/KG	47		193		5			20	P
Manganese		398.3150		483.2216		482.2327		58.0046	55.7737	MG/KG	146		150		0			20	P
Mercury		0.0344	B	0.2161		0.2220		0.1847	0.1914	MG/KG	98		98		3		65 - 135	20	CV
Molybdenum	98	0.5841		19.4482		17.2234		11.4861	11.2630	MG/KG	164	N	148	N	12		75 - 125	20	MS
Nickel	60	20.3771		49.8725		46.8542		11.4861	11.2630	MG/KG	257	N	235	N	6		75 - 125	20	MS
Phosphorus		254.4784		362.9153		369.1382		116.0093	111.5474	MG/KG	93		103		2		75 - 125	20	P
Potassium		4193.3151		5440.8318		5952.5187		1160.0928	1115.4739	MG/KG	108		158	N	9		75 - 125	20	P
Selenium	78	0.1773	B	2.1385		2.1979		2.2972	2.2526	MG/KG	85		90		3		75 - 125	20	MS
Silver	107	0.0556	B	17.0453		16.0431		11.4861	11.2630	MG/KG	148	N	142	N	6		75 - 125	20	MS
Sodium		106.1336	B	1229.4640		1189.0338		1160.0928	1115.4739	MG/KG	97		97		3		75 - 125	20	P
Strontium		31.3053		142.7726		139.2067		116.0093	111.5474	MG/KG	96		97		3		75 - 115	20	P
Thallium	203	0.4590		1.1935		1.0459		0.4640	0.4549	MG/KG	158	N	129	N	13		75 - 125	20	MS
Tin		2.8313	B	426.0673		403.3163		464.0371	446.1895	MG/KG	91		90		5		80 - 110	20	P
Titanium		1172.2474		1428.8944		1553.1010		116.0093	111.5474	MG/KG	221		341		8			20	P
Vanadium	51	58.6354		109.9906		104.3182		11.4861	11.2630	MG/KG	447		406		5			20	MS
Zinc	66	77.7600		151.1566		125.6955		11.4861	11.2630	MG/KG	639		426		18			20	MS
Zirconium		3.0610	B	113.3074		109.1335		116.0093	111.5474	MG/KG	95		95		4		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE154
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6291999BKG
% Solids for Duplicate: 84.9
Batch ID(s): P14308B, P14326A, P14311B, P15326B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6292002DUP
% Solids for Sample: 86.2

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			26715.5717		24535.0303		9		P
Antimony	121	0.2	0.2741		0.3113		13		MS
Arsenic	75		6.0573		6.0460		0		MS
Barium	137		140.5402		144.7075		3		MS
Beryllium	9		0.8812		0.8880		1		MS
Boron		5.7	22.9652		21.2522		8		P
Cadmium	111	0.1	0.3485		0.3111		11		MS
Calcium			4691.5198		4428.2139		6		P
Chromium	52		31.1085		32.1447		3		MS
Cobalt	59		10.1052		10.4926		4		MS
Copper	63		17.0658		16.2053		5		MS
Iron			29740.2231		27540.3836		8		P
Lead	208		10.4206		10.5692		1		MS
Lithium			21.9235		20.7071		6		P
Magnesium			5857.7428		5581.7516		5		P
Manganese			398.3150		448.1258		12		P
Mercury			0.0344	B	0.0195	B	55		CV
Molybdenum	98	0.1	0.5841		0.5510		6		MS
Nickel	60		20.3771		20.4514		0		MS
Phosphorus			254.4784		263.9121		4		P
Potassium			4193.3151		4242.7511		1		P
Selenium	78		0.1773	B	0.1672	B	6		MS
Silver	107		0.0556	B	0.0508	B	9		MS
Sodium			106.1336	B	96.9398	B	9		P
Strontium			31.3053		30.2086		4		P
Thallium	203	0.1	0.4590		0.4725		3		MS
Tin			2.8313	B	2.6558	B	6		P
Titanium			1172.2474		1183.6066		1		P
Vanadium	51		58.6354		61.6088		5		MS
Zinc	66		77.7600		78.0979		0		MS
Zirconium			3.0610	B	4.0592	B	28		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE154 SB10

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE154
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6291999BKG Serial Dilution Lab Sample ID: 6291999L
Batch ID(s): P14308B, P14326A, P15326B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		232591.1100		234240.6500		1		P
Antimony	121	1.2170		1.9615	B	61		MS
Arsenic	75	26.8900		30.3400		13		MS
Barium	137	623.9000		686.5000		10		MS
Beryllium	9	3.9120		4.7135		20		MS
Boron		199.9400		222.1000	B	11		P
Cadmium	111	1.5470		1.4025	B	9		MS
Calcium		40845.3100		41740.7000		2		P
Chromium	52	138.1000		174.7500		27	E	MS
Cobalt	59	44.8600		50.8500		13	E	MS
Copper	63	75.7600		85.6000		13	E	MS
Iron		258924.3300		259790.8000		0		P
Lead	208	46.2600		51.3000		11	E	MS
Lithium		190.8700		199.1000		4		P
Magnesium		50998.6800		51404.3000		1		P
Manganese		3467.8100		3658.2000		5		P
Molybdenum	98	2.5930		3.5270		36		MS
Nickel	60	90.4600		105.9500		17	E	MS
Phosphorus		2215.5400		2218.9500		0		P
Potassium		36507.8400		37085.5500		2		P
Selenium	78	0.7872	B	1.0450	B	33		MS
Silver	107	0.2467	B	0.3332	B	35		MS
Sodium		924.0200	B	1865.0000	U	100		P
Strontium		272.5500		278.6000		2		P
Thallium	203	2.0180		1.7850	B	12		MS
Tin		24.6500	B	50.0000	U	100		P
Titanium		10205.8200		10459.6500		2		P
Vanadium	51	260.3000		329.8500		27	E	MS
Zinc	66	345.2000		382.9500		11	E	MS
Zirconium		26.6500	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE154 5013

SAMPLE DELIVERY GROUP

DE155

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	3050B	6010B	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	3050B	6020	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	3060A	7199	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	3550B	8082	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	3550B	8270C	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	3550B	8270C SIM	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	5035	8260B	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	5035	8260B SIM	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	METHOD	300.0	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	METHOD	314.0	III
18-May-2011	SL-069-SA5DN-SB-4.0-5.0	6292030	N	METHOD	7471A	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	3050B	6010B	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	3050B	6020	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	3060A	7199	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	3550B	8082	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	3550B	8270C	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	3550B	8270C SIM	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	METHOD	300.0	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	METHOD	314.0	III
18-May-2011	SL-069-SA5DN-SB-9.0-10.0	6292031	N	METHOD	7471A	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	3050B	6010B	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	3050B	6020	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	3060A	7199	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	3550B	8082	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	3550B	8270C	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	5035	8260B	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	5035	8260B SIM	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	METHOD	300.0	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	METHOD	314.0	III
18-May-2011	SL-070-SA5DN-SB-4.0-5.0	6292032	N	METHOD	7471A	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	3050B	6010B	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	3050B	6020	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	3060A	7199	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	3550B	8082	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	3550B	8270C	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	3550B	8270C SIM	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	METHOD	300.0	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	METHOD	314.0	III
18-May-2011	SL-070-SA5DN-SB-9.0-10.0	6292033	N	METHOD	7471A	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	3050B	6010B	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	3050B	6020	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	3060A	7199	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	3550B	8082	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	3550B	8270C	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	3550B	8270C SIM	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	5035	8260B	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	5035	8260B SIM	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	8330	8330A	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	METHOD	300.0	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	METHOD	314.0	III
18-May-2011	SL-074-SA5DN-SB-4.0-5.0	6292034	N	METHOD	7471A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	3050B	6010B	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	3050B	6020	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	3060A	7199	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	3550B	8082	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	3550B	8270C	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	3550B	8270C SIM	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	8330	8330A	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	METHOD	300.0	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	METHOD	314.0	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	METHOD	6850	III
18-May-2011	SL-074-SA5DN-SB-9.0-10.0	6292035	N	METHOD	7471A	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	3050B	6010B	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	3050B	6020	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	3060A	7199	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	3550B	8082	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	3550B	8270C	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	3550B	8270C SIM	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	5035	8260B	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	5035	8260B SIM	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	METHOD	300.0	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	METHOD	314.0	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0	6292036	N	METHOD	7471A	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	3050B	6010B	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	3050B	6020	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	3060A	7199	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	3550B	8270C	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	3550B	8270C SIM	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	5035	8260B	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	5035	8260B SIM	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	METHOD	300.0	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	METHOD	314.0	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0MS	6292037	MS	METHOD	7471A	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0DU	6292039	DUP	3050B	6010B	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0DU	6292039	DUP	3050B	6020	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0DU	6292039	DUP	3060A	7199	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0DU	6292039	DUP	METHOD	300.0	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0DU	6292039	DUP	METHOD	314.0	III
18-May-2011	SL-076-SA5DN-SB-4.0-5.0DU	6292039	DUP	METHOD	7471A	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	3050B	6010B	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	3050B	6020	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	3060A	7199	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	3550B	8082	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	3550B	8270C	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	3550B	8270C SIM	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	5035	8260B	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	5035	8260B SIM	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	METHOD	300.0	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	METHOD	314.0	III
18-May-2011	DUP-03-SA5DN-QC-051811	6292041	FD	METHOD	7471A	III
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	3050B	6010B	III
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	3060A	7199	III
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	3550B	8082	III
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	3550B	8270C	III
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	3550B	8270C SIM	III
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	METHOD	300.0	III
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	METHOD	314.0	III
18-May-2011	SL-076-SA5DN-SB-9.0-10.0	6292040	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	44400		6.83	MDL	22.3	PQL	mg/Kg	J	E, E, FD
PHOSPHORUS	124		0.624	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2430		20.1	MDL	55.7	PQL	mg/Kg	J	Q
TIN	2.99	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
TITANIUM	1040		0.424	MDL	1.11	PQL	mg/Kg	J	E

Sample ID: SL-069-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 9:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	7160		6.92	MDL	22.6	PQL	mg/Kg	J	E, E
PHOSPHORUS	154		0.632	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	2870		20.3	MDL	56.4	PQL	mg/Kg	J	Q
TIN	3.15	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1190		0.429	MDL	1.13	PQL	mg/Kg	J	E

Sample ID: SL-069-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 9:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5570		6.87	MDL	22.4	PQL	mg/Kg	J	E, E
PHOSPHORUS	260		0.627	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2690		20.2	MDL	56.0	PQL	mg/Kg	J	Q
TIN	3.04	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
TITANIUM	1220		0.426	MDL	1.12	PQL	mg/Kg	J	E

Sample ID: SL-070-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 10:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4650		6.92	MDL	22.6	PQL	mg/Kg	J	E, E
PHOSPHORUS	260		0.633	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3090		20.3	MDL	56.5	PQL	mg/Kg	J	Q
TIN	3.14	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1600		0.429	MDL	1.13	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-070-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 10:53:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	8990		6.93	MDL	22.6	PQL	mg/Kg	J	E, E
PHOSPHORUS	239		0.633	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	2230		20.4	MDL	56.5	PQL	mg/Kg	J	Q
TIN	2.72	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	711		0.430	MDL	1.13	PQL	mg/Kg	J	E
Zirconium	3.75	J	0.950	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 12:44:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	22300		6.70	MDL	21.9	PQL	mg/Kg	J	E, E
PHOSPHORUS	165		0.612	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3070		19.7	MDL	54.6	PQL	mg/Kg	J	Q
TIN	3.21	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
TITANIUM	1180		0.415	MDL	1.09	PQL	mg/Kg	J	E

Sample ID: SL-074-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 12:48:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	78700		14.3	MDL	46.6	PQL	mg/Kg	J	E, E

Sample ID: SL-074-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 12:48:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.30	J	1.04	MDL	5.83	PQL	mg/Kg	J	Z
PHOSPHORUS	445		0.653	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	3620		21.0	MDL	58.3	PQL	mg/Kg	J	Q
TIN	2.83	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
TITANIUM	1360		0.443	MDL	1.17	PQL	mg/Kg	J	E

Sample ID: SL-076-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 3:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5820		6.51	MDL	21.2	PQL	mg/Kg	J	E, E, FD
PHOSPHORUS	155		0.595	MDL	10.6	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-076-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2720		19.1	MDL	53.1	PQL	mg/Kg	J	Q
TIN	2.97	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
TITANIUM	715		0.404	MDL	1.06	PQL	mg/Kg	J	E
Zirconium	3.85	J	0.892	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	66100		13.9	MDL	45.4	PQL	mg/Kg	J	E, E

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	427		0.635	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3340		20.4	MDL	56.7	PQL	mg/Kg	J	Q
TIN	2.48	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1260		0.431	MDL	1.13	PQL	mg/Kg	J	E

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0596	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.183		0.0563	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	115		0.122	MDL	0.450	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 Laboratory: LL

EDD Filename: PrepDE155_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-03-SA5DN-QC-051811 **Collected:** 5/18/2011 3:22:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.235		0.0676	MDL	0.225	PQL	mg/Kg	J	Q, E, FD
ARSENIC	6.40		0.0901	MDL	0.450	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.10		0.0180	MDL	0.113	PQL	mg/Kg	J	Q, E
CADMIUM	0.120		0.0450	MDL	0.113	PQL	mg/Kg	J	Q, E, E
CHROMIUM	39.8		0.135	MDL	0.450	PQL	mg/Kg	J	Q, E, A
COBALT	15.0		0.0225	MDL	0.113	PQL	mg/Kg	J	Q, E, FD, A
COPPER	16.2		0.0743	MDL	0.450	PQL	mg/Kg	J	Q, E, A
LEAD	13.0		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E, A
NICKEL	24.7		0.113	MDL	0.450	PQL	mg/Kg	J	Q, E, A
SILVER	0.0355	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q, E
VANADIUM	60.1		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, E, A
ZINC	67.7		0.631	MDL	3.38	PQL	mg/Kg	J	E

Sample ID: SL-069-SA5DN-SB-4.0-5.0 **Collected:** 5/18/2011 9:18:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-069-SA5DN-SB-4.0-5.0 **Collected:** 5/18/2011 9:18:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.562		0.0559	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-069-SA5DN-SB-4.0-5.0 **Collected:** 5/18/2011 9:18:00 **Analysis Type:** REA3 **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.302	MDL	1.12	PQL	mg/Kg	J	E, A

Sample ID: SL-069-SA5DN-SB-4.0-5.0 **Collected:** 5/18/2011 9:18:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.350		0.0671	MDL	0.224	PQL	mg/Kg	J	Q, E
ARSENIC	8.66		0.0894	MDL	0.447	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.37		0.0179	MDL	0.112	PQL	mg/Kg	J	Q, E
CADMIUM	0.232		0.0447	MDL	0.112	PQL	mg/Kg	J	Q, E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-069-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 9:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	45.5		0.134	MDL	0.447	PQL	mg/Kg	J	Q, E, A
COBALT	13.0		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E, A
COPPER	19.6		0.0738	MDL	0.447	PQL	mg/Kg	J	Q, E, A
LEAD	14.2		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, E, A
NICKEL	32.2		0.112	MDL	0.447	PQL	mg/Kg	J	Q, E, A
SILVER	0.0750	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q, E
VANADIUM	81.8		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, E, A
ZINC	84.8		0.626	MDL	3.35	PQL	mg/Kg	J	E

Sample ID: SL-069-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 9:24:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0759	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-069-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 9:24:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.553		0.0560	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-069-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 9:24:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	152		0.121	MDL	0.448	PQL	mg/Kg	J	E, A

Sample ID: SL-069-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 9:24:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.279		0.0672	MDL	0.224	PQL	mg/Kg	J	Q, E
ARSENIC	9.46		0.0896	MDL	0.448	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.08		0.0179	MDL	0.112	PQL	mg/Kg	J	Q, E
CADMIUM	0.195		0.0448	MDL	0.112	PQL	mg/Kg	J	Q, E, E
CHROMIUM	40.9		0.134	MDL	0.448	PQL	mg/Kg	J	Q, E, A
COBALT	13.6		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E, A
COPPER	19.6		0.0739	MDL	0.448	PQL	mg/Kg	J	Q, E, A
LEAD	15.7		0.0117	MDL	0.224	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-069-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 9:24:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	30.3		0.112	MDL	0.448	PQL	mg/Kg	J	Q, E, A
SILVER	0.0562	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q, E
VANADIUM	81.8		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, E, A
ZINC	75.3		0.627	MDL	3.36	PQL	mg/Kg	J	E

Sample ID: SL-070-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 10:49:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0695	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-070-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 10:49:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.411		0.0554	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-070-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 10:49:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.120	MDL	0.443	PQL	mg/Kg	J	E, A

Sample ID: SL-070-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 10:49:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.242		0.0665	MDL	0.222	PQL	mg/Kg	J	Q, E
ARSENIC	8.02		0.0886	MDL	0.443	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.976		0.0177	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.172		0.0443	MDL	0.111	PQL	mg/Kg	J	Q, E, E
CHROMIUM	29.6		0.133	MDL	0.443	PQL	mg/Kg	J	Q, E, A
COBALT	10.4		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	13.2		0.0731	MDL	0.443	PQL	mg/Kg	J	Q, E, A
LEAD	9.40		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E, A
NICKEL	19.9		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E, A
SILVER	0.0439	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q, E
VANADIUM	59.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, E, A
ZINC	58.7		0.620	MDL	3.32	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-070-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.757		0.0555	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-070-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	166		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: SL-070-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.184	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.37		0.0887	MDL	0.444	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.22		0.0177	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.175		0.0444	MDL	0.111	PQL	mg/Kg	J	Q, E, E
CHROMIUM	39.8		0.133	MDL	0.444	PQL	mg/Kg	J	Q, E, A
COBALT	8.95		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	19.1		0.0732	MDL	0.444	PQL	mg/Kg	J	Q, E, A
LEAD	11.1		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E, A
NICKEL	27.5		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E, A
SILVER	0.0502	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q, E
VANADIUM	61.9		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, E, A
ZINC	74.5		0.621	MDL	3.33	PQL	mg/Kg	J	E

Sample ID: SL-074-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 12:44:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 12:44:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.412		0.0552	MDL	0.110	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-074-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 12:44:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	146		0.119	MDL	0.441	PQL	mg/Kg	J	E, A

Sample ID: SL-074-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 12:44:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.254		0.0662	MDL	0.221	PQL	mg/Kg	J	Q, E
ARSENIC	7.44		0.0883	MDL	0.441	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.18		0.0177	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.211		0.0441	MDL	0.110	PQL	mg/Kg	J	Q, E, E
CHROMIUM	42.2		0.132	MDL	0.441	PQL	mg/Kg	J	Q, E, A
COBALT	12.2		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	19.3		0.0728	MDL	0.441	PQL	mg/Kg	J	Q, E, A
LEAD	12.7		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E, A
NICKEL	27.6		0.110	MDL	0.441	PQL	mg/Kg	J	Q, E, A
SILVER	0.0721	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q, E
VANADIUM	67.7		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, E, A
ZINC	79.5		0.618	MDL	3.31	PQL	mg/Kg	J	E

Sample ID: SL-074-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 12:48:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0825	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 12:48:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.276		0.0560	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-074-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 12:48:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	133		0.121	MDL	0.448	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-074-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 12:48:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.197	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.71		0.0897	MDL	0.448	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.914		0.0179	MDL	0.112	PQL	mg/Kg	J	Q, E
CADMIUM	0.608		0.0448	MDL	0.112	PQL	mg/Kg	J	Q, E, E
CHROMIUM	38.3		0.134	MDL	0.448	PQL	mg/Kg	J	Q, E, A
COBALT	8.60		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E, A
COPPER	17.9		0.0740	MDL	0.448	PQL	mg/Kg	J	Q, E, A
LEAD	9.51		0.0117	MDL	0.224	PQL	mg/Kg	J	Q, E, A
NICKEL	21.9		0.112	MDL	0.448	PQL	mg/Kg	J	Q, E, A
SILVER	0.0769	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q, E
VANADIUM	62.0		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, E, A
ZINC	72.8		0.628	MDL	3.36	PQL	mg/Kg	J	E

Sample ID: SL-076-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 3:15:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0846	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 3:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.149		0.0542	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-076-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 3:15:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.117	MDL	0.433	PQL	mg/Kg	J	E, A

Sample ID: SL-076-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 3:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.134	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q, E, FD
ARSENIC	4.54		0.0867	MDL	0.433	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.785		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.0913	J	0.0433	MDL	0.108	PQL	mg/Kg	J	Z, Q, E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-076-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	27.0		0.130	MDL	0.433	PQL	mg/Kg	J	Q, E, A
COBALT	6.37		0.0217	MDL	0.108	PQL	mg/Kg	J	Q, E, FD, A
COPPER	12.5		0.0715	MDL	0.433	PQL	mg/Kg	J	Q, E, A
LEAD	7.87		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, E, A
NICKEL	16.8		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E, A
SILVER	0.0403	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q, E
VANADIUM	38.8		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, E, A
ZINC	51.7		0.607	MDL	3.25	PQL	mg/Kg	J	E

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0540	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.419		0.0579	MDL	0.116	PQL	mg/Kg	J	Q, E

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.125	MDL	0.463	PQL	mg/Kg	J	E, A

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.257		0.0694	MDL	0.231	PQL	mg/Kg	J	Q, E
ARSENIC	9.81		0.0926	MDL	0.463	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.966		0.0185	MDL	0.116	PQL	mg/Kg	J	Q, E
CADMIUM	0.424		0.0463	MDL	0.116	PQL	mg/Kg	J	Q, E, E
CHROMIUM	41.4		0.139	MDL	0.463	PQL	mg/Kg	J	Q, E, A
COBALT	12.6		0.0231	MDL	0.116	PQL	mg/Kg	J	Q, E, A
COPPER	19.7		0.0764	MDL	0.463	PQL	mg/Kg	J	Q, E, A
LEAD	12.2		0.0120	MDL	0.231	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	27.3		0.116	MDL	0.463	PQL	mg/Kg	J	Q, E, A
SILVER	0.0618	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, Q, E
VANADIUM	80.0		0.0255	MDL	0.116	PQL	mg/Kg	J	Q, E, A
ZINC	90.6		0.648	MDL	3.47	PQL	mg/Kg	J	E

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

Sample ID: SL-070-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.69	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

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

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0211	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z, FD

Sample ID: SL-070-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 10:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0162	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-070-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0141	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0180	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 Laboratory: LL

EDD Filename: PrepDE155_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-074-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 12:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0153	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0068	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z, FD

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0129	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 6850 Matrix: SO

Sample ID: SL-074-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 12:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	2.7	J	2.4	MDL	5.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 Matrix: SO

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.59	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C Matrix: SO

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-069-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 9:18:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	84	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-069-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 9:24:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	44	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-070-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 10:49:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	81	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-070-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 10:53:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	120	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-074-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 12:44:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-074-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 12:44:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-074-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 12:48:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	580	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	36	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	R	Q
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	Q, L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	19	MDL	380	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	FD

Sample ID: SL-069-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 9:18:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.80	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-069-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 9:18:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	5.2		0.77	MDL	1.9	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.96	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, L
FLUORANTHENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-069-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 9:24:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	2.2		0.76	MDL	1.9	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	0.99	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	2.4		0.76	MDL	1.9	PQL	ug/Kg	J	L
FLUORANTHENE	0.77	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-070-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 10:49:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	2.2		0.76	MDL	1.9	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	0.86	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	2.2		0.76	MDL	1.9	PQL	ug/Kg	J	L
FLUORANTHENE	0.80	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-070-SA5DN-SB-9.0-10.0 ***Collected:*** 5/18/2011 10:53:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, L
BENZO(B)FLUORANTHENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, L
PHENANTHRENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-074-SA5DN-SB-4.0-5.0 ***Collected:*** 5/18/2011 12:44:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.3	J	6.7	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-076-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q
2-METHYLNAPHTHALENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q
ACENAPHTHENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q
ACENAPHTHYLENE	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	Q
ANTHRACENE	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	Q
BENZO(A)ANTHRACENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q
BENZO(A)PYRENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q
BENZO(G,H,I)PERYLENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q
Butylbenzylphthalate	6.5	U	6.5	MDL	20	PQL	ug/Kg	UJ	Q
CHRYSENE	0.39	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q, FD
Diethylphthalate	6.5	U	6.5	MDL	20	PQL	ug/Kg	UJ	Q
Dimethylphthalate	6.5	U	6.5	MDL	20	PQL	ug/Kg	UJ	Q
Di-n-butylphthalate	6.5	U	6.5	MDL	20	PQL	ug/Kg	UJ	Q
FLUORENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q
NAPHTHALENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q
N-NITROSODIMETHYLAMINE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	Q

Sample ID: SL-076-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 3:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.93	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.89	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, L
BENZO(B)FLUORANTHENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.86	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-074-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	91	U	91	MDL	270	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory:** LL

EDD Filename: PrepDE155_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-074-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-Diamino-4-nitrotoluene	91	U	91	MDL	270	PQL	ug/Kg	R	L

Sample ID: SL-074-SA5DN-SB-9.0-10.0 *Collected:* 5/18/2011 12:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DIAMINO-6-NITROTOLUENE	91	U	91	MDL	270	PQL	ug/Kg	R	L
2,6-Diamino-4-nitrotoluene	91	U	91	MDL	270	PQL	ug/Kg	R	L

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP-03-SA5DN-QC-051811 *Collected:* 5/18/2011 3:22:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.87	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-069-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 9:18:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.48	U	0.48	MDL	4.8	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	1.2	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-070-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 10:49:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	1.0	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-074-SA5DN-SB-4.0-5.0 *Collected:* 5/18/2011 12:44:00 *Analysis Type:* RES *Dilution:* 1.05

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.60	U	0.60	MDL	6.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	1.0	J	0.29	MDL	4.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-076-SA5DN-SB-4.0-5.0** ***Collected:*** **5/18/2011 3:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.93**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.77	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: PrepDE155_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE155

Method Blank Outlier Report

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14508BB222219	5/26/2011 10:19:00 PM	CALCIUM PHOSPHORUS TIN	6.19 mg/Kg 1.07 mg/Kg 1.61 mg/Kg	DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-03-SA5DN-QC-051811(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-069-SA5DN-SB-4.0-5.0(RES)	TIN	3.15 mg/Kg	3.15U mg/Kg
SL-069-SA5DN-SB-9.0-10.0(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-070-SA5DN-SB-4.0-5.0(RES)	TIN	3.14 mg/Kg	3.14U mg/Kg
SL-070-SA5DN-SB-9.0-10.0(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-074-SA5DN-SB-4.0-5.0(RES)	TIN	3.21 mg/Kg	3.21U mg/Kg
SL-074-SA5DN-SB-9.0-10.0(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-076-SA5DN-SB-4.0-5.0(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-076-SA5DN-SB-9.0-10.0(RES)	TIN	2.48 mg/Kg	2.48U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14526BB221415A	5/27/2011 2:15:00 PM	COPPER	0.0707 mg/Kg	DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB63B211406A	5/24/2011 2:06:00 PM	METHYLENE CHLORIDE	0.66 ug/Kg	DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-03-SA5DN-QC-051811(RES)	METHYLENE CHLORIDE	0.87 ug/Kg	4.2U ug/Kg
SL-069-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	3.9U ug/Kg
SL-070-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.2U ug/Kg
SL-074-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.8U ug/Kg
SL-076-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.77 ug/Kg	4.1U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLD14B260740	5/25/2011 7:40:00 AM	DIBENZO(A,H)ANTHRACENE Di-n-octylphthalate INDENO(1,2,3-CD)PYRENE	1.1 ug/Kg 8.0 ug/Kg 0.69 ug/Kg	DUP-03-SA5DN-QC-051811 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE155 Laboratory: LL

EDD Filename: DE155_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA5DN-SB-4.0-5.0MSD (SL-076-SA5DN-SB-4.0-5.0)	2-CHLORONAPHTHALENE	-	-	50.00-141.00	35 (30.00)	2-CHLORONAPHTHALENE	J (all detects)
	BENZOIC ACID	-	-	10.00-173.00	39 (30.00)	BENZOIC ACID	
SL-076-SA5DN-SB-4.0-5.0MSD (SL-076-SA5DN-SB-4.0-5.0)	2,4-DINITROPHENOL	-	0	20.00-143.00	200 (30.00)	2,4-DINITROPHENOL	J(all detects) R(all non-detects)
SL-076-SA5DN-SB-4.0-5.0MSD (SL-076-SA5DN-SB-4.0-5.0)	4,6-DINITRO-2-METHYLPHENOL	-	23	24.00-116.00	94 (30.00)	4,6-DINITRO-2-METHYLPHEN	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA5DN-SB-4.0-5.0MS SL-076-SA5DN-SB-4.0-5.0MSD (SL-076-SA5DN-SB-4.0-5.0)	BENZO(B)FLUORANTHENE	-	-	43.00-155.00	103 (30.00)	BENZO(B)FLUORANTHENE	J(all detects)
	BENZO(K)FLUORANTHENE	151	-	42.00-144.00	105 (30.00)	BENZO(K)FLUORANTHENE	
	BIS(2-ETHYLHEXYL)PHTHALAT	-	-	39.00-167.00	100 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	
	DIBENZO(A,H)ANTHRACENE	-	-	22.00-133.00	118 (30.00)	DIBENZO(A,H)ANTHRACENE	
	Di-n-octylphthalate	-	-	40.00-192.00	82 (30.00)	Di-n-octylphthalate	
	FLUORANTHENE	-	-	26.00-166.00	100 (30.00)	FLUORANTHENE	
	INDENO(1,2,3-CD)PYRENE	-	-	21.00-143.00	118 (30.00)	INDENO(1,2,3-CD)PYRENE	
	PHENANTHRENE	-	-	12.00-165.00	107 (30.00)	PHENANTHRENE	
	PYRENE	-	-	15.00-153.00	105 (30.00)	PYRENE	
SL-076-SA5DN-SB-4.0-5.0MS SL-076-SA5DN-SB-4.0-5.0MSD (SL-076-SA5DN-SB-4.0-5.0)	1-METHYLNAPHTHALENE	-	29	72.00-123.00	107 (30.00)	1-METHYLNAPHTHALENE	J(all detects) UJ(all non-detects)
	2-METHYLNAPHTHALENE	-	26	64.00-103.00	106 (30.00)	2-METHYLNAPHTHALENE	
	ACENAPHTHENE	-	26	63.00-105.00	112 (30.00)	ACENAPHTHENE	
	ACENAPHTHYLENE	-	26	67.00-114.00	112 (30.00)	ACENAPHTHYLENE	
	ANTHRACENE	-	29	60.00-122.00	110 (30.00)	ANTHRACENE	
	BENZO(A)ANTHRACENE	-	32	59.00-128.00	106 (30.00)	BENZO(A)ANTHRACENE	
	BENZO(A)PYRENE	141	43	45.00-138.00	108 (30.00)	BENZO(A)PYRENE	
	BENZO(G,H,I)PERYLENE	-	23	33.00-141.00	119 (30.00)	BENZO(G,H,I)PERYLENE	
	Butylbenzylphthalate	-	31	57.00-173.00	110 (30.00)	Butylbenzylphthalate	
	CHRYSENE	-	30	48.00-134.00	105 (30.00)	CHRYSENE	
	Diethylphthalate	-	30	70.00-136.00	112 (30.00)	Diethylphthalate	
	Dimethylphthalate	-	30	74.00-118.00	107 (30.00)	Dimethylphthalate	
	Di-n-butylphthalate	-	35	65.00-148.00	103 (30.00)	Di-n-butylphthalate	
	FLUORENE	-	30	66.00-122.00	111 (30.00)	FLUORENE	
	NAPHTHALENE	-	25	61.00-102.00	114 (30.00)	NAPHTHALENE	
	N-NITROSODIMETHYLAMINE	-	26	48.00-113.00	112 (30.00)	N-NITROSODIMETHYLAMINE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA5DN-SB-4.0-5.0MS SL-076-SA5DN-SB-4.0-5.0MSD (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	ANTIMONY ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM ZINC	66 - - - - - - - 128 - 172 155	- 281 167 151 301 143 198 321 232 138 515 400	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	21 (20.00) 38 (20.00) 40 (20.00) 36 (20.00) 42 (20.00) 33 (20.00) 31 (20.00) 42 (20.00) 31 (20.00) 28 (20.00) 48 (20.00) 32 (20.00)	ANTIMONY ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM ZINC	J(all detects) UJ(all non-detects) Zn No Qual based on %R, >4x
SL-076-SA5DN-SB-4.0-5.0MSD (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	MOLYBDENUM	-	132	75.00-125.00	28 (20.00)	MOLYBDENUM	J(all detects) UJ(all non-detects)
SL-076-SA5DN-SB-4.0-5.0MS SL-076-SA5DN-SB-4.0-5.0MSD (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	BARIUM	-33	1553	75.00-125.00	85 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual based on %R, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA5DN-SB-4.0-5.0MS SL-076-SA5DN-SB-4.0-5.0MSD (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	ALUMINUM IRON MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	3128 2495 525 210 130 153 565	5339 3453 755 153 127 177 785	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ALUMINUM IRON MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	J(all detects) Al, Fe, Mg, Mn, Ti No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA5DN-SB-4.0-5.0MS SL-076-SA5DN-SB-4.0-5.0MSD (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	CALCIUM	168	1497	75.00-125.00	62 (20.00)	CALCIUM	No Qual, >4x

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA5DN-SB-4.0-5.0MSD (SL-076-SA5DN-SB-4.0-5.0)	1,2,4-TRIMETHYLBENZENE	-	-	37.00-149.00	35 (30.00)	1,2,4-TRIMETHYLBENZENE	J(all detects)
	1,2-DICHLOROBENZENE	-	-	36.00-133.00	32 (30.00)	1,2-DICHLOROBENZENE	
	1,3,5-TRIMETHYLBENZENE	-	-	38.00-150.00	34 (30.00)	1,3,5-TRIMETHYLBENZENE	
	1,3-DICHLOROBENZENE	-	-	34.00-134.00	32 (30.00)	1,3-DICHLOROBENZENE	
	1,4-DICHLOROBENZENE	-	-	35.00-136.00	32 (30.00)	1,4-DICHLOROBENZENE	
	2-CHLOROTOLUENE	-	-	42.00-146.00	33 (30.00)	2-CHLOROTOLUENE	
	4-CHLOROTOLUENE	-	-	39.00-145.00	34 (30.00)	4-CHLOROTOLUENE	
	HEXACHLOROBUTADIENE	-	-	10.00-155.00	37 (30.00)	HEXACHLOROBUTADIENE	
	N-BUTYLBENZENE	-	-	30.00-146.00	36 (30.00)	N-BUTYLBENZENE	
	N-PROPYLBENZENE	-	-	39.00-157.00	34 (30.00)	N-PROPYLBENZENE	
	P-ISOPROPYLTOLUENE	-	-	29.00-152.00	37 (30.00)	P-ISOPROPYLTOLUENE	
	SEC-BUTYLBENZENE	-	-	33.00-157.00	36 (30.00)	SEC-BUTYLBENZENE	
	TERT-BUTYLBENZENE	-	-	41.00-152.00	35 (30.00)	TERT-BUTYLBENZENE	

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-076-SA5DN-SB-4.0-5.0DUP (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	CALCIUM TITANIUM Zirconium	85 44 54	20.00 20.00 20.00	J (all detects) UJ (all non-detects) Zr No Qual, OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-076-SA5DN-SB-4.0-5.0DUP (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	ANTIMONY CADMIUM SELENIUM SILVER	23 36 36 28	20.00 20.00 20.00 20.00	J(all detects) UJ(all non-detects) Sb, Se, Ag No Qual, OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-076-SA5DN-SB-4.0-5.0DUP (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	MERCURY	200	20.00	No Qual, OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11454AQ242357A (SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0)	NITROBENZENE PETN	132 123	- -	80.00-120.00 80.00-120.00	- -	NITROBENZENE PETN	J (all detects)
P11454AY240039A (SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0)	2,4-DIAMINO-6-NITROTOLUENE 2,6-Diamino-4-nitrotoluene	- -	0 0	54.00-134.00 54.00-134.00	200 (30.00) 200 (30.00)	2,4-DIAMINO-6-NITROTOLUEN 2,6-Diamino-4-nitrotoluene	J(all detects) R(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LALCSQ260906 (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-9.0-10.0)	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHENOL	28 51	- -	37.00-120.00 53.00-110.00	- -	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHEN	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LDLCSQ260811 (DUP-03-SA5DN-QC-051811 SL-074-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-4.0-5.0)	BENZO(A)PYRENE BENZO(G,H,I)PERYLENE DIBENZO(A,H)ANTHRACENE INDENO(1,2,3-CD)PYRENE	136 147 150 148	- - - -	58.00-129.00 44.00-138.00 62.00-142.00 56.00-134.00	- - - -	BENZO(A)PYRENE BENZO(G,H,I)PERYLENE DIBENZO(A,H)ANTHRACENE INDENO(1,2,3-CD)PYRENE	J(all detects)
P6LBLCSQ260724 (SL-069-SA5DN-SB-4.0-5.0 SL-069-SA5DN-SB-9.0-10.0 SL-070-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-9.0-10.0 SL-076-SA5DN-SB-9.0-10.0)	BENZO(A)PYRENE BENZO(K)FLUORANTHENE	131 141	- -	58.00-129.00 66.00-137.00	- -	BENZO(A)PYRENE BENZO(K)FLUORANTHENE	J(all detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B63Q211541A (DUP-03-SA5DN-QC-051811 SL-069-SA5DN-SB-4.0-5.0 SL-070-SA5DN-SB-4.0-5.0 SL-074-SA5DN-SB-4.0-5.0 SL-076-SA5DN-SB-4.0-5.0)	2-Chloro-1,1,1-trifluoroethane	75	-	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
MOISTURE	9.5	11.2	16		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
FLUORIDE	18.2	13.2	32	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
ALUMINUM	27900	33300	18	50.00	No Qualifiers Applied
IRON	29700	31800	7	50.00	
LITHIUM	31.9	33.6	5	50.00	
MAGNESIUM	6470	6910	7	50.00	
MANGANESE	269	317	16	50.00	
PHOSPHORUS	155	124	22	50.00	
POTASSIUM	2720	2430	11	50.00	
SODIUM	738	862	16	50.00	
STRONTIUM	57.0	69.9	20	50.00	
TIN	2.97	2.99	1	50.00	
TITANIUM	715	1040	37	50.00	
Zirconium	3.85	6.27	48	50.00	
CALCIUM	5820	44400	154	50.00	J(all detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
ARSENIC	4.54	6.40	34	50.00	No Qualifiers Applied
BARIUM	120	115	4	50.00	
BERYLLIUM	0.785	1.10	33	50.00	
CADMIUM	0.0913	0.120	27	50.00	
CHROMIUM	27.0	39.8	38	50.00	
COPPER	12.5	16.2	26	50.00	
LEAD	7.87	13.0	49	50.00	
MOLYBDENUM	0.149	0.183	20	50.00	
NICKEL	16.8	24.7	38	50.00	
SELENIUM	0.0846	0.0596	35	50.00	
SILVER	0.0403	0.0355	13	50.00	
THALLIUM	0.293	0.241	19	50.00	
VANADIUM	38.8	60.1	43	50.00	
ZINC	51.7	67.7	27	50.00	
ANTIMONY	0.134	0.235	55	50.00	J(all detects)
COBALT	6.37	15.0	81	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
MERCURY	0.0068	0.0211	103	50.00	J(all detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
ACETONE	8.9	9.1	2	50.00	No Qualifiers Applied
METHYLENE CHLORIDE	0.77	0.87	12	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
CHRYSENE	0.39	1.8 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
BIS(2-ETHYLHEXYL)PHTHALATE	21	19	10	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA5DN-SB-4.0-5.0	DUP-03-SA5DN-QC-051811			
PH	8.49	8.53	0	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5DN-QC-051811	TIN	J	2.99	11.1	PQL	mg/Kg	J (all detects)
SL-069-SA5DN-SB-4.0-5.0	TIN	J	3.15	11.3	PQL	mg/Kg	J (all detects)
SL-069-SA5DN-SB-9.0-10.0	TIN	J	3.04	11.2	PQL	mg/Kg	J (all detects)
SL-070-SA5DN-SB-4.0-5.0	TIN	J	3.14	11.3	PQL	mg/Kg	J (all detects)
SL-070-SA5DN-SB-9.0-10.0	TIN Zirconium	J J	2.72 3.75	11.3 5.65	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-074-SA5DN-SB-4.0-5.0	TIN	J	3.21	10.9	PQL	mg/Kg	J (all detects)
SL-074-SA5DN-SB-9.0-10.0	BORON TIN	J J	1.30 2.83	5.83 11.7	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-076-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.97 3.85	10.6 5.31	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-076-SA5DN-SB-9.0-10.0	TIN	J	2.48	11.3	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5DN-QC-051811	SELENIUM SILVER	J J	0.0596 0.0355	0.450 0.113	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-069-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.152 0.0750	0.447 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-069-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.0759 0.0562	0.448 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-070-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0695 0.0439	0.443 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-070-SA5DN-SB-9.0-10.0	ANTIMONY SILVER	J J	0.184 0.0502	0.222 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-074-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.184 0.0721	0.441 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-074-SA5DN-SB-9.0-10.0	ANTIMONY SELENIUM SILVER	J J J	0.197 0.0825 0.0769	0.224 0.448 0.112	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-076-SA5DN-SB-4.0-5.0	ANTIMONY CADMIUM SELENIUM SILVER	J J J J	0.134 0.0913 0.0846 0.0403	0.217 0.108 0.433 0.108	PQL PQL PQL PQL	mg/Kg mg/Kg mg/Kg mg/Kg	J (all detects)
SL-076-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.0540 0.0618	0.463 0.116	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6850
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-074-SA5DN-SB-9.0-10.0	PERCHLORATE	J	2.7	5.8	PQL	ug/Kg	J (all detects)

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-070-SA5DN-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.69	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5DN-QC-051811	MERCURY	J	0.0211	0.110	PQL	mg/Kg	J (all detects)
SL-070-SA5DN-SB-4.0-5.0	MERCURY	J	0.0162	0.112	PQL	mg/Kg	J (all detects)
SL-070-SA5DN-SB-9.0-10.0	MERCURY	J	0.0141	0.110	PQL	mg/Kg	J (all detects)
SL-074-SA5DN-SB-4.0-5.0	MERCURY	J	0.0180	0.113	PQL	mg/Kg	J (all detects)
SL-074-SA5DN-SB-9.0-10.0	MERCURY	J	0.0153	0.114	PQL	mg/Kg	J (all detects)
SL-076-SA5DN-SB-4.0-5.0	MERCURY	J	0.0068	0.110	PQL	mg/Kg	J (all detects)
SL-076-SA5DN-SB-9.0-10.0	MERCURY	J	0.0129	0.115	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-076-SA5DN-SB-9.0-10.0	AROCLOR 1254	J	0.59	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5DN-QC-051811	METHYLENE CHLORIDE	J	0.87	4.2	PQL	ug/Kg	J (all detects)
SL-069-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.2	3.9	PQL	ug/Kg	J (all detects)
SL-070-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.2	PQL	ug/Kg	J (all detects)
SL-074-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.8	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.77	4.1	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE155 **Laboratory: LL**

EDD Filename: DE155_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-03-SA5DN-QC-051811	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-069-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	84	380	PQL	ug/Kg	J (all detects)
SL-069-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	44	370	PQL	ug/Kg	J (all detects)
SL-070-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	81	380	PQL	ug/Kg	J (all detects)
SL-070-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	120	380	PQL	ug/Kg	J (all detects)
SL-074-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	36	380	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	360	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-069-SA5DN-SB-4.0-5.0	2-METHYLNAPHTHALENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.96	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
SL-069-SA5DN-SB-9.0-10.0	BENZO(G,H,I)PERYLENE	J	0.99	1.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	0.77	1.9	PQL	ug/Kg	
SL-070-SA5DN-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	0.86	1.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	0.80	1.9	PQL	ug/Kg	
SL-070-SA5DN-SB-9.0-10.0	BENZO(A)PYRENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.9	PQL	ug/Kg	
	PYRENE	J	1.2	1.9	PQL	ug/Kg	
SL-074-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.3	20	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SB-4.0-5.0	CHRYSENE	J	0.39	1.8	PQL	ug/Kg	J (all detects)
SL-076-SA5DN-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	0.93	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.89	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	CHRYSENE	J	0.86	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.9	PQL	ug/Kg	
	PYRENE	J	1.1	1.9	PQL	ug/Kg	

LDC #: 26275N4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE155 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: W
2nd Reviewer: SV

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	P	
III.	Calibration	N	
IV.	Blanks	A	No final
V.	ICP Interference Check Sample (ICS) Analysis	N	%RPDout. %RPDout
VI.	Matrix Spike Analysis	SW	Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4x, No final 2.R
VII.	Duplicate Sample Analysis	SW	Sb, Hg, Se, Ag, Tl <5x
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ba, Cr, Co, Cu, Pb, Ni, V.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-069-SA5DN-SB-4.0-5.0	11	SL-076-SA5DN-SB-4.0-5.0MSD	21		31	
2	SL-069-SA5DN-SB-9.0-10.0	12	SL-076-SA5DN-SB-4.0-5.0DUP	22		32	
3	SL-070-SA5DN-SB-4.0-5.0	13		23		33	
4	SL-070-SA5DN-SB-9.0-10.0	14		24		34	
5	SL-074-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-074-SA5DN-SB-9.0-10.0	16		26		36	
7	SL-076-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-076-SA5DN-SB-9.0-10.0	18		28		38	
9	DUP-03-SA5DN-QC-051811	19		29		39	
10	SL-076-SA5DN-SB-4.0-5.0MS	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE155
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6292036BKG Matrix Spike Lab Sample ID: 6292037MS Matrix Spike Duplicate Lab Sample ID: 6292038MSD
% Solids for Sample: 90.5
Batch Id(s): P14508B, P14526B, P14511B, P15326D

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		27868.7357		34579.1128		39550.7007		214.5577	218.8064	MG/KG	3128		5339		13			20	P
Antimony	121	0.1336	B	0.9882		1.2206		1.3000	1.2873	MG/KG	66	N	84		21	*	75 - 125	20	MS
Arsenic	75	4.5369		7.2040		10.5734		2.1666	2.1456	MG/KG	123		281	N	38	*	75 - 125	20	MS
Barium	137	119.5320		115.9571		286.1664		10.8331	10.7279	MG/KG	-33		1553		85	*		20	MS
Beryllium	9	0.7852		1.4791		2.2142		0.8666	0.8582	MG/KG	80		167	N	40	*	75 - 125	20	MS
Boron		0.9456	U	214.3389		223.8455		214.5577	218.8064	MG/KG	100		102		4		84 - 115	20	P
Cadmium	111	0.0913	B	1.1858		1.7066		1.0833	1.0728	MG/KG	101		151	N	36	*	75 - 125	20	MS
Calcium		5818.6453		6538.4734		12370.7554		429.1155	437.6128	MG/KG	168		1497		62	*		20	P
Chromium	52	26.9960		38.7824		59.2608		10.8331	10.7279	MG/KG	109		301	N	42	*	75 - 125	20	MS
Cobalt	59	6.3655		59.8418		83.1197		54.1653	53.6394	MG/KG	99		143	N	33	*	75 - 125	20	MS
Copper	63	12.4905		24.5477		33.6856		10.8331	10.7279	MG/KG	111		198	N	31	*	75 - 125	20	MS
Iron		29699.7089		32376.7698		33477.2365		107.2789	109.4032	MG/KG	2495		3453		3			20	P
Lead	208	7.8670		11.8752		18.2031		3.2499	3.2184	MG/KG	123		321	N	42	*	75 - 125	20	MS
Lithium		31.9135		145.7298		151.6186		107.2789	109.4032	MG/KG	106		109		4		82 - 114	20	P
Magnesium		6468.6273		7595.5018		8119.9004		214.5577	218.8064	MG/KG	525		755		7			20	P
Manganese		268.9492		381.5137		352.7105		53.6394	54.7016	MG/KG	210		153		8			20	P
Mercury		0.0068	B	0.1924		0.1815		0.1798	0.1762	MG/KG	103		99		6		65 - 135	20	CV
Molybdenum	98	0.1488		10.7681		14.2745		10.8331	10.7279	MG/KG	98		132	N	28	*	75 - 125	20	MS
Nickel	60	16.8237		30.6359		41.7100		10.8331	10.7279	MG/KG	127	N	232	N	31	*	75 - 125	20	MS
Phosphorus		154.7184		293.7092		294.1229		107.2789	109.4032	MG/KG	130	N	127	N	0		75 - 125	20	P
Potassium		2718.4562		4356.1519		4650.9852		1072.7887	1094.0321	MG/KG	153	N	177	N	7		75 - 125	20	P
Selenium	78	0.0846	B	2.1491		2.5103		2.1666	2.1456	MG/KG	95		113		16		75 - 125	20	MS
Silver	107	0.0403	B	11.1732		14.8238		10.8331	10.7279	MG/KG	103		138	N	28	*	75 - 125	20	MS
Sodium		738.2597		1850.4586		1928.1790		1072.7887	1094.0321	MG/KG	104		109		4		75 - 125	20	P
Strontium		57.0399		167.0246		173.2192		107.2789	109.4032	MG/KG	103		106		4		75 - 115	20	P
Thallium	203	0.2928		0.6333		0.6934		0.4209	0.4250	MG/KG	81		94		9		75 - 125	20	MS
Tin		2.9707	B	391.6762		395.2858		429.1155	437.6128	MG/KG	91		90		1		80 - 110	20	P
Titanium		715.1084		1321.7208		1574.1633		107.2789	109.4032	MG/KG	565		785		17			20	P
Vanadium	51	38.8257		57.4586		94.1050		10.8331	10.7279	MG/KG	172	N	515	N	48	*	75 - 125	20	MS
Zinc	66	51.6520		68.4650		94.5771		10.8331	10.7279	MG/KG	155		400		32	*		20	MS
Zirconium		3.8504	B	114.5942		117.8907		107.2789	109.4032	MG/KG	103		104		3		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE155
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6292036BKG
% Solids for Duplicate: 91.1
Batch ID(s): P14508B, P14526B, P14511B, P15326D
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6292039DUP
% Solids for Sample: 90.5

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			27868.7357		34104.5076		20		P
Antimony	121		0.1336	B	0.1676	B	23		MS
Arsenic	75		4.5369		5.2302		14		MS
Barium	137		119.5320		114.0938		5		MS
Beryllium	9		0.7852		0.7555		4		MS
Boron			0.9456	U	0.9641	U			P
Cadmium	111	0.1	0.0913	B	0.1315		36		MS
Calcium			5818.6453		14504.2747		85	*	P
Chromium	52		26.9960		29.9859		10		MS
Cobalt	59		6.3655		7.6850		19		MS
Copper	63		12.4905		12.4515		0		MS
Iron			29699.7089		32889.0911		10		P
Lead	208		7.8670		8.7141		10		MS
Lithium			31.9135		35.6549		11		P
Magnesium			6468.6273		7094.3246		9		P
Manganese			268.9492		254.1794		6		P
Mercury			0.0068	B	0.0032	U	200		CV
Molybdenum	98	0.1	0.1488		0.1472		1		MS
Nickel	60		16.8237		18.6047		10		MS
Phosphorus			154.7184		145.2746		6		P
Potassium			2718.4562		2814.8261		3		P
Selenium	78		0.0846	B	0.0590	B	36		MS
Silver	107		0.0403	B	0.0535	B	28		MS
Sodium			738.2597		823.3712		11		P
Strontium			57.0399		61.7918		8		P
Thallium	203	0.1	0.2928		0.2873		2		MS
Tin			2.9707	B	3.2889	B	10		P
Titanium			715.1084		1123.0398		44	*	P
Vanadium	51		38.8257		46.7338		18		MS
Zinc	66		51.6520		53.7753		4		MS
Zirconium		5.3	3.8504	B	6.7100		54		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE155
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6292036BKG Serial Dilution Lab Sample ID: 6292036L
Batch ID(s): P14508B, P14526B, P15326D
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		262300.5400		268368.1500		2		P
Antimony	121	0.6165	B	1.5050	B	144		MS
Arsenic	75	20.9400		26.1150		25		MS
Barium	137	551.7000		693.5000		26	E	MS
Beryllium	9	3.6240		4.7855		32		MS
Boron		8.9000	U	44.5000	U			P
Cadmium	111	0.4213	B	1.0000	U	100		MS
Calcium		54765.0900		55526.8500		1		P
Chromium	52	124.6000		169.9000		36	E	MS
Cobalt	59	29.3800		36.8600		25	E	MS
Copper	63	57.6500		72.7000		26	E	MS
Iron		139766.8300		141684.1500		1		P
Lead	208	36.3100		44.8500		24	E	MS
Lithium		300.3700		297.6000		1		P
Magnesium		60882.7200		60706.6000		0		P
Manganese		2531.3500		2565.5500		1		P
Molybdenum	98	0.6870		1.2500	U	100		MS
Nickel	60	77.6500		98.1500		26	E	MS
Phosphorus		1456.2100		1437.6000		1		P
Potassium		25586.1100		25539.0000		0		P
Selenium	78	0.3904	B	1.0000	U	100		MS
Silver	107	0.1858	B	0.5005	B	169		MS
Sodium		6948.5000		7064.0000		2		P
Strontium		536.8600		544.0500		1		P
Thallium	203	1.3380		1.3255	B	1		MS
Tin		27.9600	B	50.0000	U	100		P
Titanium		6730.6000		6386.4500		5		P
Vanadium	51	179.2000		251.3500		40	E	MS
Zinc	66	238.4000		299.3500		26		MS
Zirconium		36.2400	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE155 2596
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE156

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3050B	6010B	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3050B	6020	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3060A	7199	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3546	1625C	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3550B	8015B	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3550B	8015M	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3550B	8082	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3550B	8270C	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	3550B	8270C SIM	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	5035	8015M	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	5035	8260B	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	5035	8260B SIM	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	8330	8330A	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	METHOD	300.0	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	METHOD	314.0	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	METHOD	7471A	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	METHOD	8015B	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	METHOD	8015M	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	METHOD	8315A	III
19-May-2011	SL-067-SA5DN-SB-4.0-5.0	6293426	N	METHOD	9012B	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3050B	6010B	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3050B	6020	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3060A	7199	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3546	1625C	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3550B	8015B	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3550B	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3550B	8082	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3550B	8270C	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	3550B	8270C SIM	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	5035	8015M	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	5035	8260B	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	5035	8260B SIM	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	8330	8330A	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	METHOD	300.0	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	METHOD	314.0	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	METHOD	7471A	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	METHOD	8015B	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	METHOD	8015M	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	METHOD	8315A	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0	6293427	N	METHOD	9012B	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0D	P293427D271928B	DUP	METHOD	9012B	III
19-May-2011	SL-067-SA5DN-SB-9.0-10.0M	P293427R271929B	MS	METHOD	9012B	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	3050B	6010B	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	3050B	6020	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	3060A	7199	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	3550B	8082	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	3550B	8270C	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	3550B	8270C SIM	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	5035	8260B	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	5035	8260B SIM	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	8330	8330A	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	METHOD	314.0	III
19-May-2011	SL-079-SA5DN-SB-4.0-5.0	6293428	N	METHOD	7471A	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	3050B	6010B	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	3050B	6020	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	3060A	7199	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	3550B	8082	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	3550B	8270C	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	3550B	8270C SIM	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	8330	8330A	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	METHOD	300.0	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	METHOD	314.0	III
19-May-2011	SL-079-SA5DN-SB-9.0-10.0	6293429	N	METHOD	7471A	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	3005A	6010B	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	3020A	6020	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	3510C	8082	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	3510C	8270C	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	3510C	8270C SIM	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	5030B	8260B	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	5030B	8260B SIM	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	Gen Prep	300.0	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	Gen Prep	314.0	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	Gen Prep	7199	III
19-May-2011	EB03-SA5DN-SB-051911	6293435	EB	METHOD	7470A	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	3050B	6010B	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	3050B	6020	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	3550B	8082	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	3550B	8270C	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	3550B	8270C SIM	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	5035	8260B	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	5035	8260B SIM	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	8330	8330A	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	METHOD	300.0	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	METHOD	314.0	III
19-May-2011	SL-080-SA5DN-SB-4.0-5.0	6293430	N	METHOD	7471A	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	3050B	6010B	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	3050B	6020	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	3060A	7199	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	3550B	8082	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	3550B	8270C	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	3550B	8270C SIM	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	8330	8330A	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	METHOD	300.0	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	METHOD	314.0	III
19-May-2011	SL-080-SA5DN-SB-8.0-9.0	6293431	N	METHOD	7471A	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	3050B	6010B	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	3050B	6020	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	3060A	7199	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	3550B	8082	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	3550B	8270C	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	3550B	8270C SIM	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	5035	8260B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	5035	8260B SIM	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	8330	8330A	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	METHOD	300.0	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	METHOD	314.0	III
19-May-2011	SL-082-SA5DN-SB-4.0-5.0	6293432	N	METHOD	7471A	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	3005A	6010B	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	3020A	6020	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	3510C	8081A	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	3510C	8082	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	3510C	8270C	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	3510C	8270C SIM	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	Gen Prep	300.0	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	Gen Prep	314.0	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	Gen Prep	7199	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	METHOD	7470A	III
19-May-2011	EB04-SA5DN-SS-051911	6293436	EB	METHOD	8151A	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	3050B	6010B	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	3050B	6020	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	3060A	7199	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	3550B	8082	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	3550B	8270C	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	3550B	8270C SIM	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	5035	8260B	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	5035	8260B SIM	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	8330	8330A	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	METHOD	314.0	III
19-May-2011	SL-206-SA5DN-SB-4.0-5.0	6293433	N	METHOD	7471A	III
19-May-2011	TB-051911	6293434	TB	5030B	8015M	III
19-May-2011	TB-051911	6293434	TB	5030B	8260B	III
19-May-2011	TB-051911	6293434	TB	5030B	8260B SIM	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3050B	6010B	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3050B	6020	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3060A	7199	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3546	1625C	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3550B	8015B	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3550B	8015M	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3550B	8082	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3550B	8270C	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	3550B	8270C SIM	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	5035	8015M	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	5035	8260B	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	5035	8260B SIM	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	8330	8330A	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	METHOD	300.0	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	METHOD	314.0	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	METHOD	7471A	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	METHOD	8015B	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	METHOD	8015M	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	METHOD	8315A	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0	6293424	N	METHOD	9012B	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0DU	P293424D270714B	DUP	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-066-SA5DN-SB-4.0-5.0DU	P293424D271524B	DUP	METHOD	300.0	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0MS	P293424R270736B	MS	METHOD	314.0	III
19-May-2011	SL-066-SA5DN-SB-4.0-5.0MS	P293424R271539B	MS	METHOD	300.0	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3050B	6010B	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3050B	6020	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3060A	7199	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3546	1625C	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3550B	8015B	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3550B	8015M	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3550B	8082	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3550B	8270C	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	3550B	8270C SIM	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	5035	8015M	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	5035	8260B	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	5035	8260B SIM	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	8330	8330A	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	METHOD	300.0	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	METHOD	314.0	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	METHOD	7471A	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	METHOD	8015B	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	METHOD	8015M	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	METHOD	8315A	III
19-May-2011	SL-066-SA5DN-SB-9.0-10.0	6293425	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory:** LL

EDD Filename: PrepDE156_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-066-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 2:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	23.1		0.92	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA5DN-SB-9.0-10.0 ***Collected:*** 5/19/2011 2:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	9.4		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-067-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 8:34:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	11.0		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-067-SA5DN-SB-9.0-10.0 ***Collected:*** 5/19/2011 8:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	11.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-079-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 9:34:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	29.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-079-SA5DN-SB-9.0-10.0 ***Collected:*** 5/19/2011 9:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	9.6		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-080-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 10:44:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	27.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-080-SA5DN-SB-8.0-9.0 *Collected:* 5/19/2011 10:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	18.0		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	16.0		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	8050		6.82	MDL	22.2	PQL	mg/Kg	J	E
PHOSPHORUS	289		0.623	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	4230		20.0	MDL	55.6	PQL	mg/Kg	J	Q
TIN	3.04	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
TITANIUM	1260		0.423	MDL	1.11	PQL	mg/Kg	J	E

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	12700		7.32	MDL	23.9	PQL	mg/Kg	J	E
PHOSPHORUS	245		0.668	MDL	11.9	PQL	mg/Kg	J	Q
POTASSIUM	4110		21.5	MDL	59.7	PQL	mg/Kg	J	Q
TIN	3.02	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
TITANIUM	933		0.453	MDL	1.19	PQL	mg/Kg	J	E
Zirconium	5.85	J	1.00	MDL	5.97	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-067-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 8:34:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	7900		6.97	MDL	22.8	PQL	mg/Kg	J	E
PHOSPHORUS	229		0.637	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	2920		20.5	MDL	56.9	PQL	mg/Kg	J	Q
TIN	3.10	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
TITANIUM	1520		0.432	MDL	1.14	PQL	mg/Kg	J	E

Sample ID: SL-067-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 8:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	26000		6.95	MDL	22.7	PQL	mg/Kg	J	E
PHOSPHORUS	270		0.635	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3130		20.4	MDL	56.7	PQL	mg/Kg	J	Q
TIN	3.03	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1110		0.431	MDL	1.13	PQL	mg/Kg	J	E

Sample ID: SL-079-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 9:34:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.47	J	0.979	MDL	5.50	PQL	mg/Kg	J	Z
CALCIUM	7440		6.75	MDL	22.0	PQL	mg/Kg	J	E
PHOSPHORUS	297		0.616	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3330		19.8	MDL	55.0	PQL	mg/Kg	J	Q
TIN	3.08	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
TITANIUM	1310		0.418	MDL	1.10	PQL	mg/Kg	J	E

Sample ID: SL-079-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 9:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	17100		7.21	MDL	23.5	PQL	mg/Kg	J	E
PHOSPHORUS	373		0.659	MDL	11.8	PQL	mg/Kg	J	Q
POTASSIUM	3570		21.2	MDL	58.8	PQL	mg/Kg	J	Q
TIN	3.04	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
TITANIUM	1410		0.447	MDL	1.18	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory:** LL

EDD Filename: PrepDE156_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-080-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 10:44:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	10200		6.70	MDL	21.9	PQL	mg/Kg	J	E
PHOSPHORUS	243		0.612	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3840		19.7	MDL	54.6	PQL	mg/Kg	J	Q
TIN	3.09	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
TITANIUM	1510		0.415	MDL	1.09	PQL	mg/Kg	J	E

Sample ID: SL-080-SA5DN-SB-8.0-9.0 *Collected:* 5/19/2011 10:49:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	14400		6.58	MDL	21.5	PQL	mg/Kg	J	E
PHOSPHORUS	320		0.601	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	2220		19.3	MDL	53.6	PQL	mg/Kg	J	Q
TIN	2.97	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
TITANIUM	1210		0.408	MDL	1.07	PQL	mg/Kg	J	E
Zirconium	5.01	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	9010		6.63	MDL	21.6	PQL	mg/Kg	J	E
PHOSPHORUS	125		0.605	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2610		19.5	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.94	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
TITANIUM	747		0.411	MDL	1.08	PQL	mg/Kg	J	E
Zirconium	4.07	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5210		6.90	MDL	22.5	PQL	mg/Kg	J	E
PHOSPHORUS	130		0.630	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	2110		20.3	MDL	56.3	PQL	mg/Kg	J	Q
TIN	3.18	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1160		0.428	MDL	1.13	PQL	mg/Kg	J	E
Zirconium	4.76	J	0.945	MDL	5.63	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory:** LL

EDD Filename: PrepDE156_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS
Method: 6010B **Matrix:** SO

Method Category: METALS
Method: 6020 **Matrix:** AQ

Sample ID: EB04-SA5DN-SS-051911 *Collected:* 5/19/2011 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000056	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.318		0.0674	MDL	0.225	PQL	mg/Kg	J	Q, E
ARSENIC	8.69		0.0898	MDL	0.449	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.22		0.0180	MDL	0.112	PQL	mg/Kg	J	Q, E
CADMIUM	0.426		0.0449	MDL	0.112	PQL	mg/Kg	J	Q, E, E
CHROMIUM	45.7		0.135	MDL	0.449	PQL	mg/Kg	J	Q, E, A
COBALT	18.4		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, E, A
COPPER	22.1		0.0741	MDL	0.449	PQL	mg/Kg	J	Q, E, A
LEAD	16.6		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E, A
NICKEL	32.5		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E, A
SILVER	0.0591	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q, E
VANADIUM	83.9		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, E, A
ZINC	96.1		0.629	MDL	3.37	PQL	mg/Kg	J	E

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.175	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.527		0.0562	MDL	0.112	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 Laboratory: LL

EDD Filename: PrepDE156_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	177		0.121	MDL	0.449	PQL	mg/Kg	J	E, A

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.300		0.0688	MDL	0.229	PQL	mg/Kg	J	Q, E
ARSENIC	4.32		0.0918	MDL	0.459	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.08		0.0184	MDL	0.115	PQL	mg/Kg	J	Q, E
CADMIUM	0.378		0.0459	MDL	0.115	PQL	mg/Kg	J	Q, E, E
CHROMIUM	55.1		0.138	MDL	0.459	PQL	mg/Kg	J	Q, E, A
COBALT	9.13		0.0229	MDL	0.115	PQL	mg/Kg	J	Q, E, A
COPPER	23.4		0.0757	MDL	0.459	PQL	mg/Kg	J	Q, E, A
LEAD	13.2		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E, A
NICKEL	28.9		0.115	MDL	0.459	PQL	mg/Kg	J	Q, E, A
SILVER	0.0852	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q, E
VANADIUM	66.6		0.0252	MDL	0.115	PQL	mg/Kg	J	Q, E, A
ZINC	96.8		0.643	MDL	3.44	PQL	mg/Kg	J	E

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.248		0.0574	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* REA7 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	715		0.620	MDL	2.29	PQL	mg/Kg	J	E, A

Sample ID: SL-067-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 8:34:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.195	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.74		0.0884	MDL	0.442	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.03		0.0177	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.235		0.0442	MDL	0.110	PQL	mg/Kg	J	Q, E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-067-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 8:34:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	38.8		0.133	MDL	0.442	PQL	mg/Kg	J	Q, E, A
COBALT	10.4		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	16.4		0.0729	MDL	0.442	PQL	mg/Kg	J	Q, E, A
LEAD	11.4		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E, A
NICKEL	23.1		0.110	MDL	0.442	PQL	mg/Kg	J	Q, E, A
SILVER	0.0655	J	0.0133	MDL	0.110	PQL	mg/Kg	J	Z, Q, E
VANADIUM	74.0		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, E, A
ZINC	68.1		0.619	MDL	3.31	PQL	mg/Kg	J	E

Sample ID: SL-067-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 8:34:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0903	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 8:34:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.446		0.0552	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: SL-067-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 8:34:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	159		0.119	MDL	0.442	PQL	mg/Kg	J	E, A

Sample ID: SL-067-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 8:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.188	J	0.0687	MDL	0.229	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.00		0.0916	MDL	0.458	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.05		0.0183	MDL	0.115	PQL	mg/Kg	J	Q, E
CADMIUM	0.235		0.0458	MDL	0.115	PQL	mg/Kg	J	Q, E, E
CHROMIUM	44.9		0.137	MDL	0.458	PQL	mg/Kg	J	Q, E, A
COBALT	7.15		0.0229	MDL	0.115	PQL	mg/Kg	J	Q, E, A
COPPER	20.0		0.0756	MDL	0.458	PQL	mg/Kg	J	Q, E, A
LEAD	11.0		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-067-SA5DN-SB-9.0-10.0 ***Collected:*** 5/19/2011 8:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	25.0		0.115	MDL	0.458	PQL	mg/Kg	J	Q, E, A
SILVER	0.0591	J	0.0137	MDL	0.115	PQL	mg/Kg	J	Z, Q, E
VANADIUM	61.9		0.0252	MDL	0.115	PQL	mg/Kg	J	Q, E, A
ZINC	85.5		0.641	MDL	3.44	PQL	mg/Kg	J	E

Sample ID: SL-067-SA5DN-SB-9.0-10.0 ***Collected:*** 5/19/2011 8:40:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.178		0.0573	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-067-SA5DN-SB-9.0-10.0 ***Collected:*** 5/19/2011 8:40:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.124	MDL	0.458	PQL	mg/Kg	J	E, A

Sample ID: SL-079-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 9:34:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.295		0.0660	MDL	0.220	PQL	mg/Kg	J	Q, E
ARSENIC	9.14		0.0880	MDL	0.440	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.22		0.0176	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.471		0.0440	MDL	0.110	PQL	mg/Kg	J	Q, E, E
CHROMIUM	46.1		0.132	MDL	0.440	PQL	mg/Kg	J	Q, E, A
COBALT	20.9		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	20.8		0.0726	MDL	0.440	PQL	mg/Kg	J	Q, E, A
LEAD	17.8		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, E, A
NICKEL	32.5		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E, A
SILVER	0.0693	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q, E
VANADIUM	84.2		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, E, A
ZINC	90.1		0.616	MDL	3.30	PQL	mg/Kg	J	E

Sample ID: SL-079-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 9:34:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.193	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-079-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 9:34:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.529		0.0550	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: SL-079-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 9:34:00 *Analysis Type:* REA7 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.297	MDL	1.10	PQL	mg/Kg	J	E, A

Sample ID: SL-079-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 9:39:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.223	J	0.0699	MDL	0.233	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.61		0.0932	MDL	0.466	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.03		0.0186	MDL	0.117	PQL	mg/Kg	J	Q, E
CADMIUM	0.304		0.0466	MDL	0.117	PQL	mg/Kg	J	Q, E, E
CHROMIUM	42.1		0.140	MDL	0.466	PQL	mg/Kg	J	Q, E, A
COBALT	13.8		0.0233	MDL	0.117	PQL	mg/Kg	J	Q, E, A
COPPER	18.6		0.0769	MDL	0.466	PQL	mg/Kg	J	Q, E, A
LEAD	11.7		0.0121	MDL	0.233	PQL	mg/Kg	J	Q, E, A
NICKEL	26.2		0.117	MDL	0.466	PQL	mg/Kg	J	Q, E, A
SILVER	0.0979	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z, Q, E
VANADIUM	73.8		0.0256	MDL	0.117	PQL	mg/Kg	J	Q, E, A
ZINC	83.7		0.653	MDL	3.50	PQL	mg/Kg	J	E

Sample ID: SL-079-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 9:39:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0637	J	0.0466	MDL	0.466	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 9:39:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.466		0.0583	MDL	0.117	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-079-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 9:39:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	160		0.126	MDL	0.466	PQL	mg/Kg	J	E, A

Sample ID: SL-080-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 10:44:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.276		0.0669	MDL	0.223	PQL	mg/Kg	J	Q, E
ARSENIC	7.98		0.0892	MDL	0.446	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.13		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.325		0.0446	MDL	0.111	PQL	mg/Kg	J	Q, E, E
CHROMIUM	39.6		0.134	MDL	0.446	PQL	mg/Kg	J	Q, E, A
COBALT	16.7		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	20.5		0.0736	MDL	0.446	PQL	mg/Kg	J	Q, E, A
LEAD	13.4		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E, A
NICKEL	27.4		0.111	MDL	0.446	PQL	mg/Kg	J	Q, E, A
SILVER	0.0542	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q, E
VANADIUM	72.3		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, E, A
ZINC	77.2		0.624	MDL	3.34	PQL	mg/Kg	J	E

Sample ID: SL-080-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 10:44:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.103	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-080-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 10:44:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.462		0.0557	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-080-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 10:44:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	182		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory:** LL

EDD Filename: PrepDE156_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-080-SA5DN-SB-8.0-9.0 ***Collected:*** 5/19/2011 10:49:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.207	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.17		0.0867	MDL	0.433	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.06		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.137		0.0433	MDL	0.108	PQL	mg/Kg	J	Q, E, E
CHROMIUM	31.3		0.130	MDL	0.433	PQL	mg/Kg	J	Q, E, A
COBALT	7.00		0.0217	MDL	0.108	PQL	mg/Kg	J	Q, E, A
COPPER	15.7		0.0715	MDL	0.433	PQL	mg/Kg	J	Q, E, A
LEAD	7.77		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, E, A
NICKEL	17.8		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E, A
SILVER	0.0450	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q, E
VANADIUM	52.4		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, E, A
ZINC	61.1		0.607	MDL	3.25	PQL	mg/Kg	J	E

Sample ID: SL-080-SA5DN-SB-8.0-9.0 ***Collected:*** 5/19/2011 10:49:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.268		0.0542	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-080-SA5DN-SB-8.0-9.0 ***Collected:*** 5/19/2011 10:49:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.117	MDL	0.433	PQL	mg/Kg	J	E, A

Sample ID: SL-082-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 11:24:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.268		0.0649	MDL	0.216	PQL	mg/Kg	J	Q, E
ARSENIC	7.00		0.0865	MDL	0.432	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.13		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.270		0.0432	MDL	0.108	PQL	mg/Kg	J	Q, E, E
CHROMIUM	38.4		0.130	MDL	0.432	PQL	mg/Kg	J	Q, E, A
COBALT	12.7		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E, A
COPPER	16.1		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E, A
LEAD	13.2		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E, A
NICKEL	28.6		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory:** LL

EDD Filename: PrepDE156_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0705	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q, E
VANADIUM	70.6		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, E, A
ZINC	71.2		0.605	MDL	3.24	PQL	mg/Kg	J	E

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* REA5 *Dilution:* 2

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

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.505		0.0540	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	159		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0682	MDL	0.227	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.35		0.0909	MDL	0.455	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.795		0.0182	MDL	0.114	PQL	mg/Kg	J	Q, E
CADMIUM	0.0900	J	0.0455	MDL	0.114	PQL	mg/Kg	J	Z, Q, E, E
CHROMIUM	33.8		0.136	MDL	0.455	PQL	mg/Kg	J	Q, E, A
COBALT	5.70		0.0227	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	15.0		0.0750	MDL	0.455	PQL	mg/Kg	J	Q, E, A
LEAD	8.40		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E, A
NICKEL	15.3		0.114	MDL	0.455	PQL	mg/Kg	J	Q, E, A
SILVER	0.0796	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z, Q, E
VANADIUM	52.7		0.0250	MDL	0.114	PQL	mg/Kg	J	Q, E, A
ZINC	63.5		0.637	MDL	3.41	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory:** LL

EDD Filename: PrepDE156_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0537	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.204		0.0568	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.123	MDL	0.455	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** AQ

Sample ID: EB03-SA5DN-SB-051911 *Collected:* 5/19/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0199	J	0.0033	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0132	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-079-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 9:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0186	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 9:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0130	J	0.0034	MDL	0.118	PQL	mg/Kg	J	Z

Sample ID: SL-080-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0210	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0102	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0089	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	26.4	J	19.0	MDL	38.1	PQL	ng/Kg	J	Z

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	211	J	198	MDL	396	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.2	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.76	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 8:34:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.72	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 8:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.65	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-079-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 9:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.84	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.42	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: AQ**

Sample ID: EB04-SA5DN-SS-051911 *Collected:* 5/19/2011 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.086	U	0.086	MDL	0.32	PQL	ug/L	UJ	L
DINOSEB	0.11	U	0.11	MDL	0.54	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB03-SA5DN-SB-051911 *Collected:* 5/19/2011 9:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Sample ID: EB04-SA5DN-SS-051911 *Collected:* 5/19/2011 12:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	2	J	1	MDL	5	PQL	ug/L	U	B
BENZOIC ACID	6	U	6	MDL	16	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	200	U	200	MDL	590	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory:** LL

EDD Filename: PrepDE156_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-067-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 8:34:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-067-SA5DN-SB-9.0-10.0 ***Collected:*** 5/19/2011 8:40:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	580	PQL	ug/Kg	UJ	L

Sample ID: SL-079-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 9:34:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-079-SA5DN-SB-9.0-10.0 ***Collected:*** 5/19/2011 9:39:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	400	U	400	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	200	U	200	MDL	600	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: SL-080-SA5DN-SB-4.0-5.0 ***Collected:*** 5/19/2011 10:44:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L

Sample ID: SL-080-SA5DN-SB-8.0-9.0 ***Collected:*** 5/19/2011 10:49:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	540	PQL	ug/Kg	UJ	L

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB03-SA5DN-SB-051911 *Collected:* 5/19/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.033	J	0.011	MDL	0.053	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.033	J	0.011	MDL	0.053	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.16	J	0.053	MDL	1.1	PQL	ug/L	U	B
Butylbenzylphthalate	0.082	J	0.053	MDL	1.1	PQL	ug/L	U	B
Di-n-butylphthalate	0.14	J	0.053	MDL	1.1	PQL	ug/L	U	B

Sample ID: EB04-SA5DN-SS-051911 *Collected:* 5/19/2011 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.032	J	0.011	MDL	0.054	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.032	J	0.011	MDL	0.054	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.21	J	0.054	MDL	1.1	PQL	ug/L	U	B
Butylbenzylphthalate	0.089	J	0.054	MDL	1.1	PQL	ug/L	U	B
Di-n-butylphthalate	0.15	J	0.054	MDL	1.1	PQL	ug/L	U	B
Di-n-octylphthalate	0.33	J	0.054	MDL	1.1	PQL	ug/L	J	Z, L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-080-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 10:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	6.8	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	16	J	6.6	MDL	20	PQL	ug/Kg	U	B

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: EB03-SA5DN-SB-051911 *Collected:* 5/19/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3	J	2	MDL	5	PQL	ug/L	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-066-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:39:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.56	U	0.56	MDL	5.6	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.78	J	0.27	MDL	4.5	PQL	ug/Kg	U	B, F

Sample ID: SL-066-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1.1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.66	U	0.66	MDL	6.6	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	3.6	J	0.32	MDL	5.2	PQL	ug/Kg	U	B, F

Sample ID: SL-067-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 8:34:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.55	U	0.55	MDL	5.5	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	1.1	J	0.26	MDL	4.4	PQL	ug/Kg	U	B, F

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 Laboratory: LL

EDD Filename: PrepDE156_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-067-SA5DN-SB-9.0-10.0 *Collected:* 5/19/2011 8:40:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	3.3	J	0.25	MDL	4.1	PQL	ug/Kg	U	B, F

Sample ID: SL-079-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 9:34:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.88	J	0.25	MDL	4.1	PQL	ug/Kg	U	B, F

Sample ID: SL-080-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1.07

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.60	U	0.60	MDL	6.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	1.5	J	0.29	MDL	4.8	PQL	ug/Kg	U	B, F

Sample ID: SL-082-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 11:24:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.54	U	0.54	MDL	5.4	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	5.3		0.26	MDL	4.3	PQL	ug/Kg	U	B, F

Sample ID: SL-206-SA5DN-SB-4.0-5.0 *Collected:* 5/19/2011 2:10:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.54	U	0.54	MDL	5.4	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	1.2	J	0.26	MDL	4.3	PQL	ug/Kg	U	B, F

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: PrepDE156_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE156

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE156 **Laboratory: LL**
EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB03-SA5DN-SB-051911 (RES)	Sampling To Analysis	25.00	24.00	HOURS	J (all detects) UJ (all non-detects)

Method: 9040B **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB03-SA5DN-SB-051911 (RES)	Sampling To Analysis	130.00	48.00	HOURS	No Qualifiers Applied
EB04-SA5DN-SS-051911 (RES)		127.00	48.00	HOURS	

Method Blank Outlier Report

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14508BB222219	5/26/2011 10:19:00 PM	CALCIUM PHOSPHORUS TIN	6.19 mg/Kg 1.07 mg/Kg 1.61 mg/Kg	SL-066-SA5DN-SB-4.0-5.0 SL-066-SA5DN-SB-9.0-10.0 SL-067-SA5DN-SB-4.0-5.0 SL-067-SA5DN-SB-9.0-10.0 SL-079-SA5DN-SB-4.0-5.0 SL-079-SA5DN-SB-9.0-10.0 SL-080-SA5DN-SB-4.0-5.0 SL-080-SA5DN-SB-8.0-9.0 SL-082-SA5DN-SB-4.0-5.0 SL-206-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-066-SA5DN-SB-4.0-5.0(REA)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-066-SA5DN-SB-9.0-10.0(REA)	TIN	3.02 mg/Kg	3.02U mg/Kg
SL-067-SA5DN-SB-4.0-5.0(REA)	TIN	3.10 mg/Kg	3.10U mg/Kg
SL-067-SA5DN-SB-9.0-10.0(REA)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-079-SA5DN-SB-4.0-5.0(REA)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-079-SA5DN-SB-9.0-10.0(REA)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-080-SA5DN-SB-4.0-5.0(REA)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-080-SA5DN-SB-8.0-9.0(REA)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-082-SA5DN-SB-4.0-5.0(REA)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-206-SA5DN-SB-4.0-5.0(REA)	TIN	3.18 mg/Kg	3.18U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14526BB221415A	5/27/2011 2:15:00 PM	COPPER	0.0707 mg/Kg	SL-066-SA5DN-SB-4.0-5.0 SL-066-SA5DN-SB-9.0-10.0 SL-067-SA5DN-SB-4.0-5.0 SL-067-SA5DN-SB-9.0-10.0 SL-079-SA5DN-SB-4.0-5.0 SL-079-SA5DN-SB-9.0-10.0 SL-080-SA5DN-SB-4.0-5.0 SL-080-SA5DN-SB-8.0-9.0 SL-082-SA5DN-SB-4.0-5.0 SL-206-SA5DN-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB63B211406A	5/24/2011 2:06:00 PM	METHYLENE CHLORIDE	0.66 ug/Kg	SL-066-SA5DN-SB-4.0-5.0 SL-066-SA5DN-SB-9.0-10.0 SL-067-SA5DN-SB-4.0-5.0 SL-067-SA5DN-SB-9.0-10.0 SL-079-SA5DN-SB-4.0-5.0 SL-080-SA5DN-SB-4.0-5.0 SL-082-SA5DN-SB-4.0-5.0 SL-206-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-066-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.78 ug/Kg	4.5U ug/Kg
SL-066-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	3.6 ug/Kg	5.2U ug/Kg
SL-067-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.4U ug/Kg
SL-067-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	3.3 ug/Kg	4.1U ug/Kg
SL-079-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.88 ug/Kg	4.1U ug/Kg
SL-080-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.8U ug/Kg
SL-082-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	5.3 ug/Kg	5.3U ug/Kg
SL-206-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.3U ug/Kg

Method: **8270C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC14B261938	5/30/2011 7:38:00 PM	4-CHLOROANILINE	3 ug/L	EB03-SA5DN-SB-051911 EB04-SA5DN-SS-051911

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB04-SA5DN-SS-051911(RES)	4-CHLOROANILINE	2 ug/L	5U ug/L

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWK14B260709	5/26/2011 7:09:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Di-n-butylphthalate	0.11 ug/L 0.070 ug/L 0.082 ug/L	EB03-SA5DN-SB-051911 EB04-SA5DN-SS-051911

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB03-SA5DN-SB-051911(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.16 ug/L	1.1U ug/L

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB03-SA5DN-SB-051911(RES)	Butylbenzylphthalate	0.082 ug/L	1.1U ug/L
EB03-SA5DN-SB-051911(RES)	Di-n-butylphthalate	0.14 ug/L	1.1U ug/L
EB04-SA5DN-SS-051911(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.21 ug/L	1.1U ug/L
EB04-SA5DN-SS-051911(RES)	Butylbenzylphthalate	0.089 ug/L	1.1U ug/L
EB04-SA5DN-SS-051911(RES)	Di-n-butylphthalate	0.15 ug/L	1.1U ug/L

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLD14B260740	5/25/2011 7:40:00 AM	DIBENZO(A,H)ANTHRACENE Di-n-octylphthalate INDENO(1,2,3-CD)PYRENE	1.1 ug/Kg 8.0 ug/Kg 0.69 ug/Kg	SL-066-SA5DN-SB-4.0-5.0 SL-066-SA5DN-SB-9.0-10.0 SL-067-SA5DN-SB-4.0-5.0 SL-067-SA5DN-SB-9.0-10.0 SL-079-SA5DN-SB-4.0-5.0 SL-079-SA5DN-SB-9.0-10.0 SL-080-SA5DN-SB-4.0-5.0 SL-080-SA5DN-SB-8.0-9.0 SL-082-SA5DN-SB-4.0-5.0 SL-206-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-080-SA5DN-SB-4.0-5.0(RES)	Di-n-octylphthalate	16 ug/Kg	20U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB03-SA5DN-SB-051911 (RES)	5/19/2011 9:50:00 AM	METHYLENE CHLORIDE	3 ug/L	SL-066-SA5DN-SB-4.0-5.0 SL-066-SA5DN-SB-9.0-10.0 SL-067-SA5DN-SB-4.0-5.0 SL-067-SA5DN-SB-9.0-10.0 SL-079-SA5DN-SB-4.0-5.0 SL-079-SA5DN-SB-9.0-10.0 SL-080-SA5DN-SB-4.0-5.0 SL-080-SA5DN-SB-8.0-9.0 SL-082-SA5DN-SB-4.0-5.0 SL-206-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-066-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.78 ug/Kg	4.5U ug/Kg
SL-066-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	3.6 ug/Kg	5.2U ug/Kg
SL-067-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.4U ug/Kg
SL-067-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	3.3 ug/Kg	4.1U ug/Kg
SL-079-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.88 ug/Kg	4.1U ug/Kg
SL-080-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.8U ug/Kg
SL-082-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	5.3 ug/Kg	5.3U ug/Kg
SL-206-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.3U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-066-SA5DN-SB-4.0-5.0MS (SL-066-SA5DN-SB-4.0-5.0 SL-066-SA5DN-SB-9.0-10.0 SL-067-SA5DN-SB-4.0-5.0 SL-067-SA5DN-SB-9.0-10.0 SL-079-SA5DN-SB-4.0-5.0 SL-079-SA5DN-SB-9.0-10.0 SL-080-SA5DN-SB-4.0-5.0 SL-080-SA5DN-SB-8.0-9.0 SL-082-SA5DN-SB-4.0-5.0 SL-206-SA5DN-SB-4.0-5.0)	FLUORIDE	78	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11430AQ242200A P11430AY242227A (EB04-SA5DN-SS-051911)	DICAMBA DINOSEB	48 -	52 -	68.00-135.00 32.00-91.00	- 69 (30.00)	DICAMBA DINOSEB	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11441AQ240938A (EB03-SA5DN-SB-051911 EB04-SA5DN-SS-051911)	Aroclor 5442	92	-	35.00-84.00	-	Aroclor 5442 Aroclor 5432 Aroclor 5460	J(all detects)

Method: 7199
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P14041AQ271205A P14041AY271217A (EB03-SA5DN-SB-051911 EB04-SA5DN-SS-051911)	HEXAVALENT CHROMIUM	112	113	90.00-110.00	-	HEXAVALENT CHROMIUM	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P4WCLCSY262028 (EB03-SA5DN-SB-051911 EB04-SA5DN-SS-051911)	BENZOIC ACID	-	-	10.00-69.00	39 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P4WKLCSQ260741 P4WKLCSY260814 (EB03-SA5DN-SB-051911 EB04-SA5DN-SS-051911)	BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(G,H,I)PERYLENE BENZO(K)FLUORANTHENE DIBENZO(A,H)ANTHRACENE Di-n-octylphthalate INDENO(1,2,3-CD)PYRENE	142 145 147 143 147 - 147	146 148 152 147 153 152 152	60.00-127.00 69.00-123.00 57.00-131.00 59.00-130.00 55.00-134.00 57.00-145.00 69.00-124.00	- - - - - - -	BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(G,H,I)PERYLENE BENZO(K)FLUORANTHENE DIBENZO(A,H)ANTHRACENE Di-n-octylphthalate INDENO(1,2,3-CD)PYRENE	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11436AQ242127A	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	
(SL-066-SA5DN-SB-4.0-5.0	2-AMINO-4,6-DINITROTOLUENE	126	-	80.00-120.00	-	2-AMINO-4,6-DINITROTOLUEN	
SL -066-SA5DN-SB-9.0-10.0	NITROBENZENE	145	-	80.00-120.00	-	NITROBENZENE	
SL -067-SA5DN-SB-4.0-5.0	PETN	132	-	80.00-120.00	-	PETN	
SL -067-SA5DN-SB-9.0-10.0							
SL -079-SA5DN-SB-4.0-5.0							J (all detects)
SL -079-SA5DN-SB-9.0-10.0							
SL -080-SA5DN-SB-4.0-5.0							
SL -080-SA5DN-SB-8.0-9.0							
SL -082-SA5DN-SB-4.0-5.0							
SL -206-SA5DN-SB-4.0-5.0)							

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LALCSQ260906	2,4-DINITROPHENOL	28	-	37.00-120.00	-	2,4-DINITROPHENOL	
(SL-066-SA5DN-SB-4.0-5.0	4,6-DINITRO-2-METHYLPHENOL	51	-	53.00-110.00	-	4,6-DINITRO-2-METHYLPHEN	
SL -066-SA5DN-SB-9.0-10.0							
SL -067-SA5DN-SB-4.0-5.0							
SL -067-SA5DN-SB-9.0-10.0							J(all detects)
SL -079-SA5DN-SB-4.0-5.0							UJ(all non-detects)
SL -079-SA5DN-SB-9.0-10.0							
SL -080-SA5DN-SB-4.0-5.0							
SL -080-SA5DN-SB-8.0-9.0							
SL -082-SA5DN-SB-4.0-5.0							
SL -206-SA5DN-SB-4.0-5.0)							

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LDLCSQ260811	BENZO(A)PYRENE	136	-	58.00-129.00	-	BENZO(A)PYRENE	
(SL-066-SA5DN-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	147	-	44.00-138.00	-	BENZO(G,H,I)PERYLENE	
SL -066-SA5DN-SB-9.0-10.0	DIBENZO(A,H)ANTHRACENE	150	-	62.00-142.00	-	DIBENZO(A,H)ANTHRACENE	
SL -067-SA5DN-SB-4.0-5.0	INDENO(1,2,3-CD)PYRENE	148	-	56.00-134.00	-	INDENO(1,2,3-CD)PYRENE	
SL -067-SA5DN-SB-9.0-10.0							
SL -079-SA5DN-SB-4.0-5.0							J(all detects)
SL -079-SA5DN-SB-9.0-10.0							
SL -080-SA5DN-SB-4.0-5.0							
SL -080-SA5DN-SB-8.0-9.0							
SL -082-SA5DN-SB-4.0-5.0							
SL -206-SA5DN-SB-4.0-5.0)							

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
LCS1B63Q211541A (SL-066-SA5DN-SB-4.0-5.0 SL -066-SA5DN-SB-9.0-10.0 SL -067-SA5DN-SB-4.0-5.0 SL -067-SA5DN-SB-9.0-10.0 SL -079-SA5DN-SB-4.0-5.0 SL -080-SA5DN-SB-4.0-5.0 SL -082-SA5DN-SB-4.0-5.0 SL -206-SA5DN-SB-4.0-5.0)	2-Chloro-1,1,1-trifluoroethane	75	-	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB04-SA5DN-SS-051911	LEAD	J	0.000056	0.0010	PQL	mg/L	J (all detects)

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB03-SA5DN-SB-051911	METHYLENE CHLORIDE	J	3	5	PQL	ug/L	J (all detects)

Method: 8270C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB04-SA5DN-SS-051911	4-CHLOROANILINE	J	2	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB03-SA5DN-SB-051911	1-METHYLNAPHTHALENE	J	0.033	0.053	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.033	0.053	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.16	1.1	PQL	ug/L	
	Butylbenzylphthalate	J	0.082	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.14	1.1	PQL	ug/L	
EB04-SA5DN-SS-051911	1-METHYLNAPHTHALENE	J	0.032	0.054	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.032	0.054	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.21	1.1	PQL	ug/L	
	Butylbenzylphthalate	J	0.089	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.15	1.1	PQL	ug/L	
	Di-n-octylphthalate	J	0.33	1.1	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	26.4	38.1	PQL	ng/Kg	J (all detects)
SL-066-SA5DN-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	211	396	PQL	ng/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SB-4.0-5.0	TIN	J	3.04	11.1	PQL	mg/Kg	J (all detects)
SL-066-SA5DN-SB-9.0-10.0	TIN Zirconium	J J	3.02 5.85	11.9 5.97	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-067-SA5DN-SB-4.0-5.0	TIN	J	3.10	11.4	PQL	mg/Kg	J (all detects)
SL-067-SA5DN-SB-9.0-10.0	TIN	J	3.03	11.3	PQL	mg/Kg	J (all detects)
SL-079-SA5DN-SB-4.0-5.0	BORON TIN	J J	1.47 3.08	5.50 11.0	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA5DN-SB-9.0-10.0	TIN	J	3.04	11.8	PQL	mg/Kg	J (all detects)
SL-080-SA5DN-SB-4.0-5.0	TIN	J	3.09	10.9	PQL	mg/Kg	J (all detects)
SL-080-SA5DN-SB-8.0-9.0	TIN Zirconium	J J	2.97 5.01	10.7 5.36	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-082-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.94 4.07	10.8 5.40	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-206-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	3.18 4.76	11.3 5.63	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.175 0.0591	0.449 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-066-SA5DN-SB-9.0-10.0	SILVER	J	0.0852	0.115	PQL	mg/Kg	J (all detects)
SL-067-SA5DN-SB-4.0-5.0	ANTIMONY SELENIUM SILVER	J J J	0.195 0.0903 0.0655	0.221 0.442 0.110	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-067-SA5DN-SB-9.0-10.0	ANTIMONY SILVER	J J	0.188 0.0591	0.229 0.115	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.193 0.0693	0.440 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA5DN-SB-9.0-10.0	ANTIMONY SELENIUM SILVER	J J J	0.223 0.0637 0.0979	0.233 0.466 0.117	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-080-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.103 0.0542	0.446 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-080-SA5DN-SB-8.0-9.0	ANTIMONY	J	0.207	0.217	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0450	0.108	PQL	mg/Kg	
SL-082-SA5DN-SB-4.0-5.0	SELENIUM	J	0.133	0.432	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0705	0.108	PQL	mg/Kg	
SL-206-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.174	0.227	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0900	0.114	PQL	mg/Kg	
	SELENIUM	J	0.0537	0.455	PQL	mg/Kg	
	SILVER	J	0.0796	0.114	PQL	mg/Kg	

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SB-9.0-10.0	MERCURY	J	0.0199	0.117	PQL	mg/Kg	J (all detects)
SL-067-SA5DN-SB-9.0-10.0	MERCURY	J	0.0132	0.110	PQL	mg/Kg	J (all detects)
SL-079-SA5DN-SB-4.0-5.0	MERCURY	J	0.0186	0.111	PQL	mg/Kg	J (all detects)
SL-079-SA5DN-SB-9.0-10.0	MERCURY	J	0.0130	0.118	PQL	mg/Kg	J (all detects)
SL-080-SA5DN-SB-4.0-5.0	MERCURY	J	0.0210	0.107	PQL	mg/Kg	J (all detects)
SL-082-SA5DN-SB-4.0-5.0	MERCURY	J	0.0102	0.102	PQL	mg/Kg	J (all detects)
SL-206-SA5DN-SB-4.0-5.0	MERCURY	J	0.0089	0.109	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	1.2	1.4	PQL	mg/Kg	J (all detects)
SL-066-SA5DN-SB-9.0-10.0	EFH (C30-C40)	J	0.76	1.4	PQL	mg/Kg	J (all detects)
SL-067-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.72	1.4	PQL	mg/Kg	J (all detects)
SL-067-SA5DN-SB-9.0-10.0	EFH (C30-C40)	J	0.65	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA5DN-SB-4.0-5.0	AROCLOR 1254	J	0.84	1.9	PQL	ug/Kg	J (all detects)
SL-082-SA5DN-SB-4.0-5.0	AROCLOR 1254	J	0.42	1.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE156 **Laboratory: LL**

EDD Filename: DE156_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-066-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.78	4.5	PQL	ug/Kg	J (all detects)
SL-066-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	3.6	5.2	PQL	ug/Kg	J (all detects)
SL-067-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.1	4.4	PQL	ug/Kg	J (all detects)
SL-067-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	3.3	4.1	PQL	ug/Kg	J (all detects)
SL-079-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.88	4.1	PQL	ug/Kg	J (all detects)
SL-080-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.5	4.8	PQL	ug/Kg	J (all detects)
SL-206-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.2	4.3	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	400	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-080-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-octylphthalate	J J	6.8 16	20 20	PQL PQL	ug/Kg ug/Kg	J (all detects)

LDC #: 26275O4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE156 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual.
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	DB155.
VII.	Duplicate Sample Analysis	SW	
VIII.	Laboratory Control Samples (LCS)	N A	SRM.
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ba, Cr, Co, Cu, Pb, Ni, V (DB155)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	SW	TB=11, 12.

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

Validated Samples:

1	SL-066-SA5DN-SB-4.0-5.0	11	EB03-SA5DN-SB-051911	21		31	
2	SL-066-SA5DN-SB-9.0-10.0	12	EB04-SA5DN-SS-051911	22		32	
3	SL-067-SA5DN-SB-4.0-5.0	13		23		33	
4	SL-367-SA5DN-SB-9.0-10.0	14		24		34	
5	SL-079-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-079-SA5DN-SB-9.0-10.0	16		26		36	
7	SL-080-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-080-SA5DN-SB-8.0-9.0	18		28		38	
9	SL-082-SA5DN-SB-4.0-5.0	19		29		39	
10	SL-206-SA5DN-SB-4.0-5.0	20		30		40	

Notes:

LDC #: 26275O4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer:
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target analytes detected in the field blanks?

Blank units: mg/L **Associated sample units:** mg/Kg

Sampling date: 5/19/11 Soil factor applied 100X

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil (>5X)

Analyte	Blank ID	Sample Identification											
	12	Action Level											
Pb	0.000056	0.028											
Zn	0.0213	10.65											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

DE157

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3050B	6010B	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3050B	6020	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3060A	7199	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3546	1625C	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3550B	8015B	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3550B	8015M	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3550B	8081A	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3550B	8082	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3550B	8151A	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3550B	8270C	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	3550B	8270C SIM	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	8330	8330A	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	METHOD	300.0	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	METHOD	314.0	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	METHOD	7471A	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	METHOD	8015B	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	METHOD	8015M	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	METHOD	8315A	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5	6293463	N	METHOD	9012B	III
19-May-2011	SL-047-SA5DN-SS-0.0-0.5MS	P293463R241944A	MS	3550B	8151A	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	3050B	6010B	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	3050B	6020	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	3060A	7199	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	3550B	8081A	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	3550B	8082	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	3550B	8270C	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	3550B	8270C SIM	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	METHOD	300.0	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	METHOD	314.0	III
19-May-2011	SL-048-SA5DN-SS-0.0-0.5	6293464	N	METHOD	7471A	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3050B	6010B	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3050B	6020	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3060A	7199	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3546	1625C	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3550B	8015B	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3550B	8015M	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3550B	8081A	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3550B	8082	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3550B	8151A	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3550B	8270C	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	3550B	8270C SIM	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	8330	8330A	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	METHOD	300.0	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	METHOD	314.0	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	METHOD	6850	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	METHOD	7471A	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	METHOD	8015B	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	METHOD	8015M	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	METHOD	8315A	III
19-May-2011	SL-046-SA5DN-SS-0.0-0.5	6293462	N	METHOD	9012B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3050B	6020	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3060A	7199	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3546	1625C	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3550B	8015B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3550B	8015M	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3550B	8081A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3550B	8082	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3550B	8151A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3550B	8270C	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	3550B	8270C SIM	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	8330	8330A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	METHOD	300.0	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	METHOD	314.0	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	METHOD	7471A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	METHOD	8015B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	METHOD	8015M	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	METHOD	8315A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5	6293457	N	METHOD	9012B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3050B	6010B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3050B	6020	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3060A	7199	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3546	1625C	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3550B	8015B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3550B	8015M	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3550B	8081A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3550B	8151A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3550B	8270C	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	3550B	8270C SIM	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	8330	8330A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	METHOD	300.0	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	METHOD	314.0	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	METHOD	7471A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	METHOD	8015B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	METHOD	8015M	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	METHOD	8315A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5MS	6293458	MS	METHOD	9012B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5DU	6293460	DUP	3050B	6010B	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5DU	6293460	DUP	3050B	6020	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5DU	6293460	DUP	3060A	7199	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5DU	6293460	DUP	METHOD	300.0	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5DU	6293460	DUP	METHOD	314.0	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5DU	6293460	DUP	METHOD	7471A	III
19-May-2011	SL-043-SA5DN-SS-0.0-0.5DU	6293460	DUP	METHOD	9012B	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3050B	6010B	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3050B	6020	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3060A	7199	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3546	1625C	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3550B	8015B	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3550B	8015M	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3550B	8081A	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3550B	8151A	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3550B	8270C	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	3550B	8270C SIM	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	8330	8330A	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	METHOD	300.0	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	METHOD	314.0	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	METHOD	7471A	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	METHOD	8015B	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	METHOD	8015M	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	METHOD	8315A	III
19-May-2011	DUP-04-SA5DN-QC-051911	6293466	FD	METHOD	9012B	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3050B	6010B	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3050B	6020	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3060A	7199	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3546	1625C	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3550B	8015B	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3550B	8015M	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3550B	8081A	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3550B	8082	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3550B	8270C	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	3550B	8270C SIM	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	8330	8330A	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	Gen Prep	8151A	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	METHOD	300.0	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	METHOD	314.0	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	METHOD	7471A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	METHOD	8015B	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	METHOD	8015M	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	METHOD	8315A	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5	6293456	N	METHOD	9012B	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5DU	P293456D270344A	DUP	METHOD	300.0	III
19-May-2011	SL-042-SA5DN-SS-0.0-0.5MS	P293456R270357A	MS	METHOD	300.0	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3050B	6010B	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3050B	6020	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3060A	7199	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3546	1625C	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3550B	8015B	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3550B	8015M	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3550B	8081A	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3550B	8082	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3550B	8151A	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3550B	8270C	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	3550B	8270C SIM	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	8330	8330A	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	METHOD	300.0	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	METHOD	314.0	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	METHOD	7471A	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	METHOD	8015B	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	METHOD	8015M	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	METHOD	8315A	III
19-May-2011	SL-041-SA5DN-SS-0.0-0.5	6293455	N	METHOD	9012B	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3050B	6020	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3060A	7199	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3546	1625C	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3550B	8015B	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3550B	8015M	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3550B	8081A	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3550B	8082	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3550B	8151A	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3550B	8270C	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	3550B	8270C SIM	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	8330	8330A	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	METHOD	300.0	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	METHOD	314.0	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	METHOD	7471A	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	METHOD	8015B	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	METHOD	8015M	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	METHOD	8315A	III
19-May-2011	SL-045-SA5DN-SS-0.0-0.5	6293461	N	METHOD	9012B	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	3050B	6010B	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	3050B	6020	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	3060A	7199	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	3550B	8081A	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	3550B	8082	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	3550B	8151A	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	3550B	8270C	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	METHOD	300.0	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	METHOD	314.0	III
19-May-2011	SL-049-SA5DN-SS-0.0-0.5	6293465	N	METHOD	7471A	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3050B	6010B	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3050B	6020	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3060A	7199	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3546	1625C	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3550B	8015B	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3550B	8015M	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3550B	8081A	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3550B	8082	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3550B	8151A	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3550B	8270C	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	3550B	8270C SIM	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	8330	8330A	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	METHOD	300.0	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	METHOD	314.0	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	METHOD	6850	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	METHOD	7471A	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	METHOD	8015B	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	METHOD	8015M	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	METHOD	8315A	III
19-May-2011	SL-032-SA5DN-SS-0.0-0.5	6293451	N	METHOD	9012B	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3050B	6010B	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3050B	6020	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3546	1625C	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3550B	8015B	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3550B	8015M	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3550B	8081A	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3550B	8082	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3550B	8151A	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3550B	8270C	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	3550B	8270C SIM	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	8330	8330A	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	METHOD	300.0	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	METHOD	314.0	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	METHOD	7471A	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	METHOD	8015B	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	METHOD	8015M	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	METHOD	8315A	III
19-May-2011	SL-033-SA5DN-SS-0.0-0.5	6293452	N	METHOD	9012B	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3050B	6010B	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3050B	6020	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3060A	7199	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3546	1625C	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3550B	8015B	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3550B	8015M	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3550B	8081A	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3550B	8082	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3550B	8151A	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3550B	8270C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	3550B	8270C SIM	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	8330	8330A	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	METHOD	300.0	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	METHOD	314.0	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	METHOD	7471A	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	METHOD	8015B	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	METHOD	8015M	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	METHOD	8315A	III
19-May-2011	SL-035-SA5DN-SS-0.0-0.5	6293454	N	METHOD	9012B	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3050B	6010B	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3050B	6020	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3060A	7199	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3546	1625C	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3550B	8015B	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3550B	8015M	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3550B	8081A	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3550B	8082	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3550B	8151A	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3550B	8270C	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	3550B	8270C SIM	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	8330	8330A	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	METHOD	300.0	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	METHOD	314.0	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	METHOD	7471A	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	METHOD	8015B	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	METHOD	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	METHOD	8315A	III
19-May-2011	SL-034-SA5DN-SS-0.0-0.5	6293453	N	METHOD	9012B	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3050B	6010B	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3050B	6020	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3060A	7199	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3546	1625C	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3550B	8015B	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3550B	8015M	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3550B	8081A	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3550B	8082	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3550B	8151A	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3550B	8270C	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	3550B	8270C SIM	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	8330	8330A	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	METHOD	300.0	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	METHOD	314.0	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	METHOD	7471A	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	METHOD	8015B	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	METHOD	8015M	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	METHOD	8315A	III
19-May-2011	SL-031-SA5DN-SS-0.0-0.5	6293450	N	METHOD	9012B	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3050B	6010B	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3050B	6020	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3060A	7199	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3546	1625C	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3550B	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3550B	8015M	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3550B	8081A	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3550B	8082	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3550B	8151A	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3550B	8270C	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	3550B	8270C SIM	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	8330	8330A	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	METHOD	300.0	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	METHOD	314.0	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	METHOD	7471A	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	METHOD	8015B	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	METHOD	8015M	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	METHOD	8315A	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5	6293449	N	METHOD	9012B	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5DU	P293449D270650A	DUP	METHOD	314.0	III
19-May-2011	SL-030-SA5DN-SS-0.0-0.5MS	P293449R270712A	MS	METHOD	314.0	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.93	MDL	1.2	PQL	mg/Kg	J	FD

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.92	U	0.92	MDL	1.2	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 Matrix: SO

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	0.94	MDL	1.2	PQL	mg/Kg	J	Z, Q

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.9	J	1.5	MDL	2.8	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.92	U	0.92	MDL	1.2	PQL	mg/Kg	UJ	Q, FD

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.4	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B Matrix: SO

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	13300		6.94	MDL	22.7	PQL	mg/Kg	J	E
PHOSPHORUS	428		0.634	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	4500		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.96	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.58	J	0.952	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	17400		6.96	MDL	22.7	PQL	mg/Kg	J	E
PHOSPHORUS	377		0.635	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3630		20.4	MDL	56.7	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.83	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.83	J	0.953	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	39700		6.85	MDL	22.3	PQL	mg/Kg	J	E
PHOSPHORUS	196		0.625	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2760		20.1	MDL	55.8	PQL	mg/Kg	J	Q
TIN	2.87	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.79	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.34	J	0.976	MDL	5.48	PQL	mg/Kg	J	Z
CALCIUM	11200		6.72	MDL	21.9	PQL	mg/Kg	J	E
PHOSPHORUS	324		0.614	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3760		19.7	MDL	54.8	PQL	mg/Kg	J	Q
TIN	2.96	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.53	J	0.921	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	13700		7.03	MDL	22.9	PQL	mg/Kg	J	E
PHOSPHORUS	378		0.642	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3680		20.6	MDL	57.3	PQL	mg/Kg	J	Q
TIN	2.67	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.88	J	0.963	MDL	5.73	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	13800		6.55	MDL	21.4	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	359		0.599	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	3610		19.2	MDL	53.5	PQL	mg/Kg	J	Q
TIN	2.68	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.37	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6760		7.00	MDL	22.8	PQL	mg/Kg	J	E
PHOSPHORUS	284		0.640	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	4300		20.6	MDL	57.1	PQL	mg/Kg	J	Q
TIN	2.81	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	4.53	J	0.959	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	9850		7.11	MDL	23.2	PQL	mg/Kg	J	E
PHOSPHORUS	419		0.649	MDL	11.6	PQL	mg/Kg	J	Q
POTASSIUM	4100		20.9	MDL	58.0	PQL	mg/Kg	J	Q
SODIUM	114	J	43.2	MDL	116	PQL	mg/Kg	J	Z
TIN	2.91	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	17400		11.2	MDL	36.6	PQL	mg/Kg	J	E
PHOSPHORUS	568		1.02	MDL	18.3	PQL	mg/Kg	J	Q
POTASSIUM	6080		32.9	MDL	91.5	PQL	mg/Kg	J	Q
SODIUM	181	J	68.3	MDL	183	PQL	mg/Kg	J	Z
TIN	4.37	J	1.83	MDL	18.3	PQL	mg/Kg	U	B
Zirconium	6.06	J	1.54	MDL	9.15	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	11000		7.00	MDL	22.8	PQL	mg/Kg	J	E
PHOSPHORUS	380		0.640	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	4060		20.6	MDL	57.1	PQL	mg/Kg	J	Q
TIN	2.93	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	4.23	J	0.959	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	11600		6.95	MDL	22.7	PQL	mg/Kg	J	E
PHOSPHORUS	361		0.635	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	4230		20.4	MDL	56.7	PQL	mg/Kg	J	Q
TIN	2.61	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.85	J	0.952	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	11400		6.93	MDL	22.6	PQL	mg/Kg	J	E
PHOSPHORUS	466		0.633	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	4460		20.4	MDL	56.5	PQL	mg/Kg	J	Q
TIN	2.65	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.54	J	0.950	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	8010		6.50	MDL	21.2	PQL	mg/Kg	J	E
PHOSPHORUS	467		0.594	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	4140		19.1	MDL	53.1	PQL	mg/Kg	J	Q
TIN	2.53	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.24	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	7230		6.77	MDL	22.1	PQL	mg/Kg	J	E
PHOSPHORUS	543		0.618	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	4050		19.9	MDL	55.2	PQL	mg/Kg	J	Q
TIN	2.65	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.27	J	0.927	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6750		6.71	MDL	21.9	PQL	mg/Kg	J	E
PHOSPHORUS	519		0.613	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	4300		19.7	MDL	54.7	PQL	mg/Kg	J	Q
TIN	2.69	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.92	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.145	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z, Q

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.829		0.0572	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	196		0.124	MDL	0.458	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.517		0.0333	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.310		0.0686	MDL	0.229	PQL	mg/Kg	J	Q
ARSENIC	9.29		0.0915	MDL	0.458	PQL	mg/Kg	J	E, A
CADMIUM	0.497		0.0458	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	43.4		0.137	MDL	0.458	PQL	mg/Kg	J	E
COBALT	14.4		0.0229	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	24.8		0.0755	MDL	0.458	PQL	mg/Kg	J	Q, E, A
LEAD	16.5		0.0119	MDL	0.229	PQL	mg/Kg	J	A
NICKEL	30.4		0.114	MDL	0.458	PQL	mg/Kg	J	Q, E, A
SILVER	0.480		0.0137	MDL	0.114	PQL	mg/Kg	J	Q, FD
VANADIUM	82.3		0.0252	MDL	0.114	PQL	mg/Kg	J	E
ZINC	124		0.641	MDL	3.43	PQL	mg/Kg	J	E, A

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0856	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z, Q

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.396		0.0556	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.120	MDL	0.445	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.452		0.0334	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.217	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	6.88		0.0890	MDL	0.445	PQL	mg/Kg	J	E, A
CADMIUM	0.260		0.0445	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	32.0		0.134	MDL	0.445	PQL	mg/Kg	J	E
COBALT	11.2		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	17.0		0.0735	MDL	0.445	PQL	mg/Kg	J	Q, E, A
LEAD	10.8		0.0116	MDL	0.223	PQL	mg/Kg	J	A
NICKEL	21.5		0.111	MDL	0.445	PQL	mg/Kg	J	Q, E, A
SILVER	0.0459	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q
VANADIUM	64.5		0.0245	MDL	0.111	PQL	mg/Kg	J	E
ZINC	79.5		0.623	MDL	3.34	PQL	mg/Kg	J	E, A

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0615	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z, Q

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.276		0.0575	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	151		0.124	MDL	0.460	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.445		0.0342	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.245		0.0690	MDL	0.230	PQL	mg/Kg	J	Q
ARSENIC	8.18		0.0920	MDL	0.460	PQL	mg/Kg	J	E, A
CADMIUM	0.217		0.0460	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	37.0		0.138	MDL	0.460	PQL	mg/Kg	J	E
COBALT	8.85		0.0230	MDL	0.115	PQL	mg/Kg	J	Q, E, A
COPPER	17.7		0.0759	MDL	0.460	PQL	mg/Kg	J	Q, E, A
LEAD	11.5		0.0120	MDL	0.230	PQL	mg/Kg	J	A
NICKEL	21.2		0.115	MDL	0.460	PQL	mg/Kg	J	Q, E, A
SILVER	0.0362	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q
VANADIUM	67.5		0.0253	MDL	0.115	PQL	mg/Kg	J	E
ZINC	67.0		0.644	MDL	3.45	PQL	mg/Kg	J	E, A

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.311		0.0447	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.137	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z, Q

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.625		0.0559	MDL	0.112	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.121	MDL	0.447	PQL	mg/Kg	J	E, A

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.486		0.0336	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.325		0.0671	MDL	0.224	PQL	mg/Kg	J	Q
ARSENIC	9.98		0.0895	MDL	0.447	PQL	mg/Kg	J	E, A
CHROMIUM	47.3		0.134	MDL	0.447	PQL	mg/Kg	J	E
COBALT	15.0		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E, A
COPPER	26.6		0.0738	MDL	0.447	PQL	mg/Kg	J	Q, E, A
LEAD	16.6		0.0116	MDL	0.224	PQL	mg/Kg	J	A
NICKEL	33.9		0.112	MDL	0.447	PQL	mg/Kg	J	Q, E, A
SILVER	0.0963	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
VANADIUM	86.4		0.0246	MDL	0.112	PQL	mg/Kg	J	E
ZINC	126		0.626	MDL	3.36	PQL	mg/Kg	J	E, A

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z, Q

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.650		0.0562	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.304	MDL	1.12	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.496		0.0341	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.367		0.0675	MDL	0.225	PQL	mg/Kg	J	Q
ARSENIC	11.0		0.0900	MDL	0.450	PQL	mg/Kg	J	E, A
CADMIUM	0.453		0.0450	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	46.9		0.135	MDL	0.450	PQL	mg/Kg	J	E
COBALT	16.4		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, E, A
COPPER	26.4		0.0742	MDL	0.450	PQL	mg/Kg	J	Q, E, A
LEAD	15.3		0.0117	MDL	0.225	PQL	mg/Kg	J	A
NICKEL	33.0		0.112	MDL	0.450	PQL	mg/Kg	J	Q, E, A
SILVER	0.0754	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
VANADIUM	86.7		0.0247	MDL	0.112	PQL	mg/Kg	J	E
ZINC	120		0.630	MDL	3.37	PQL	mg/Kg	J	E, A

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z, Q

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.567		0.0540	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.292	MDL	1.08	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.352		0.0330	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.355		0.0648	MDL	0.216	PQL	mg/Kg	J	Q
ARSENIC	9.38		0.0864	MDL	0.432	PQL	mg/Kg	J	E, A
CADMIUM	0.525		0.0432	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	38.8		0.130	MDL	0.432	PQL	mg/Kg	J	E
COBALT	14.8		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E, A
COPPER	24.2		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E, A
LEAD	16.7		0.0112	MDL	0.216	PQL	mg/Kg	J	A
NICKEL	28.1		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E, A
SILVER	0.0730	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
VANADIUM	74.4		0.0238	MDL	0.108	PQL	mg/Kg	J	E
ZINC	112		0.605	MDL	3.24	PQL	mg/Kg	J	E, A

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.262	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z, Q

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.651		0.0555	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	172		0.299	MDL	1.11	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.503		0.0333	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.332		0.0665	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	10.6		0.0887	MDL	0.444	PQL	mg/Kg	J	E, A
CADMIUM	0.492		0.0444	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	53.3		0.133	MDL	0.444	PQL	mg/Kg	J	E
COBALT	18.3		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	28.4		0.0732	MDL	0.444	PQL	mg/Kg	J	Q, E, A
LEAD	16.8		0.0115	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	38.2		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E, A
SILVER	0.0785	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
VANADIUM	99.3		0.0244	MDL	0.111	PQL	mg/Kg	J	E
ZINC	120		0.621	MDL	3.33	PQL	mg/Kg	J	E, A

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.231	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z, Q

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.752		0.0568	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	145		0.307	MDL	1.14	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.456		0.0338	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.465		0.0682	MDL	0.227	PQL	mg/Kg	J	Q
ARSENIC	10.7		0.0909	MDL	0.455	PQL	mg/Kg	J	E, A
CADMIUM	0.522		0.0455	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	52.0		0.136	MDL	0.455	PQL	mg/Kg	J	E
COBALT	17.5		0.0227	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	29.9		0.0750	MDL	0.455	PQL	mg/Kg	J	Q, E, A
LEAD	24.0		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	35.7		0.114	MDL	0.455	PQL	mg/Kg	J	Q, E, A
SILVER	0.114		0.0136	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	96.3		0.0250	MDL	0.114	PQL	mg/Kg	J	E
ZINC	149		0.637	MDL	3.41	PQL	mg/Kg	J	E, A

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.305	J	0.0725	MDL	0.725	PQL	mg/Kg	J	Z, Q

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.16		0.0906	MDL	0.181	PQL	mg/Kg	J	Q, E

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	263		0.489	MDL	1.81	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.807		0.0538	MDL	0.179	PQL	mg/Kg	J	Q

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.535		0.109	MDL	0.362	PQL	mg/Kg	J	Q
ARSENIC	16.6		0.145	MDL	0.725	PQL	mg/Kg	J	E, A
CADMIUM	0.785		0.0725	MDL	0.181	PQL	mg/Kg	J	Q
CHROMIUM	81.1		0.217	MDL	0.725	PQL	mg/Kg	J	E
COBALT	28.9		0.0362	MDL	0.181	PQL	mg/Kg	J	Q, E, A
COPPER	44.4		0.120	MDL	0.725	PQL	mg/Kg	J	Q, E, A
LEAD	30.1		0.0188	MDL	0.362	PQL	mg/Kg	J	A
NICKEL	57.3		0.181	MDL	0.725	PQL	mg/Kg	J	Q, E, A
SILVER	0.117	J	0.0217	MDL	0.181	PQL	mg/Kg	J	Z, Q
VANADIUM	152		0.0399	MDL	0.181	PQL	mg/Kg	J	E
ZINC	203		1.01	MDL	5.44	PQL	mg/Kg	J	E, A

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.225	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z, Q

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.845		0.0571	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.123	MDL	0.457	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.439		0.0333	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.442		0.0685	MDL	0.228	PQL	mg/Kg	J	Q
ARSENIC	10.5		0.0914	MDL	0.457	PQL	mg/Kg	J	E, A
CADMIUM	0.465		0.0457	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	44.0		0.137	MDL	0.457	PQL	mg/Kg	J	E
COBALT	16.4		0.0228	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	27.9		0.0754	MDL	0.457	PQL	mg/Kg	J	Q, E, A
LEAD	17.2		0.0119	MDL	0.228	PQL	mg/Kg	J	A
NICKEL	34.4		0.114	MDL	0.457	PQL	mg/Kg	J	Q, E, A
SILVER	0.0937	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q, FD
VANADIUM	81.2		0.0251	MDL	0.114	PQL	mg/Kg	J	E
ZINC	131		0.640	MDL	3.43	PQL	mg/Kg	J	E, A

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.186	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z, Q

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.58		0.0567	MDL	0.113	PQL	mg/Kg	J	Q, E

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	168		0.306	MDL	1.13	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.476		0.0347	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.472		0.0680	MDL	0.227	PQL	mg/Kg	J	Q
ARSENIC	13.3		0.0907	MDL	0.453	PQL	mg/Kg	J	E, A
CADMIUM	0.663		0.0453	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	56.8		0.136	MDL	0.453	PQL	mg/Kg	J	E
COBALT	56.5		0.0227	MDL	0.113	PQL	mg/Kg	J	Q, E, A
COPPER	31.8		0.0748	MDL	0.453	PQL	mg/Kg	J	Q, E, A
LEAD	40.0		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	45.7		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E, A
SILVER	0.0509	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
VANADIUM	105		0.0249	MDL	0.113	PQL	mg/Kg	J	E
ZINC	140		0.635	MDL	3.40	PQL	mg/Kg	J	E, A

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.148	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z, Q

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.683		0.0571	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* REA4 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	153		0.308	MDL	1.14	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.439		0.0339	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.285		0.0685	MDL	0.228	PQL	mg/Kg	J	Q
ARSENIC	8.49		0.0914	MDL	0.457	PQL	mg/Kg	J	E, A
CADMIUM	0.463		0.0457	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	40.7		0.137	MDL	0.457	PQL	mg/Kg	J	E
COBALT	14.6		0.0228	MDL	0.114	PQL	mg/Kg	J	Q, E, A
COPPER	24.8		0.0754	MDL	0.457	PQL	mg/Kg	J	Q, E, A
LEAD	22.9		0.0119	MDL	0.228	PQL	mg/Kg	J	A
NICKEL	30.9		0.114	MDL	0.457	PQL	mg/Kg	J	Q, E, A
SILVER	0.0764	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
VANADIUM	82.5		0.0251	MDL	0.114	PQL	mg/Kg	J	E
ZINC	107		0.640	MDL	3.43	PQL	mg/Kg	J	E, A

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z, Q

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.415		0.0531	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	143		0.115	MDL	0.424	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.327		0.0315	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.266		0.0637	MDL	0.212	PQL	mg/Kg	J	Q
ARSENIC	5.64		0.0849	MDL	0.424	PQL	mg/Kg	J	E, A
CADMIUM	0.398		0.0424	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	28.1		0.127	MDL	0.424	PQL	mg/Kg	J	E
COBALT	11.2		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E, A
COPPER	16.9		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E, A
LEAD	16.5		0.0110	MDL	0.212	PQL	mg/Kg	J	A
NICKEL	20.2		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E, A
SILVER	0.0525	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
VANADIUM	55.3		0.0233	MDL	0.106	PQL	mg/Kg	J	E
ZINC	92.4		0.594	MDL	3.18	PQL	mg/Kg	J	E, A

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z, Q

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.07		0.0546	MDL	0.109	PQL	mg/Kg	J	Q, E

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	137		0.118	MDL	0.437	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.390		0.0325	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.277		0.0656	MDL	0.219	PQL	mg/Kg	J	Q
ARSENIC	5.58		0.0874	MDL	0.437	PQL	mg/Kg	J	E, A
CADMIUM	0.646		0.0437	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	28.6		0.131	MDL	0.437	PQL	mg/Kg	J	E
COBALT	9.83		0.0219	MDL	0.109	PQL	mg/Kg	J	Q, E, A
COPPER	24.5		0.0721	MDL	0.437	PQL	mg/Kg	J	Q, E, A
LEAD	28.7		0.0114	MDL	0.219	PQL	mg/Kg	J	A
NICKEL	19.0		0.109	MDL	0.437	PQL	mg/Kg	J	Q, E, A
SILVER	0.226		0.0131	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	56.6		0.0240	MDL	0.109	PQL	mg/Kg	J	E
ZINC	118		0.612	MDL	3.28	PQL	mg/Kg	J	E, A

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z, Q

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.844		0.0542	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	154		0.117	MDL	0.433	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.315		0.0319	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.335		0.0650	MDL	0.217	PQL	mg/Kg	J	Q
ARSENIC	6.29		0.0867	MDL	0.433	PQL	mg/Kg	J	E, A
CADMIUM	0.718		0.0433	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	29.0		0.130	MDL	0.433	PQL	mg/Kg	J	E
COBALT	12.0		0.0217	MDL	0.108	PQL	mg/Kg	J	Q, E, A
COPPER	20.0		0.0715	MDL	0.433	PQL	mg/Kg	J	Q, E, A
LEAD	48.2		0.0113	MDL	0.217	PQL	mg/Kg	J	A
NICKEL	22.7		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E, A
SILVER	0.0518	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
VANADIUM	62.9		0.0238	MDL	0.108	PQL	mg/Kg	J	E
ZINC	142		0.607	MDL	3.25	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	U	0.23	MDL	1.2	PQL	mg/Kg	UJ	FD

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.72	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.37	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.76	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.74	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.69	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0197	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z, FD

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0116	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0044	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0169	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0092	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z, FD

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0105	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0125	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0411	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0092	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C Matrix: SO

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	242	J	192	MDL	384	PQL	ng/Kg	J	Z, FD

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	257	J	192	MDL	383	PQL	ng/Kg	J	Z

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	303	J	192	MDL	385	PQL	ng/Kg	J	Z

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	260	J	193	MDL	386	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	411	J	308	MDL	616	PQL	ng/Kg	J	Z

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	57.4		19.0	MDL	38.1	PQL	ng/Kg	J	Q, FD

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	221	J	191	MDL	382	PQL	ng/Kg	J	Z

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	276	J	182	MDL	363	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.5	J	4.7	MDL	14	PQL	mg/Kg	J	Z, FD

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.9	J	2.3	MDL	6.9	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.9	J	2.2	MDL	6.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.2	J	4.7	MDL	14	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.2	J	4.7	MDL	14	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.9	J	3.7	MDL	11	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.8	U	5.8	MDL	12	PQL	mg/Kg	UJ	Q

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* REA3 *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	9.2	U	9.2	MDL	28	PQL	mg/Kg	UJ	FD

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	7.5	J	4.6	MDL	14	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* REA3 *Dilution:* 25

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	14	J	12	MDL	35	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.22	U	0.22	MDL	0.99	PQL	ug/Kg	UJ	FD
4,4'-DDT	1.4		0.19	MDL	0.99	PQL	ug/Kg	J	L, S
Chlordane	2.5	J	2.3	MDL	9.9	PQL	ug/Kg	J	Z, S, FD

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.6	J	0.92	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.077	U	0.077	MDL	0.39	PQL	ug/Kg	UJ	S
4,4'-DDE	0.15	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.78		0.077	MDL	0.39	PQL	ug/Kg	J	L, S
ALDRIN	0.077	U	0.077	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.070	U	0.070	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	0.95	J	0.93	MDL	3.9	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.042	U	0.042	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.077	U	0.077	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.077	U	0.077	MDL	0.39	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.077	U	0.077	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN	0.077	U	0.077	MDL	0.39	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.15	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z, S
ENDRIN KETONE	0.077	U	0.077	MDL	0.39	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.070	U	0.070	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.12	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z, S
TOXAPHENE	2.6	U	2.6	MDL	7.7	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.2		0.074	MDL	0.38	PQL	ug/Kg	J	L
Chlordane	1.5	J	0.89	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.35	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z, L
MIREX	0.10	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN I	0.068	J	0.048	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.3		0.076	MDL	0.39	PQL	ug/Kg	J	L
Chlordane	1.3	J	0.92	MDL	3.9	PQL	ug/Kg	J	Z
DIELDRIN	0.18	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.9		0.077	MDL	0.39	PQL	ug/Kg	J	L
Chlordane	2.7	J	0.93	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.61	J	0.12	MDL	0.63	PQL	ug/Kg	J	Z, L
MIREX	0.28	J	0.12	MDL	0.63	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **8081A** ***Matrix:*** **SO**

Sample ID: **SL-043-SA5DN-SS-0.0-0.5** ***Collected:*** **5/19/2011 9:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.23	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z, Q, Q, FD
4,4'-DDT	1.2		0.076	MDL	0.39	PQL	ug/Kg	J	Q, Q, L
Chlordane	4.6		0.92	MDL	3.9	PQL	ug/Kg	J	FD
DIELDRIN	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	Q
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	R	Q
ENDOSULFAN II	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	Q
ENDRIN KETONE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	R	Q
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	Q

Sample ID: **SL-045-SA5DN-SS-0.0-0.5** ***Collected:*** **5/19/2011 10:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.31	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.92		0.076	MDL	0.39	PQL	ug/Kg	J	L, S
Chlordane	1.0	J	0.92	MDL	3.9	PQL	ug/Kg	J	Z, S
ENDRIN KETONE	0.37	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z, S
HEPTACHLOR EPOXIDE	0.083	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z, S

Sample ID: **SL-046-SA5DN-SS-0.0-0.5** ***Collected:*** **5/19/2011 9:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.8		0.076	MDL	0.39	PQL	ug/Kg	J	L
Chlordane	2.3	J	0.92	MDL	3.9	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.044	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: **SL-047-SA5DN-SS-0.0-0.5** ***Collected:*** **5/19/2011 8:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.0		0.072	MDL	0.37	PQL	ug/Kg	J	L
Chlordane	2.8	J	0.87	MDL	3.7	PQL	ug/Kg	J	Z
DELTA-BHC	0.047	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z
HEPTACHLOR	0.16	J	0.065	MDL	0.18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.1		0.073	MDL	0.38	PQL	ug/Kg	J	L
Chlordane	2.8	J	0.89	MDL	3.8	PQL	ug/Kg	J	Z
DELTA-BHC	0.044	J	0.040	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	R	S
4,4'-DDE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	R	S
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	R	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	R	S
BETA-BHC	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	R	S
Chlordane	4.0		0.88	MDL	3.7	PQL	ug/Kg	J	S
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	R	S
DIELDRIN	1.1		0.073	MDL	0.37	PQL	ug/Kg	J	S
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	R	S
ENDOSULFAN II	1.3		0.073	MDL	0.37	PQL	ug/Kg	J	S
ENDRIN	0.16	U	0.16	MDL	0.37	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	R	S
HEPTACHLOR	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.068	U	0.068	MDL	0.18	PQL	ug/Kg	R	S

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z, FD
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	FD

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.5	J	2.2	MDL	7.4	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.9	J	0.72	MDL	3.1	PQL	ug/Kg	J	Z

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	2.5		0.45	MDL	1.9	PQL	ug/Kg	J	FD
Aroclor 5460	1.8	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.0	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.45	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	4.9	J	2.2	MDL	7.3	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.17	J	0.088	MDL	0.20	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.92	U	0.92	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L
MCPA	210	J	88	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.10	J	0.091	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.94	U	0.94	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.091	J	0.082	MDL	0.19	PQL	ug/Kg	J	Z
MCPA	160	J	83	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.10	J	0.087	MDL	0.20	PQL	ug/Kg	J	Z
MCPA	160	J	88	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.15	U	0.15	MDL	0.31	PQL	ug/Kg	UJ	H
2,4,5-TP (Silvex)	0.14	U	0.14	MDL	0.31	PQL	ug/Kg	UJ	H
2,4-D	2.2	U	2.2	MDL	6.6	PQL	ug/Kg	UJ	H

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.1	U	1.1	MDL	3.1	PQL	ug/Kg	UJ	H
DALAPON	8.1	U	8.1	MDL	17	PQL	ug/Kg	UJ	H
DICAMBA	0.74	U	0.74	MDL	2.2	PQL	ug/Kg	UJ	H
DICHLOROPROP	1.5	U	1.5	MDL	3.1	PQL	ug/Kg	UJ	H
DINOSEB	1.5	U	1.5	MDL	4.4	PQL	ug/Kg	UJ	H
MCPA	140	U	140	MDL	460	PQL	ug/Kg	UJ	H
MCPP	140	U	140	MDL	460	PQL	ug/Kg	UJ	H

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.086	U	0.086	MDL	0.19	PQL	ug/Kg	UJ	FD
DALAPON	5.0	U	5.0	MDL	10	PQL	ug/Kg	R	Q
DINOSEB	0.92	U	0.92	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	170	J	87	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.17	J	0.082	MDL	0.19	PQL	ug/Kg	J	Z, Q
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	110	J	84	MDL	280	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-041-SA5DN-SS-0.0-0.5** *Collected:* **5/19/2011 10:28:00** *Analysis Type:* **RES-ACID** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
BENZO(B)FLUORANTHENE	20	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	24	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-042-SA5DN-SS-0.0-0.5** *Collected:* **5/19/2011 10:10:00** *Analysis Type:* **RES-ACID** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	610	U	610	MDL	1800	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	130	J	31	MDL	610	PQL	ug/Kg	J	Z
CHRYSENE	33	J	31	MDL	310	PQL	ug/Kg	J	Z

Sample ID: **SL-043-SA5DN-SS-0.0-0.5** *Collected:* **5/19/2011 9:30:00** *Analysis Type:* **RES-ACID** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q

Sample ID: **SL-045-SA5DN-SS-0.0-0.5** *Collected:* **5/19/2011 10:50:00** *Analysis Type:* **RES-ACID** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
BENZO(G,H,I)PERYLENE	20	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	390	PQL	ug/Kg	J	Z
CHRYSENE	23	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	20	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-046-SA5DN-SS-0.0-0.5** *Collected:* **5/19/2011 9:15:00** *Analysis Type:* **RES-ACID** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-047-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L

Sample ID: SL-049-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 11:10:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	37	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	33	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	55	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	55	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	74	J	18	MDL	360	PQL	ug/Kg	J	Z
Butylbenzylphthalate	110	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	64	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	68	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	32	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	31	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	64	J	18	MDL	180	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	4.1	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	4.8	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	5.4	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z, FD
BENZO(G,H,I)PERYLENE	3.9	U	3.9	MDL	9.7	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP-04-SA5DN-QC-051911 *Collected:* 5/19/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	9.7		3.9	MDL	9.7	PQL	ug/Kg	J	FD
CHRYSENE	6.6	J	1.9	MDL	9.7	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	8.2	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z, FD
PYRENE	6.7	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z, FD

Sample ID: SL-030-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	0.40	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-031-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.8	J	7.0	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-032-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.75	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.84	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.58	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.5	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	4.4	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.8	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	36	J	35	MDL	100	PQL	ug/Kg	J	Z
CHRYSENE	5.0	J	1.9	MDL	9.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-033-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	7.0	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z
PYRENE	4.1	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z

Sample ID: SL-034-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 2:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.82	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.95	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.1	J	6.5	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	0.85	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 1:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	5.0	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
CHRYSENE	3.5	J	1.9	MDL	9.5	PQL	ug/Kg	J	Z
FLUORANTHENE	5.0	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z

Sample ID: SL-041-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.6	J	3.9	MDL	9.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	4.1	J	3.9	MDL	9.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	89	J	35	MDL	110	PQL	ug/Kg	J	Z
Di-n-octylphthalate	50	J	35	MDL	110	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	9.7	J	6.1	MDL	15	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	14	J	6.1	MDL	15	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory:** LL

EDD Filename: DE157_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-042-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	7.8	J	6.1	MDL	15	PQL	ug/Kg	J	Z
PYRENE	11	J	6.1	MDL	15	PQL	ug/Kg	J	Z

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.9	J	0.77	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	3.1		0.77	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	9.9	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD
Di-n-butylphthalate	7.0	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z
FLUORANTHENE	2.3		0.77	MDL	1.9	PQL	ug/Kg	J	FD
PYRENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD

Sample ID: SL-045-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	5.2	J	3.9	MDL	9.6	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	7.5	J	3.9	MDL	9.6	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.3	J	3.9	MDL	9.6	PQL	ug/Kg	J	Z

Sample ID: SL-046-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	38	J	19	MDL	48	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	35	J	19	MDL	48	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.7	J	6.6	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-048-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.43	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.7	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	3.4	U	3.4	MDL	8.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-043-SA5DN-SS-0.0-0.5 *Collected:* 5/19/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	120	U	120	MDL	580	PQL	ug/Kg	R	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE157

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE157
EDD Filename: DE157_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 8151A **Preparation Method: Gen Prep**
Matrix: SO

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
SL-042-SA5DN-SS-0.0-0.5 (RES)	Sampling To Extraction	19.00	14.00	DAYS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14308CB222257	5/29/2011 10:57:00 PM	PHOSPHORUS TIN	1.45 mg/Kg 1.41 mg/Kg	DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-04-SA5DN-QC-051911(RES)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-030-SA5DN-SS-0.0-0.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-031-SA5DN-SS-0.0-0.5(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-032-SA5DN-SS-0.0-0.5(RES)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-033-SA5DN-SS-0.0-0.5(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-034-SA5DN-SS-0.0-0.5(RES)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-035-SA5DN-SS-0.0-0.5(RES)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-041-SA5DN-SS-0.0-0.5(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-042-SA5DN-SS-0.0-0.5(RES)	TIN	4.37 mg/Kg	4.37U mg/Kg
SL-043-SA5DN-SS-0.0-0.5(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-045-SA5DN-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-046-SA5DN-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-047-SA5DN-SS-0.0-0.5(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-048-SA5DN-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-049-SA5DN-SS-0.0-0.5(RES)	TIN	2.69 mg/Kg	2.69U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14326BB221236A	5/24/2011 12:36:00 PM	COPPER	0.110 mg/Kg	DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5

Method: **8151A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P43432AB240243A	5/25/2011 2:43:00 AM	2,4-DB	0.88 ug/Kg	SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	Isopropanol	-	-	12.00-149.00	75 (20.00)	Isopropanol	J (all detects)
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	ETHANOL	0	0	48.00-130.00	-	ETHANOL	J(all detects) R(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	2,4,5-TP (Silvex)	-	-	24.00-141.00	56 (35.00)	2,4,5-TP (Silvex)	J(all detects)
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	DALAPON	0	-	10.00-125.00	200 (50.00)	DALAPON	J(all detects) R(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	DIETHYLENE GLYCOL	-	57	59.00-109.00	-	DIETHYLENE GLYCOL	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-047-SA5DN-SS-0.0-0.5MS SL-047-SA5DN-SS-0.0-0.5MSD (SL-047-SA5DN-SS-0.0-0.5)	2,4,5-TP (Silvex)	19	18	24.00-141.00	-	2,4,5-TP (Silvex)	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	EFH (C15-C20)	414	589	49.00-123.00	35 (20.00)	EFH (C15-C20)	No Qual, Diluted Out
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	0 -858 -5778 0	0 - -4175 0	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	- 41 (20.00) 21 (20.00) -	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	No Qual, Diluted Out

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	m-Terphenyl	70	69	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	NITROBENZENE PETN	127 126	- 123	80.00-125.00 80.00-121.00	- -	NITROBENZENE PETN	J(all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	4,4'-DDD ALDRIN ALPHA-BHC BETA-BHC ENDOSULFAN SULFATE ENDRIN ENDRIN ALDEHYDE HEPTACHLOR HEPTACHLOR EPOXIDE	- - - - - - 245 - -	- - - - - - - - -	16.00-163.00 16.00-126.00 10.00-129.00 14.00-147.00 21.00-160.00 11.00-149.00 10.00-148.00 13.00-126.00 13.00-157.00	82 (50.00) 67 (50.00) 67 (50.00) 69 (50.00) 52 (50.00) 81 (50.00) 62 (35.00) 70 (50.00) 95 (50.00)	4,4'-DDD ALDRIN ALPHA-BHC BETA-BHC ENDOSULFAN SULFATE ENDRIN ENDRIN ALDEHYDE HEPTACHLOR HEPTACHLOR EPOXIDE	J(all detects)
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	4,4'-DDE 4,4'-DDT ENDOSULFAN I ENDRIN KETONE	- - 0 0	-2 -12 0 0	18.00-161.00 10.00-176.00 16.00-137.00 22.00-165.00	84 (50.00) 72 (50.00) - -	4,4'-DDE 4,4'-DDT ENDOSULFAN I ENDRIN KETONE	J(all detects) R(all non-detects)
SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	DIELDRIN ENDOSULFAN II METHOXYCHLOR	- - -	14 18 21	19.00-154.00 28.00-154.00 32.00-147.00	89 (50.00) 63 (50.00) 91 (50.00)	DIELDRIN ENDOSULFAN II METHOXYCHLOR	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	CADMIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM	136 143 129 127 131 143 142	132 141 - - - 141 151	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	CADMIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM	J(all detects) Pb, V No Qual, >4x
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	ZINC	149	9	75.00-125.00	-	ZINC	No Qual, >4x
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	ANTIMONY ARSENIC	64 68	60 -	75.00-125.00 75.00-125.00	- -	ANTIMONY ARSENIC	J(all detects) UJ(all non-detects) As No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-043-SA5DN-SS-0.0-0.5MS **SL-043-SA5DN-SS-0.0-0.5MSD** (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	SELENIUM	126	128	75.00-125.00	-	SELENIUM	J(all detects)
SL-043-SA5DN-SS-0.0-0.5MS **SL-043-SA5DN-SS-0.0-0.5MSD** (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	MOLYBDENUM	144	141	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-043-SA5DN-SS-0.0-0.5MS **SL-043-SA5DN-SS-0.0-0.5MSD** (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	BARIUM	147	170	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	ALUMINUM CALCIUM MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	1640 196 - - 161 130 309	3590 681 321 137 140 180 395	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ALUMINUM CALCIUM MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	J(all detects) Al, Ca, Mg, Mn, Ti No Qual >4x
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	IRON	-1268	1640	75.00-125.00	-	IRON	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	BENZIDINE	25	29	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	Butylbenzylphthalate	-	947	57.00-173.00	160 (30.00)	Butylbenzylphthalate	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (SL-043-SA5DN-SS-0.0-0.5)	N-NITROSODIMETHYLAMINE	41	45	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS (SL-030-SA5DN-SS-0.0-0.5 SL -031-SA5DN-SS-0.0-0.5 SL -032-SA5DN-SS-0.0-0.5 SL -033-SA5DN-SS-0.0-0.5 SL -034-SA5DN-SS-0.0-0.5 SL -035-SA5DN-SS-0.0-0.5 SL -041-SA5DN-SS-0.0-0.5 SL -043-SA5DN-SS-0.0-0.5)	FLUORIDE	74	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-043-SA5DN-SS-0.0-0.5MS SL-043-SA5DN-SS-0.0-0.5MSD (DUP-04-SA5DN-QC-051911 SL -030-SA5DN-SS-0.0-0.5 SL -031-SA5DN-SS-0.0-0.5 SL -032-SA5DN-SS-0.0-0.5 SL -033-SA5DN-SS-0.0-0.5 SL -034-SA5DN-SS-0.0-0.5 SL -035-SA5DN-SS-0.0-0.5 SL -041-SA5DN-SS-0.0-0.5 SL -042-SA5DN-SS-0.0-0.5 SL -043-SA5DN-SS-0.0-0.5 SL -045-SA5DN-SS-0.0-0.5 SL -046-SA5DN-SS-0.0-0.5 SL -047-SA5DN-SS-0.0-0.5 SL -048-SA5DN-SS-0.0-0.5 SL -049-SA5DN-SS-0.0-0.5)	THALLIUM	139	152	75.00-125.00	-	THALLIUM	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE157 Laboratory: LL

EDD Filename: DE157_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5DN-SS-0.0-0.5DUP (DUP-04-SA5DN-QC-051911 SL-042-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5)	FLUORIDE Nitrate-NO3	22 200	20.00 20.00	No Qual, OK by difference
SL-043-SA5DN-SS-0.0-0.5DUP (SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual, OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-043-SA5DN-SS-0.0-0.5DUP (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	CALCIUM	34	20.00	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-043-SA5DN-SS-0.0-0.5DUP (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL -031-SA5DN-SS-0.0-0.5 SL -032-SA5DN-SS-0.0-0.5 SL -033-SA5DN-SS-0.0-0.5 SL -034-SA5DN-SS-0.0-0.5 SL -035-SA5DN-SS-0.0-0.5 SL -041-SA5DN-SS-0.0-0.5 SL -042-SA5DN-SS-0.0-0.5 SL -043-SA5DN-SS-0.0-0.5 SL -045-SA5DN-SS-0.0-0.5 SL -046-SA5DN-SS-0.0-0.5 SL -047-SA5DN-SS-0.0-0.5 SL -048-SA5DN-SS-0.0-0.5 SL -049-SA5DN-SS-0.0-0.5)	ANTIMONY	27	20.00	
	ARSENIC	31	20.00	
	BARIUM	23	20.00	
	CADMIUM	26	20.00	
	CHROMIUM	25	20.00	
	COBALT	26	20.00	
	COPPER	35	20.00	
	MOLYBDENUM	0.3493	0.228	J(all detects) UJ(all non-detects) Sb, Cd, Se, Ag No Qual, OK by difference
	NICKEL	31	20.00	
	SELENIUM	39	20.00	
	SILVER	53	20.00	
	VANADIUM	22	20.00	
	ZINC	22	20.00	

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-043-SA5DN-SS-0.0-0.5DUP (DUP-04-SA5DN-QC-051911 SL -030-SA5DN-SS-0.0-0.5 SL -031-SA5DN-SS-0.0-0.5 SL -032-SA5DN-SS-0.0-0.5 SL -033-SA5DN-SS-0.0-0.5 SL -034-SA5DN-SS-0.0-0.5 SL -035-SA5DN-SS-0.0-0.5 SL -041-SA5DN-SS-0.0-0.5 SL -042-SA5DN-SS-0.0-0.5 SL -043-SA5DN-SS-0.0-0.5 SL -045-SA5DN-SS-0.0-0.5 SL -046-SA5DN-SS-0.0-0.5 SL -047-SA5DN-SS-0.0-0.5 SL -048-SA5DN-SS-0.0-0.5 SL -049-SA5DN-SS-0.0-0.5)	HEXAVALENT CHROMIUM	200	20.00	No Qual, OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-043-SA5DN-SS-0.0-0.5DUP (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	MERCURY	200	20.00	No Qual, OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11432AQ240311A (SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5)	DINOSEB	9	-	10.00-36.00	-	DINOSEB	J (all detects) R (all non-detects)
P11441AQ241849A (SL-047-SA5DN-SS-0.0-0.5)	DINOSEB	9	-	10.00-36.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11455AQ241820A (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5)	NITROBENZENE PETN	132 121	- -	80.00-120.00 80.00-120.00	- -	NITROBENZENE PETN	J(all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11453AQ240355A (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	4,4'-DDT METHOXYCHLOR	134 137	- -	54.00-130.00 59.00-125.00	- -	4,4'-DDT METHOXYCHLOR	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P3LBLCSQ262054 (DUP-04-SA5DN-QC-051911 SL-030-SA5DN-SS-0.0-0.5 SL-031-SA5DN-SS-0.0-0.5 SL-032-SA5DN-SS-0.0-0.5 SL-033-SA5DN-SS-0.0-0.5 SL-034-SA5DN-SS-0.0-0.5 SL-035-SA5DN-SS-0.0-0.5 SL-041-SA5DN-SS-0.0-0.5 SL-042-SA5DN-SS-0.0-0.5 SL-043-SA5DN-SS-0.0-0.5 SL-045-SA5DN-SS-0.0-0.5 SL-046-SA5DN-SS-0.0-0.5 SL-047-SA5DN-SS-0.0-0.5 SL-048-SA5DN-SS-0.0-0.5 SL-049-SA5DN-SS-0.0-0.5)	2,4-DINITROPHENOL	31	-	37.00-120.00	-	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015B**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-046-SA5DN-SS-0.0-0.5	n-Triacontane-d62	218	50.00-150.00	All Target Analytes	No Qual, diluted out

Method: **8081A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
DUP-04-SA5DN-QC-051911	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	190 156	20.00-120.00 50.00-130.00	All Target Analytes	J (all detects)
SL-031-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	38	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-045-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	125	20.00-120.00	All Target Analytes	J(all detects)
SL-049-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911			
MOISTURE	13.3	14.3	7		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911			
N-NITROSODIMETHYLAMINE	57.4	242	123	50.00	J(all detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911			
Nitrate-NO3	2.5	3.6	36	50.00	No Qualifiers Applied
FLUORIDE	1.2 U	2.3	200	50.00	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911			
ALUMINUM	30200	30100	0	50.00	No Qualifiers Applied
BORON	13.6	12.6	8	50.00	
CALCIUM	11000	13300	19	50.00	
IRON	31900	32400	2	50.00	
LITHIUM	26.0	25.8	1	50.00	
MAGNESIUM	6850	6770	1	50.00	
MANGANESE	358	386	8	50.00	
PHOSPHORUS	380	428	12	50.00	
POTASSIUM	4060	4500	10	50.00	
SODIUM	137	132	4	50.00	
STRONTIUM	40.1	40.3	0	50.00	
TIN	2.93	2.96	1	50.00	
TITANIUM	1220	1280	5	50.00	
Zirconium	4.23	3.58	17	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-043-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5DN-QC-051911	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.442	0.310	35	50.00	
ARSENIC	10.5	9.29	12	50.00	
BARIUM	126	196	43	50.00	
BERYLLIUM	1.22	1.25	2	50.00	
CADMIUM	0.465	0.497	7	50.00	
CHROMIUM	44.0	43.4	1	50.00	
COBALT	16.4	14.4	13	50.00	
COPPER	27.9	24.8	12	50.00	No Qualifiers Applied
LEAD	17.2	16.5	4	50.00	
MOLYBDENUM	0.845	0.829	2	50.00	
NICKEL	34.4	30.4	12	50.00	
SELENIUM	0.225	0.145	43	50.00	
THALLIUM	0.439	0.517	16	50.00	
VANADIUM	81.2	82.3	1	50.00	
ZINC	131	124	5	50.00	
SILVER	0.0937	0.480	135	50.00	J(all detects)

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-043-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5DN-QC-051911	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.76	1.2 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-043-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5DN-QC-051911	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0092	0.0197	73	50.00	J(all detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-043-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP-04-SA5DN-QC-051911	Sample RPD	eQAPP RPD	Flag
EFH (C21-C30)	67	54	21	50.00	No Qualifiers Applied
EFH (C30-C40)	370	230	47	50.00	
EFH (C15-C20)	28 U	6.5	200	50.00	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-043-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP-04-SA5DN-QC-051911	Sample RPD	eQAPP RPD	Flag
4,4'-DDT	1.2	1.4	15	50.00	No Qualifiers Applied

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Analyte	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911	Sample RPD	eQAPP RPD	Flag
4,4'-DDE	0.23	0.99 U	200	50.00	J(all detects)
Chlordane	4.6	2.5	59	50.00	UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911			
AROCLOR 1260	2.5	1.1	78	50.00	J(all detects)
Aroclor 5460	1.8	3.8 U	200	50.00	UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911			
2,4,5-TP (Silvex)	0.19 U	0.17	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911			
BENZO(A)ANTHRACENE	1.3	4.1	104	50.00	
BENZO(A)PYRENE	1.9	4.8	87	50.00	
BENZO(B)FLUORANTHENE	3.1	5.4	54	50.00	
BENZO(G,H,I)PERYLENE	1.2	9.7 U	200	50.00	J(all detects)
BENZO(K)FLUORANTHENE	1.1	9.7	159	50.00	UJ(all non-detects)
CHRYSENE	1.8	6.6	114	50.00	
FLUORANTHENE	2.3	8.2	112	50.00	
PYRENE	1.6	6.7	123	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-043-SA5DN-SS-0.0-0.5	DUP-04-SA5DN-QC-051911			
PH	7.95	8.03	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	N-NITROSODIMETHYLAMINE	J	242	384	PQL	ng/Kg	J (all detects)
SL-030-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	257	383	PQL	ng/Kg	J (all detects)
SL-031-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	303	385	PQL	ng/Kg	J (all detects)
SL-033-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	260	386	PQL	ng/Kg	J (all detects)
SL-042-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	411	616	PQL	ng/Kg	J (all detects)
SL-045-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	221	382	PQL	ng/Kg	J (all detects)
SL-047-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	276	363	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-041-SA5DN-SS-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-042-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.9	2.8	PQL	mg/Kg	J (all detects)
SL-045-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	TIN Zirconium	J J	2.96 3.58	11.3 5.66	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-030-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.83 3.83	11.3 5.67	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-031-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.87 3.79	11.2 5.58	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	BORON TIN Zirconium	J J J	1.34 2.96 2.53	5.48 11.0 5.48	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-033-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.67 3.88	11.5 5.73	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-034-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.68 3.37	10.7 5.35	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-035-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.81 4.53	11.4 5.71	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-041-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	114 2.91	116 11.6	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SS-0.0-0.5	SODIUM	J	181	183	PQL	mg/Kg	J (all detects)
	TIN	J	4.37	18.3	PQL	mg/Kg	
	Zirconium	J	6.06	9.15	PQL	mg/Kg	
SL-043-SA5DN-SS-0.0-0.5	TIN	J	2.93	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.23	5.71	PQL	mg/Kg	
SL-045-SA5DN-SS-0.0-0.5	TIN	J	2.61	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.85	5.67	PQL	mg/Kg	
SL-046-SA5DN-SS-0.0-0.5	TIN	J	2.65	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.54	5.65	PQL	mg/Kg	
SL-047-SA5DN-SS-0.0-0.5	TIN	J	2.53	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.24	5.31	PQL	mg/Kg	
SL-048-SA5DN-SS-0.0-0.5	TIN	J	2.65	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.27	5.52	PQL	mg/Kg	
SL-049-SA5DN-SS-0.0-0.5	TIN	J	2.69	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.92	5.47	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	SELENIUM	J	0.145	0.458	PQL	mg/Kg	J (all detects)
SL-030-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.217	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0856	0.445	PQL	mg/Kg	
	SILVER	J	0.0459	0.111	PQL	mg/Kg	
SL-031-SA5DN-SS-0.0-0.5	SELENIUM	J	0.0615	0.460	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0362	0.115	PQL	mg/Kg	
SL-032-SA5DN-SS-0.0-0.5	SELENIUM	J	0.137	0.447	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0963	0.112	PQL	mg/Kg	
SL-033-SA5DN-SS-0.0-0.5	SELENIUM	J	0.181	0.450	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0754	0.112	PQL	mg/Kg	
SL-034-SA5DN-SS-0.0-0.5	SELENIUM	J	0.110	0.432	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0730	0.108	PQL	mg/Kg	
SL-035-SA5DN-SS-0.0-0.5	SELENIUM	J	0.262	0.444	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0785	0.111	PQL	mg/Kg	
SL-041-SA5DN-SS-0.0-0.5	SELENIUM	J	0.231	0.455	PQL	mg/Kg	J (all detects)
SL-042-SA5DN-SS-0.0-0.5	SELENIUM	J	0.305	0.725	PQL	mg/Kg	J (all detects)
	SILVER	J	0.117	0.181	PQL	mg/Kg	
SL-043-SA5DN-SS-0.0-0.5	SELENIUM	J	0.225	0.457	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0937	0.114	PQL	mg/Kg	
SL-045-SA5DN-SS-0.0-0.5	SELENIUM	J	0.186	0.453	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0509	0.113	PQL	mg/Kg	
SL-046-SA5DN-SS-0.0-0.5	SELENIUM	J	0.148	0.457	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0764	0.114	PQL	mg/Kg	
SL-047-SA5DN-SS-0.0-0.5	SELENIUM	J	0.181	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0525	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5DN-SS-0.0-0.5	SELENIUM	J	0.159	0.437	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SS-0.0-0.5	SELENIUM	J	0.114	0.433	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0518	0.108	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-033-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.2	PQL	mg/Kg	J (all detects)
SL-034-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-035-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.72	1.2	PQL	mg/Kg	J (all detects)
SL-041-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.57	1.2	PQL	mg/Kg	J (all detects)
SL-042-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.8	PQL	mg/Kg	J (all detects)
SL-043-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.76	1.2	PQL	mg/Kg	J (all detects)
SL-046-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.2	PQL	mg/Kg	J (all detects)
SL-047-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.74	1.1	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.69	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	MERCURY	J	0.0197	0.110	PQL	mg/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	MERCURY	J	0.0116	0.107	PQL	mg/Kg	J (all detects)
SL-033-SA5DN-SS-0.0-0.5	MERCURY	J	0.0044	0.116	PQL	mg/Kg	J (all detects)
SL-041-SA5DN-SS-0.0-0.5	MERCURY	J	0.0169	0.115	PQL	mg/Kg	J (all detects)
SL-043-SA5DN-SS-0.0-0.5	MERCURY	J	0.0092	0.113	PQL	mg/Kg	J (all detects)
SL-046-SA5DN-SS-0.0-0.5	MERCURY	J	0.0105	0.111	PQL	mg/Kg	J (all detects)
SL-047-SA5DN-SS-0.0-0.5	MERCURY	J	0.0125	0.104	PQL	mg/Kg	J (all detects)
SL-048-SA5DN-SS-0.0-0.5	MERCURY	J	0.0411	0.107	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SS-0.0-0.5	MERCURY	J	0.0092	0.107	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	EFH (C15-C20)	J	6.5	14	PQL	mg/Kg	J (all detects)
SL-030-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	4.9	6.9	PQL	mg/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	4.9	6.7	PQL	mg/Kg	J (all detects)
SL-033-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.2	14	PQL	mg/Kg	J (all detects)
SL-041-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.2	14	PQL	mg/Kg	J (all detects)
SL-042-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.9	11	PQL	mg/Kg	J (all detects)
SL-045-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	7.5	14	PQL	mg/Kg	J (all detects)
SL-046-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	14	35	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	Chlordane	J	2.5	9.9	PQL	ug/Kg	J (all detects)
SL-030-SA5DN-SS-0.0-0.5	Chlordane	J	1.6	3.9	PQL	ug/Kg	J (all detects)
SL-031-SA5DN-SS-0.0-0.5	4,4'-DDE Chlordane ENDRIN ALDEHYDE MIREX	J J J J	0.15 0.95 0.15 0.12	0.39 3.9 0.39 0.39	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	Chlordane	J	1.5	3.8	PQL	ug/Kg	J (all detects)
SL-033-SA5DN-SS-0.0-0.5	4,4'-DDT MIREX	J J	0.35 0.10	0.40 0.40	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-034-SA5DN-SS-0.0-0.5	ENDOSULFAN I	J	0.068	0.18	PQL	ug/Kg	J (all detects)
SL-035-SA5DN-SS-0.0-0.5	Chlordane DIELDRIN	J J	1.3 0.18	3.9 0.39	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-041-SA5DN-SS-0.0-0.5	Chlordane	J	2.7	3.9	PQL	ug/Kg	J (all detects)
SL-042-SA5DN-SS-0.0-0.5	4,4'-DDT MIREX	J J	0.61 0.28	0.63 0.63	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-043-SA5DN-SS-0.0-0.5	4,4'-DDE	J	0.23	0.39	PQL	ug/Kg	J (all detects)
SL-045-SA5DN-SS-0.0-0.5	4,4'-DDE Chlordane ENDRIN KETONE HEPTACHLOR EPOXIDE	J J J J	0.31 1.0 0.37 0.083	0.39 3.9 0.39 0.19	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-046-SA5DN-SS-0.0-0.5	Chlordane gamma-BHC (Lindane)	J J	2.3 0.044	3.9 0.19	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-047-SA5DN-SS-0.0-0.5	Chlordane DELTA-BHC HEPTACHLOR	J J J	2.8 0.047 0.16	3.7 0.18 0.18	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-048-SA5DN-SS-0.0-0.5	Chlordane DELTA-BHC	J J	2.8 0.044	3.8 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	AROCLOR 1260	J	1.1	2.0	PQL	ug/Kg	J (all detects)
SL-031-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.2	2.0	PQL	ug/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.5	7.4	PQL	ug/Kg	J (all detects)
SL-042-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.9	3.1	PQL	ug/Kg	J (all detects)
SL-043-SA5DN-SS-0.0-0.5	Aroclor 5460	J	1.8	3.8	PQL	ug/Kg	J (all detects)
SL-045-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.0	3.8	PQL	ug/Kg	J (all detects)
SL-047-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	0.45	1.8	PQL	ug/Kg	J (all detects)
SL-048-SA5DN-SS-0.0-0.5	Aroclor 5460	J	4.9	7.3	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	2,4,5-TP (Silvex)	J	0.17	0.20	PQL	ug/Kg	J (all detects)
SL-031-SA5DN-SS-0.0-0.5	MCPA	J	210	290	PQL	ug/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	2,4,5-T	J	0.10	0.19	PQL	ug/Kg	J (all detects)
SL-034-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex) MCPA	J J	0.091 160	0.19 270	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-035-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex) MCPA	J J	0.10 160	0.20 290	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-046-SA5DN-SS-0.0-0.5	MCPP	J	170	290	PQL	ug/Kg	J (all detects)
SL-047-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.17	0.19	PQL	ug/Kg	J (all detects)
SL-048-SA5DN-SS-0.0-0.5	MCPA	J	110	280	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	390	PQL	ug/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	370	PQL	ug/Kg	J (all detects)
SL-035-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	380	PQL	ug/Kg	J (all detects)
SL-041-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE CHRYSENE FLUORANTHENE PYRENE	J J J J	20 24 21 26	190 190 190 190	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-042-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE	J J	130 33	610 310	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-045-SA5DN-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	20	190	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	
	CHRYSENE	J	23	190	PQL	ug/Kg	
	PYRENE	J	20	190	PQL	ug/Kg	
SL-047-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	360	PQL	ug/Kg	J (all detects)
SL-049-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	37	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	33	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	55	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	55	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	21	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	74	360	PQL	ug/Kg	
	Butylbenzylphthalate	J	110	180	PQL	ug/Kg	
	CHRYSENE	J	64	180	PQL	ug/Kg	
	FLUORANTHENE	J	68	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	32	180	PQL	ug/Kg	
	PHENANTHRENE	J	31	180	PQL	ug/Kg	
	PYRENE	J	64	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-04-SA5DN-QC-051911	BENZO(A)ANTHRACENE	J	4.1	9.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	4.8	9.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	5.4	9.7	PQL	ug/Kg	
	CHRYSENE	J	6.6	9.7	PQL	ug/Kg	
	FLUORANTHENE	J	8.2	9.7	PQL	ug/Kg	
	PYRENE	J	6.7	9.7	PQL	ug/Kg	
SL-030-SA5DN-SS-0.0-0.5	Butylbenzylphthalate	J	12	21	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.40	1.9	PQL	ug/Kg	
SL-031-SA5DN-SS-0.0-0.5	Di-n-octylphthalate	J	8.8	21	PQL	ug/Kg	J (all detects)
SL-032-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.75	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.84	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.58	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.5	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.8	PQL	ug/Kg	
SL-033-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	4.4	9.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	5.8	9.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	36	100	PQL	ug/Kg	
	CHRYSENE	J	5.0	9.7	PQL	ug/Kg	
	FLUORANTHENE	J	7.0	9.7	PQL	ug/Kg	
	PYRENE	J	4.1	9.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE157 **Laboratory: LL**

EDD Filename: DE157_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-034-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.82	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.95	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.1	20	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.8	PQL	ug/Kg	
	FLUORENE	J	0.85	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
	PYRENE	J	1.5	1.8	PQL	ug/Kg	
SL-035-SA5DN-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	5.0	9.5	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	3.5	9.5	PQL	ug/Kg	
	FLUORANTHENE	J	5.0	9.5	PQL	ug/Kg	
SL-041-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	4.6	9.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	4.1	9.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	89	110	PQL	ug/Kg	
	Di-n-octylphthalate	J	50	110	PQL	ug/Kg	
SL-042-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	9.7	15	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	14	15	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	7.8	15	PQL	ug/Kg	
	PYRENE	J	11	15	PQL	ug/Kg	
SL-043-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.9	21	PQL	ug/Kg	
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.0	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.6	21	PQL	ug/Kg	
	PYRENE	J	1.6	1.9	PQL	ug/Kg	
SL-045-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	5.2	9.6	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	7.5	9.6	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	7.3	9.6	PQL	ug/Kg	
SL-046-SA5DN-SS-0.0-0.5	DIBENZO(A,H)ANTHRACENE	J	38	48	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	35	48	PQL	ug/Kg	
SL-048-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.7	20	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.43	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.7	20	PQL	ug/Kg	

LDC #: 26275P4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE157 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
2nd Reviewer: CR

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual.
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	Al, As, Ba, Ca, Fe, Pb, Mg, Mn, Ti, V, Zn > 4X.
VII.	Duplicate Sample Analysis	SW	Sb, Cd, Hg, Se, Ag <5X, Mo qual by difference 0.3493 (≤0.224 mg/kg)
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	As, Ba, Co, Cu, Pb, Ni, Zn
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-030-SA5DN-SS-0.0-0.5	11	SL-046-SA5DN-SS-0.0-0.5	21		31	
2	SL-031-SA5DN-SS-0.0-0.5	12	SL-047-SA5DN-SS-0.0-0.5	22		32	
3	SL-032-SA5DN-SS-0.0-0.5	13	SL-048-SA5DN-SS-0.0-0.5	23		33	
4	SL-033-SA5DN-SS-0.0-0.5	14	SL-049-SA5DN-SS-0.0-0.5	24		34	
5	SL-034-SA5DN-SS-0.0-0.5	15	DUP-04-SA5DN-QC-051911	25		35	
6	SL-035-SA5DN-SS-0.0-0.5	16	SL-043-SA5DN-SS-0.0-0.5MS	26		36	
7	SL-041-SA5DN-SS-0.0-0.5	17	SL-043-SA5DN-SS-0.0-0.5MSD	27		37	
8	SL-042-SA5DN-SS-0.0-0.5	18	SL-043-SA5DN-SS-0.0-0.5DUP	28		38	
9	SL-043-SA5DN-SS-0.0-0.5	19		29		39	
10	SL-045-SA5DN-SS-0.0-0.5	20		30		40	

Notes:

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE157
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6293457BKG Matrix Spike Lab Sample ID: 6293458MS Matrix Spike Duplicate Lab Sample ID: 6293459MSD
% Solids for Sample: 86.7
Batch Id(s): P14308C, P14326B, P14311C, P15326C

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum		30189.1603		33862.2188		38389.7107		223.9617	228.3965	MG/KG	1640		3590		13			20	P
Antimony	121	0.4419		1.3241		1.2520		1.3841	1.3569	MG/KG	64	N	60	N	6		75 - 125	20	MS
Arsenic	75	10.5496		12.1084		12.9973		2.3068	2.2616	MG/KG	68		108		7			20	MS
Barium	137	126.1434		143.1373		145.3626		11.5340	11.3079	MG/KG	147		170		2			20	MS
Beryllium	9	1.2244		2.2867		2.3023		0.9227	0.9046	MG/KG	115		119		1		75 - 125	20	MS
Boron		13.5645		238.1160		235.6424		223.9617	228.3965	MG/KG	100		97		1		84 - 115	20	P
Cadmium	111	0.4652		2.0288		1.9608		1.1534	1.1308	MG/KG	136	N	132	N	3		75 - 125	20	MS
Calcium		10968.3534		11844.8024		14077.6811		447.9233	456.7931	MG/KG	196		681		17			20	P
Chromium	52	44.0349		57.8316		57.7832		11.5340	11.3079	MG/KG	120		122		0		75 - 125	20	MS
Cobalt	59	16.3897		98.6621		96.0038		57.6701	56.5393	MG/KG	143	N	141	N	3		75 - 125	20	MS
Copper	63	27.8644		42.6990		41.4999		11.5340	11.3079	MG/KG	129	N	121		3		75 - 125	20	MS
Iron		31914.7453		30493.4995		33787.8196		111.9808	114.1983	MG/KG	-1269		1640		10			20	P
Lead	208	17.2188		21.6194		21.2588		3.4602	3.3924	MG/KG	127		119		2			20	MS
Lithium		26.0258		142.9984		144.8868		111.9808	114.1983	MG/KG	104		104		1		82 - 114	20	P
Magnesium		6854.8357		7043.1037		7588.7275		223.9617	228.3965	MG/KG	84		321		7			20	P
Manganese		358.4307		407.2317		436.7045		55.9904	57.0991	MG/KG	87		137		7			20	P
Mercury		0.0092	B	0.1977		0.1985		0.1882	0.1855	MG/KG	100		102		0		65 - 135	20	CV
Molybdenum	98	0.8446		17.4810		16.7718		11.5340	11.3079	MG/KG	144	N	141	N	4		75 - 125	20	MS
Nickel	60	34.4194		49.5040		48.6012		11.5340	11.3079	MG/KG	131	N	125		2		75 - 125	20	MS
Phosphorus		379.5026		560.1460		539.9112		111.9808	114.1983	MG/KG	161	N	140	N	4		75 - 125	20	P
Potassium		4063.4988		5521.7948		6124.6269		1119.8083	1141.9827	MG/KG	130	N	180	N	10		75 - 125	20	P
Selenium	78	0.2246	B	3.1326		3.1187		2.3068	2.2616	MG/KG	126	N	128	N	0		75 - 125	20	MS
Silver	107	0.0937	B	16.5536		16.0888		11.5340	11.3079	MG/KG	143	N	141	N	3		75 - 125	20	MS
Sodium		136.6063		1279.9017		1267.4147		1119.8083	1141.9827	MG/KG	102		99		1		75 - 125	20	P
Strontium		40.0893		153.6982		155.7676		111.9808	114.1983	MG/KG	101		101		1		75 - 115	20	P
Thallium	203	0.4385		1.0484		1.1180		0.4394	0.4479	MG/KG	139	N	152	N	6		75 - 125	20	MS
Tin		2.9292	B	399.1042		389.0804		447.9233	456.7931	MG/KG	88		85		3		80 - 110	20	P
Titanium		1220.5363		1566.3890		1672.0557		111.9808	114.1983	MG/KG	309		395		7			20	P
Vanadium	51	81.2407		97.6009		98.2880		11.5340	11.3079	MG/KG	142		151		1			20	MS
Zinc	66	131.0768		148.2122		132.0985		11.5340	11.3079	MG/KG	149		9		11			20	MS
Zirconium		4.2288	B	109.2474		112.0491		111.9808	114.1983	MG/KG	94		94		3		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES.
SDG No.: DE157
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6293457BKG
% Solids for Duplicate: 85.6
Batch ID(s): P14308C, P14326B, P14311C, P15326C
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6293460DUP
% Solids for Sample: 86.7

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			30189.1603		28081.7740		7		P
Antimony	121	0.2	0.4419		0.3365		27		MS
Arsenic	75		10.5496		7.7389		31	*	MS
Barium	137		126.1434		158.2158		23	*	MS
Beryllium	9		1.2244		1.0119		19		MS
Boron		5.7	13.5645		12.2080		11		P
Cadmium	111	0.1	0.4652		0.3596		26		MS
Calcium			10968.3534		15451.7052		34	*	P
Chromium	52		44.0349		34.1141		25	*	MS
Cobalt	59		16.3897		12.5965		26	*	MS
Copper	63		27.8644		19.5879		35	*	MS
Iron			31914.7453		31641.7102		1		P
Lead	208		17.2188		14.1292		20		MS
Lithium			26.0258		24.9565		4		P
Magnesium			6854.8357		6642.9507		3		P
Manganese			358.4307		377.0552		5		P
Mercury			0.0092	B	0.0034	U	200		CV
Molybdenum	98	0.1	0.8446		0.4953		52	*	MS
Nickel	60		34.4194		25.2418		31	*	MS
Phosphorus			379.5026		395.3005		4		P
Potassium			4063.4988		4281.1000		5		P
Selenium	78		0.2246	B	0.1514	B	39		MS
Silver	107		0.0937	B	0.0546	B	53		MS
Sodium		114.2	136.6063		129.9862		5		P
Strontium			40.0893		40.0389		0		P
Thallium	203	0.1	0.4385		0.4878		11		MS
Tin			2.9292	B	2.7783	B	5		P
Titanium			1220.5363		1159.4048		5		P
Vanadium	51		81.2407		65.0785		22	*	MS
Zinc	66		131.0768		104.8709		22	*	MS
Zirconium			4.2288	B	5.1428	B	20		P

Difference (<0.220)

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE157
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6293457BKG Serial Dilution Lab Sample ID: 6293457L
Batch ID(s): P14308C, P14326B, P15326C
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		264357.4200		254065.1500		4		P
Antimony	121	1.9350		1.5000	U	100		MS
Arsenic	75	46.1900		31.0000		33	E	MS
Barium	137	552.3000		625.5000		13	E	MS
Beryllium	9	5.3610		4.5305		15		MS
Boron		118.7800		138.5500	B	17		P
Cadmium	111	2.0370		1.2540	B	38		MS
Calcium		96046.5800		96142.0500		0		P
Chromium	52	192.8000		179.4500		7		MS
Cobalt	59	71.7600		47.0450		34	E	MS
Copper	63	122.0000		82.8500		32	E	MS
Iron		55893.5700		57868.7000		4		P
Lead	208	75.3900		54.2500		28	E	MS
Lithium		227.9000		228.3000		0		P
Magnesium		60025.7400		59594.7000		1		P
Manganese		3138.6700		3319.5500		6		P
Molybdenum	98	3.6980		2.6955		27		MS
Nickel	60	150.7000		108.9500		28	E	MS
Phosphorus		3323.1900		3264.2500		2		P
Potassium		35582.8400		35716.2000		0		P
Selenium	78	0.9832	B	1.0000	U	100		MS
Silver	107	0.4103	B	0.3219	B	22		MS
Sodium		1196.2200		1865.0000	U	100		P
Strontium		351.0500		357.7500		2		P
Thallium	203	1.9770		1.6945	B	14		MS
Tin		25.6500	B	50.0000	U	100		P
Titanium		10687.8700		10806.1500		1		P
Vanadium	51	355.7000		328.5000		8		MS
Zinc	66	573.9000		397.2500		31	E	MS
Zirconium		37.0300	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE158

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	3050B	6010B	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	3050B	6020	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	3060A	7199	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	3550B	8081A	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	3550B	8082	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	3550B	8151A	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	3550B	8270C	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	3550B	8270C SIM	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	METHOD	300.0	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	METHOD	314.0	IV
20-May-2011	SL-050-SA5DN-SS-0.0-0.5	6294846	N	METHOD	7471A	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3050B	6010B	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3050B	6020	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3060A	7199	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3546	1625C	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3550B	8015B	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3550B	8015M	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3550B	8081A	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3550B	8082	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3550B	8151A	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3550B	8270C	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	3550B	8270C SIM	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	8330	8330A	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	METHOD	300.0	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	METHOD	314.0	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	METHOD	7471A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	METHOD	8015B	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	METHOD	8015M	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	METHOD	8315A	IV
20-May-2011	SL-051-SA5DN-SS-0.0-0.5	6294847	N	METHOD	9012B	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3050B	6010B	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3050B	6020	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3060A	7199	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3546	1625C	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3550B	8015B	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3550B	8015M	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3550B	8081A	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3550B	8082	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3550B	8151A	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3550B	8270C	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	3550B	8270C SIM	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	8330	8330A	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	METHOD	300.0	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	METHOD	314.0	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	METHOD	7471A	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	METHOD	8015B	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	METHOD	8015M	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	METHOD	8315A	IV
20-May-2011	SL-036-SA5DN-SS-0.0-0.5	6294840	N	METHOD	9012B	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3050B	6010B	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3050B	6020	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3060A	7199	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3546	1625C	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3550B	8015B	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3550B	8015M	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3550B	8081A	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3550B	8082	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3550B	8151A	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3550B	8270C	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	3550B	8270C SIM	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	8330	8330A	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	METHOD	300.0	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	METHOD	314.0	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	METHOD	6850	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	METHOD	7471A	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	METHOD	8015B	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	METHOD	8015M	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	METHOD	8315A	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5	6294843	N	METHOD	9012B	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5DU	P294843D271335B	DUP	METHOD	300.0	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5DU	P294843D271703B	DUP	METHOD	314.0	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5DU	P294843D272033B	DUP	METHOD	9012B	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5MS	P294843R271350B	MS	METHOD	300.0	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5MS	P294843R271747B	MS	METHOD	314.0	IV
20-May-2011	SL-039-SA5DN-SS-0.0-0.5MS	P294843R272035B	MS	METHOD	9012B	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3050B	6010B	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3050B	6020	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3060A	7199	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3546	1625C	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3550B	8015B	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3550B	8015M	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3550B	8081A	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3550B	8082	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3550B	8151A	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3550B	8270C	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	3550B	8270C SIM	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	8330	8330A	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	METHOD	300.0	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	METHOD	314.0	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	METHOD	7471A	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	METHOD	8015B	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	METHOD	8015M	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	METHOD	8315A	IV
20-May-2011	SL-040-SA5DN-SS-0.0-0.5	6294844	N	METHOD	9012B	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3050B	6010B	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3050B	6020	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3060A	7199	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3546	1625C	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3550B	8015B	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3550B	8015M	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3550B	8082	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3550B	8270C	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	3550B	8270C SIM	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	5035	8015M	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	5035	8260B	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	5035	8260B SIM	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	8330	8330A	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	METHOD	300.0	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	METHOD	314.0	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	METHOD	7471A	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	METHOD	8015B	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	METHOD	8015M	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	METHOD	8315A	IV
20-May-2011	SL-065-SA5DN-SB-4.0-5.0	6294849	N	METHOD	9012B	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3050B	6010B	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3050B	6020	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3060A	7199	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3546	1625C	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3550B	8015B	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3550B	8015M	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3550B	8082	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3550B	8270C	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	3550B	8270C SIM	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	5035	8015M	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	5035	8260B	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	5035	8260B SIM	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	8330	8330A	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	METHOD	300.0	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	METHOD	314.0	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	METHOD	6850	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	METHOD	7471A	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	METHOD	8015B	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	METHOD	8015M	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	METHOD	8315A	IV
20-May-2011	SL-065-SA5DN-SB-7.0-8.0	6294850	N	METHOD	9012B	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3050B	6010B	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3050B	6020	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3060A	7199	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3546	1625C	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3550B	8015B	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3550B	8015M	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3550B	8081A	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3550B	8082	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3550B	8151A	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3550B	8270C	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	3550B	8270C SIM	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	8330	8330A	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	METHOD	300.0	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	METHOD	314.0	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	METHOD	7471A	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	METHOD	8015B	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	METHOD	8015M	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	METHOD	8315A	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5	6294842	N	METHOD	9012B	IV
20-May-2011	SL-038-SA5DN-SS-0.0-0.5MS	P294842R320104A	MS	METHOD	8015B	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3050B	6010B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3050B	6020	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3060A	7199	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3546	1625C	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3550B	8015B	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3550B	8015M	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3550B	8081A	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3550B	8082	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3550B	8151A	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3550B	8270C	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	3550B	8270C SIM	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	8330	8330A	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	METHOD	300.0	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	METHOD	314.0	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	METHOD	7471A	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	METHOD	8015B	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	METHOD	8015M	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	METHOD	8315A	IV
20-May-2011	SL-037-SA5DN-SS-0.0-0.5	6294841	N	METHOD	9012B	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3050B	6010B	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3050B	6020	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3060A	7199	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3546	1625C	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3550B	8015B	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3550B	8015M	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3550B	8082	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3550B	8270C	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	3550B	8270C SIM	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	5035	8015M	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	5035	8260B	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	5035	8260B SIM	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	8330	8330A	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	METHOD	300.0	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	METHOD	314.0	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	METHOD	6850	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	METHOD	7471A	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	METHOD	8015B	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	METHOD	8015M	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	METHOD	8315A	IV
20-May-2011	SL-064-SA5DN-SB-4.0-5.0	6294848	N	METHOD	9012B	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3050B	6010B	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3050B	6020	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3060A	7199	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3546	1625C	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3550B	8015B	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3550B	8015M	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3550B	8081A	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3550B	8082	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3550B	8151A	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3550B	8270C	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	3550B	8270C SIM	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	8330	8330A	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	METHOD	300.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	METHOD	314.0	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	METHOD	7471A	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	METHOD	8015B	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	METHOD	8015M	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	METHOD	8315A	IV
20-May-2011	SL-026-SA5DN-SS-0.0-0.5	6294836	N	METHOD	9012B	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3050B	6010B	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3050B	6020	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3060A	7199	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3546	1625C	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3550B	8015B	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3550B	8015M	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3550B	8081A	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3550B	8082	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3550B	8151A	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3550B	8270C	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	3550B	8270C SIM	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	8330	8330A	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	METHOD	300.0	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	METHOD	314.0	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	METHOD	6850	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	METHOD	7471A	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	METHOD	8015B	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	METHOD	8015M	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	METHOD	8315A	IV
20-May-2011	SL-025-SA5DN-SS-0.0-0.5	6294835	N	METHOD	9012B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3050B	6010B	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3050B	6020	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3060A	7199	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3546	1625C	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3550B	8015B	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3550B	8015M	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3550B	8081A	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3550B	8082	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3550B	8151A	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3550B	8270C	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	3550B	8270C SIM	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	8330	8330A	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	METHOD	300.0	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	METHOD	314.0	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	METHOD	7471A	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	METHOD	8015B	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	METHOD	8015M	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	METHOD	8315A	IV
20-May-2011	SL-024-SA5DN-SS-0.0-0.5	6294834	N	METHOD	9012B	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	3050B	6010B	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	3050B	6020	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	3060A	7199	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	3550B	8082	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	3550B	8270C	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	3550B	8270C SIM	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	5035	8260B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	5035	8260B SIM	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	8330	8330A	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	METHOD	300.0	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	METHOD	314.0	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	METHOD	6850	IV
20-May-2011	SL-088-SA5DN-SB-4.0-5.0	6294852	N	METHOD	7471A	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3050B	6010B	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3050B	6020	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3060A	7199	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3546	1625C	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3550B	8015B	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3550B	8015M	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3550B	8081A	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3550B	8082	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3550B	8151A	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3550B	8270C	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	3550B	8270C SIM	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	8330	8330A	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	METHOD	300.0	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	METHOD	314.0	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	METHOD	7471A	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	METHOD	8015B	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	METHOD	8015M	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	METHOD	8315A	IV
20-May-2011	SL-027-SA5DN-SS-0.0-0.5	6294837	N	METHOD	9012B	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3050B	6010B	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3050B	6020	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3060A	7199	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3546	1625C	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3550B	8015B	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3550B	8015M	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3550B	8081A	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3550B	8082	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3550B	8151A	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3550B	8270C	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	3550B	8270C SIM	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	8330	8330A	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	METHOD	300.0	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	METHOD	314.0	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	METHOD	7471A	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	METHOD	8015B	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	METHOD	8015M	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	METHOD	8315A	IV
20-May-2011	SL-028-SA5DN-SS-0.0-0.5	6294838	N	METHOD	9012B	IV
20-May-2011	TB-052011	6294853	TB	5030B	8015M	IV
20-May-2011	TB-052011	6294853	TB	5030B	8260B	IV
20-May-2011	TB-052011	6294853	TB	5030B	8260B SIM	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3050B	6010B	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3050B	6020	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3060A	7199	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3546	1625C	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3550B	8015B	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3550B	8015M	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3550B	8081A	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3550B	8082	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3550B	8151A	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3550B	8270C	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	3550B	8270C SIM	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	8330	8330A	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	METHOD	300.0	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	METHOD	314.0	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	METHOD	7471A	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	METHOD	8015B	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	METHOD	8015M	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	METHOD	8315A	IV
20-May-2011	SL-044-SA5DN-SS-0.0-0.5	6294845	N	METHOD	9012B	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3050B	6010B	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3050B	6020	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3060A	7199	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3546	1625C	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3550B	8015B	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3550B	8015M	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3550B	8081A	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3550B	8082	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3550B	8151A	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3550B	8270C	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	3550B	8270C SIM	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	8330	8330A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	METHOD	300.0	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	METHOD	314.0	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	METHOD	7471A	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	METHOD	8015B	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	METHOD	8015M	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	METHOD	8315A	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5	6294839	N	METHOD	9012B	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5DU	P294839D272024A	DUP	METHOD	9012B	IV
20-May-2011	SL-029-SA5DN-SS-0.0-0.5MS	P294839R272025A	MS	METHOD	9012B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3050B	6010B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3060A	7199	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3546	1625C	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3550B	8015B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3550B	8015M	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3550B	8081A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3550B	8082	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3550B	8151A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3550B	8270C	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	3550B	8270C SIM	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	8330	8330A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	METHOD	300.0	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	METHOD	314.0	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	METHOD	7471A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	METHOD	8015B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	METHOD	8015M	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	METHOD	8315A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5	6294833	N	METHOD	9012B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D220820	DUP	3050B	6010B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D220953A	DUP	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D220953B	DUP	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D220953C	DUP	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D220953D	DUP	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D221028	DUP	3050B	6010B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D221902	DUP	METHOD	7471A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D271017A	DUP	METHOD	300.0	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D271412A	DUP	3060A	7199	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5DU	P294833D272234A	DUP	METHOD	314.0	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R220824	MS	3050B	6010B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R220956A	MS	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R220956B	MS	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R220956C	MS	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R221032	MS	3050B	6010B	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R221542D	MS	3050B	6020	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R221904	MS	METHOD	7471A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R240505A	MS	METHOD	8315A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R241835A	MS	8330	8330A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R241848A	MS	3550B	8081A	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R241904A	MS	3550B	8082	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R260322	MS	3550B	8270C	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R261414	MS	3550B	8270C SIM	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R261854	MS	3546	1625C	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R271031A	MS	METHOD	300.0	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R271238A	MS	METHOD	314.0	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R271337A	MS	3060A	7199	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R320342A	MS	3550B	8015M	IV
20-May-2011	SL-020-SA5DN-SS-0.0-0.5MS	P294833R321458A	MS	3550B	8015B	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3050B	6010B	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3050B	6020	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3060A	7199	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3546	1625C	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3550B	8015B	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3550B	8015M	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3550B	8082	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3550B	8270C	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	3550B	8270C SIM	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	5035	8015M	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	5035	8260B	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	5035	8260B SIM	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	8330	8330A	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	METHOD	300.0	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	METHOD	314.0	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	METHOD	6850	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	METHOD	7471A	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	METHOD	8015B	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	METHOD	8015M	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	METHOD	8315A	IV
20-May-2011	SL-086-SA5DN-SB-4.0-5.0	6294851	N	METHOD	9012B	IV

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.93	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	0.94	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	0.97	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.0	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.0	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z, Q

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.93	MDL	1.8	PQL	mg/Kg	J	Z, Q

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.0	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.88	U	0.88	MDL	1.1	PQL	mg/Kg	UJ	Q
Nitrate-NO3	2.2		0.88	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.0		0.92	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	0.96	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.9		0.96	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.33	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3610		19.1	MDL	53.0	PQL	mg/Kg	J	Q
Zirconium	1.02	J	0.890	MDL	5.30	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.74	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3840		20.7	MDL	57.4	PQL	mg/Kg	J	Q
SODIUM	81.4	J	42.8	MDL	115	PQL	mg/Kg	J	Z
Zirconium	3.30	J	0.965	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3830		20.8	MDL	57.8	PQL	mg/Kg	J	Q
TIN	3.04	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.23	J	0.972	MDL	5.78	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4060		20.5	MDL	57.0	PQL	mg/Kg	J	Q
TIN	2.99	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.81	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3800		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.90	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.99	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	13800		7.03	MDL	22.9	PQL	mg/Kg	U	B
MAGNESIUM	6490		2.91	MDL	11.5	PQL	mg/Kg	U	B
POTASSIUM	3780		20.7	MDL	57.4	PQL	mg/Kg	J	Q
TIN	3.02	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	31200		27.0	MDL	115	PQL	mg/Kg	U	B

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1210		0.427	MDL	1.12	PQL	mg/Kg	U	B

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.46	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3690		20.3	MDL	56.4	PQL	mg/Kg	J	Q
SODIUM	108	J	42.1	MDL	113	PQL	mg/Kg	J	Z
TIN	3.21	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.59	J	0.947	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3700		19.9	MDL	55.4	PQL	mg/Kg	J	Q
SODIUM	108	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	3.16	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.17	J	0.930	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3860		20.0	MDL	55.5	PQL	mg/Kg	J	Q
SODIUM	99.1	J	41.4	MDL	111	PQL	mg/Kg	J	Z
TIN	2.93	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.81	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3880		20.4	MDL	56.8	PQL	mg/Kg	J	Q
SODIUM	110	J	42.4	MDL	114	PQL	mg/Kg	J	Z
TIN	2.98	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.25	J	0.954	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4240		20.5	MDL	56.9	PQL	mg/Kg	J	Q
SODIUM	97.0	J	42.5	MDL	114	PQL	mg/Kg	J	Z
TIN	3.09	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.37	J	0.956	MDL	5.69	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3910		20.8	MDL	57.8	PQL	mg/Kg	J	Q
SODIUM	110	J	43.1	MDL	116	PQL	mg/Kg	J	Z
TIN	3.06	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.15	J	0.972	MDL	5.78	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3560		20.3	MDL	56.4	PQL	mg/Kg	J	Q
TIN	2.94	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.54	J	0.947	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4190		19.3	MDL	53.7	PQL	mg/Kg	J	Q
SODIUM	94.2	J	40.1	MDL	107	PQL	mg/Kg	J	Z
TIN	2.90	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.81	J	0.902	MDL	5.37	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4310		19.1	MDL	53.1	PQL	mg/Kg	J	Q
TIN	2.91	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.56	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2710		20.6	MDL	57.3	PQL	mg/Kg	J	Q
TIN	2.84	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.00	J	0.963	MDL	5.73	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3150		19.8	MDL	54.9	PQL	mg/Kg	J	Q
TIN	3.01	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.62	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2150		19.2	MDL	53.2	PQL	mg/Kg	J	Q
TIN	2.79	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.77	J	0.894	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2960		20.0	MDL	55.5	PQL	mg/Kg	J	Q
TIN	2.85	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.90	J	0.933	MDL	5.55	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2110		20.7	MDL	57.5	PQL	mg/Kg	J	Q
TIN	3.09	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.36	J	0.966	MDL	5.75	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z, Q

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.591		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.276		0.0629	MDL	0.210	PQL	mg/Kg	J	Q
ARSENIC	6.13		0.0839	MDL	0.420	PQL	mg/Kg	J	Q
BERYLLIUM	0.644		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	0.245		0.0420	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	27.2		0.126	MDL	0.420	PQL	mg/Kg	J	Q, A
COBALT	11.9		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	19.4		0.0692	MDL	0.420	PQL	mg/Kg	J	A
LEAD	12.5		0.0109	MDL	0.210	PQL	mg/Kg	J	A
NICKEL	19.2		0.105	MDL	0.420	PQL	mg/Kg	J	Q, A
SILVER	0.0532	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.364		0.0315	MDL	0.105	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: PrepDE158_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	71.1		0.0231	MDL	0.105	PQL	mg/Kg	J	A
ZINC	103		0.587	MDL	3.15	PQL	mg/Kg	J	A

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.156	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z, Q

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.09		0.0558	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.393		0.0669	MDL	0.223	PQL	mg/Kg	J	Q
ARSENIC	7.93		0.0892	MDL	0.446	PQL	mg/Kg	J	Q
BERYLLIUM	0.993		0.0178	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.473		0.0446	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	42.7		0.134	MDL	0.446	PQL	mg/Kg	J	Q, A
COBALT	13.8		0.0223	MDL	0.112	PQL	mg/Kg	J	Q, A
COPPER	18.9		0.0736	MDL	0.446	PQL	mg/Kg	J	A
LEAD	15.2		0.0116	MDL	0.223	PQL	mg/Kg	J	A
NICKEL	30.9		0.112	MDL	0.446	PQL	mg/Kg	J	Q, A
SILVER	0.0704	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.469		0.0335	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	78.1		0.0245	MDL	0.112	PQL	mg/Kg	J	A
ZINC	105		0.625	MDL	3.35	PQL	mg/Kg	J	A

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.173	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: SL-025-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 1:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.600		0.0567	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-025-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 1:25:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.362		0.0681	MDL	0.227	PQL	mg/Kg	J	Q
ARSENIC	9.10		0.0907	MDL	0.454	PQL	mg/Kg	J	Q
BERYLLIUM	1.19		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.422		0.0454	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	46.7		0.136	MDL	0.454	PQL	mg/Kg	J	Q, A
COBALT	15.2		0.0227	MDL	0.113	PQL	mg/Kg	J	Q, A
COPPER	19.1		0.0749	MDL	0.454	PQL	mg/Kg	J	A
LEAD	15.9		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	33.1		0.113	MDL	0.454	PQL	mg/Kg	J	Q, A
SILVER	0.0749	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.528		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	88.8		0.0250	MDL	0.113	PQL	mg/Kg	J	A
ZINC	108		0.635	MDL	3.40	PQL	mg/Kg	J	A

Sample ID: SL-026-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 11:40:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.238	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z, Q

Sample ID: SL-026-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 11:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.688		0.0570	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 11:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.347		0.0684	MDL	0.228	PQL	mg/Kg	J	Q
ARSENIC	7.98		0.0911	MDL	0.456	PQL	mg/Kg	J	Q
BERYLLIUM	1.11		0.0182	MDL	0.114	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.755		0.0456	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	44.9		0.137	MDL	0.456	PQL	mg/Kg	J	Q, A
COBALT	18.0		0.0228	MDL	0.114	PQL	mg/Kg	J	Q, A
COPPER	19.3		0.0752	MDL	0.456	PQL	mg/Kg	J	A
LEAD	16.1		0.0118	MDL	0.228	PQL	mg/Kg	J	A
NICKEL	36.4		0.114	MDL	0.456	PQL	mg/Kg	J	Q, A
SILVER	0.0617	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.517		0.0342	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	85.0		0.0251	MDL	0.114	PQL	mg/Kg	J	A
ZINC	110		0.638	MDL	3.42	PQL	mg/Kg	J	A

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.145	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z, Q

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.710		0.0571	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.392		0.0686	MDL	0.229	PQL	mg/Kg	J	Q
ARSENIC	9.15		0.0914	MDL	0.457	PQL	mg/Kg	J	Q
BERYLLIUM	1.13		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.476		0.0457	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	43.7		0.137	MDL	0.457	PQL	mg/Kg	J	Q, A
COBALT	14.0		0.0229	MDL	0.114	PQL	mg/Kg	J	Q, A
COPPER	19.4		0.0754	MDL	0.457	PQL	mg/Kg	J	A
LEAD	16.5		0.0119	MDL	0.229	PQL	mg/Kg	J	A
NICKEL	33.7		0.114	MDL	0.457	PQL	mg/Kg	J	Q, A
SILVER	0.0757	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.485		0.0343	MDL	0.114	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	85.1		0.0251	MDL	0.114	PQL	mg/Kg	J	A
ZINC	120		0.640	MDL	3.43	PQL	mg/Kg	J	A

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z, Q

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.810		0.0579	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.417		0.0695	MDL	0.232	PQL	mg/Kg	J	Q
ARSENIC	10.4		0.0927	MDL	0.463	PQL	mg/Kg	J	Q
BERYLLIUM	1.20		0.0185	MDL	0.116	PQL	mg/Kg	J	Q
CADMIUM	0.435		0.0463	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	46.4		0.139	MDL	0.463	PQL	mg/Kg	J	Q, A
COBALT	14.7		0.0232	MDL	0.116	PQL	mg/Kg	J	Q, A
COPPER	19.1		0.0765	MDL	0.463	PQL	mg/Kg	J	A
LEAD	19.9		0.0121	MDL	0.232	PQL	mg/Kg	J	A
NICKEL	32.4		0.116	MDL	0.463	PQL	mg/Kg	J	Q, A
SILVER	0.0668	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, Q
THALLIUM	0.517		0.0348	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	91.1		0.0255	MDL	0.116	PQL	mg/Kg	J	A
ZINC	137		0.649	MDL	3.48	PQL	mg/Kg	J	A

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.147	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.664		0.0569	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.403		0.0683	MDL	0.228	PQL	mg/Kg	J	Q
ARSENIC	9.33		0.0911	MDL	0.455	PQL	mg/Kg	J	Q
BERYLLIUM	1.10		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.423		0.0455	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	44.3		0.137	MDL	0.455	PQL	mg/Kg	J	Q, A
COBALT	17.2		0.0228	MDL	0.114	PQL	mg/Kg	J	Q, A
COPPER	19.0		0.0752	MDL	0.455	PQL	mg/Kg	J	A
LEAD	17.4		0.0118	MDL	0.228	PQL	mg/Kg	J	A
NICKEL	32.1		0.114	MDL	0.455	PQL	mg/Kg	J	Q, A
SILVER	0.0640	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.481		0.0342	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	84.9		0.0251	MDL	0.114	PQL	mg/Kg	J	A
ZINC	113		0.638	MDL	3.42	PQL	mg/Kg	J	A

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.165	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z, Q

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.827		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.445		0.0664	MDL	0.221	PQL	mg/Kg	J	Q
ARSENIC	11.0		0.0886	MDL	0.443	PQL	mg/Kg	J	Q
BERYLLIUM	1.27		0.0177	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.559		0.0443	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	55.3		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	18.8		0.0221	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	23.2		0.0731	MDL	0.443	PQL	mg/Kg	J	A
LEAD	21.0		0.0115	MDL	0.221	PQL	mg/Kg	J	A
NICKEL	40.7		0.111	MDL	0.443	PQL	mg/Kg	J	Q, A
SILVER	0.119		0.0133	MDL	0.111	PQL	mg/Kg	J	Q
THALLIUM	0.625		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	100		0.0244	MDL	0.111	PQL	mg/Kg	J	A
ZINC	131		0.620	MDL	3.32	PQL	mg/Kg	J	A

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.172	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z, Q

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.595		0.0571	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.359		0.0685	MDL	0.228	PQL	mg/Kg	J	Q
ARSENIC	6.97		0.0914	MDL	0.457	PQL	mg/Kg	J	Q
BERYLLIUM	0.975		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.410		0.0457	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	39.0		0.137	MDL	0.457	PQL	mg/Kg	J	Q, A
COBALT	11.6		0.0228	MDL	0.114	PQL	mg/Kg	J	Q, A
COPPER	16.6		0.0754	MDL	0.457	PQL	mg/Kg	J	A
LEAD	14.0		0.0119	MDL	0.228	PQL	mg/Kg	J	A
NICKEL	24.3		0.114	MDL	0.457	PQL	mg/Kg	J	Q, A
SILVER	0.0629	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.420		0.0343	MDL	0.114	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	74.8		0.0251	MDL	0.114	PQL	mg/Kg	J	A
ZINC	98.3		0.640	MDL	3.43	PQL	mg/Kg	J	A

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z, Q

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.709		0.0568	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.399		0.0681	MDL	0.227	PQL	mg/Kg	J	Q
ARSENIC	8.59		0.0908	MDL	0.454	PQL	mg/Kg	J	Q
BERYLLIUM	1.10		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.427		0.0454	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	44.8		0.136	MDL	0.454	PQL	mg/Kg	J	Q, A
COBALT	14.3		0.0227	MDL	0.114	PQL	mg/Kg	J	Q, A
COPPER	22.9		0.0749	MDL	0.454	PQL	mg/Kg	J	A
LEAD	16.4		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	30.6		0.114	MDL	0.454	PQL	mg/Kg	J	Q, A
SILVER	0.0697	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.508		0.0341	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	84.9		0.0250	MDL	0.114	PQL	mg/Kg	J	A
ZINC	113		0.636	MDL	3.41	PQL	mg/Kg	J	A

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.170	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.711		0.0580	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.374		0.0696	MDL	0.232	PQL	mg/Kg	J	Q
ARSENIC	8.65		0.0929	MDL	0.464	PQL	mg/Kg	J	Q
BERYLLIUM	1.16		0.0186	MDL	0.116	PQL	mg/Kg	J	Q
CADMIUM	0.538		0.0464	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	45.7		0.139	MDL	0.464	PQL	mg/Kg	J	Q, A
COBALT	15.1		0.0232	MDL	0.116	PQL	mg/Kg	J	Q, A
COPPER	18.5		0.0766	MDL	0.464	PQL	mg/Kg	J	A
LEAD	16.9		0.0121	MDL	0.232	PQL	mg/Kg	J	A
NICKEL	31.1		0.116	MDL	0.464	PQL	mg/Kg	J	Q, A
SILVER	0.0842	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, Q
THALLIUM	0.492		0.0348	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	88.0		0.0255	MDL	0.116	PQL	mg/Kg	J	A
ZINC	103		0.650	MDL	3.48	PQL	mg/Kg	J	A

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.154	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z, Q

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.576		0.0562	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.310		0.0674	MDL	0.225	PQL	mg/Kg	J	Q
ARSENIC	7.57		0.0899	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	0.965		0.0180	MDL	0.112	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: PrepDE158_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.488		0.0449	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	38.6		0.135	MDL	0.449	PQL	mg/Kg	J	Q, A
COBALT	13.5		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, A
COPPER	16.6		0.0741	MDL	0.449	PQL	mg/Kg	J	A
LEAD	14.7		0.0117	MDL	0.225	PQL	mg/Kg	J	A
NICKEL	28.2		0.112	MDL	0.449	PQL	mg/Kg	J	Q, A
SILVER	0.0698	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.444		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	73.0		0.0247	MDL	0.112	PQL	mg/Kg	J	A
ZINC	96.7		0.629	MDL	3.37	PQL	mg/Kg	J	A

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z, Q

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.535		0.0558	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.292		0.0670	MDL	0.223	PQL	mg/Kg	J	Q
ARSENIC	7.11		0.0893	MDL	0.447	PQL	mg/Kg	J	Q
BERYLLIUM	0.926		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.358		0.0447	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	36.8		0.134	MDL	0.447	PQL	mg/Kg	J	Q, A
COBALT	12.0		0.0223	MDL	0.112	PQL	mg/Kg	J	Q, A
COPPER	15.2		0.0737	MDL	0.447	PQL	mg/Kg	J	A
LEAD	16.0		0.0116	MDL	0.223	PQL	mg/Kg	J	A
NICKEL	25.3		0.112	MDL	0.447	PQL	mg/Kg	J	Q, A
SILVER	0.0529	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.435		0.0335	MDL	0.112	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	71.2		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	105		0.625	MDL	3.35	PQL	mg/Kg	J	A

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.229	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z, Q

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.976		0.0532	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.595		0.0638	MDL	0.213	PQL	mg/Kg	J	Q
ARSENIC	7.47		0.0851	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.965		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.800		0.0425	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	41.2		0.128	MDL	0.425	PQL	mg/Kg	J	Q, A
COBALT	18.1		0.0213	MDL	0.106	PQL	mg/Kg	J	Q, A
COPPER	19.4		0.0702	MDL	0.425	PQL	mg/Kg	J	A
LEAD	43.6		0.0111	MDL	0.213	PQL	mg/Kg	J	A
NICKEL	32.4		0.106	MDL	0.425	PQL	mg/Kg	J	Q, A
SILVER	0.0770	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.465		0.0319	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	85.1		0.0234	MDL	0.106	PQL	mg/Kg	J	A
ZINC	153		0.596	MDL	3.19	PQL	mg/Kg	J	A

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.192	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.692		0.0546	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.371		0.0656	MDL	0.219	PQL	mg/Kg	J	Q
ARSENIC	5.79		0.0874	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.814		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.456		0.0437	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	32.7		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
COBALT	11.0		0.0219	MDL	0.109	PQL	mg/Kg	J	Q, A
COPPER	15.9		0.0721	MDL	0.437	PQL	mg/Kg	J	A
LEAD	21.1		0.0114	MDL	0.219	PQL	mg/Kg	J	A
NICKEL	23.2		0.109	MDL	0.437	PQL	mg/Kg	J	Q, A
SILVER	0.0586	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.359		0.0328	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	68.2		0.0240	MDL	0.109	PQL	mg/Kg	J	A
ZINC	107		0.612	MDL	3.28	PQL	mg/Kg	J	A

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.121	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z, Q

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.581		0.0573	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.381		0.0688	MDL	0.229	PQL	mg/Kg	J	Q
ARSENIC	10.8		0.0917	MDL	0.458	PQL	mg/Kg	J	Q
BERYLLIUM	1.22		0.0183	MDL	0.115	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.409		0.0458	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	50.7		0.138	MDL	0.458	PQL	mg/Kg	J	Q, A
COBALT	16.4		0.0229	MDL	0.115	PQL	mg/Kg	J	Q, A
COPPER	17.0		0.0756	MDL	0.458	PQL	mg/Kg	J	A
LEAD	15.9		0.0119	MDL	0.229	PQL	mg/Kg	J	A
NICKEL	35.0		0.115	MDL	0.458	PQL	mg/Kg	J	Q, A
SILVER	0.0651	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.532		0.0344	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	94.5		0.0252	MDL	0.115	PQL	mg/Kg	J	A
ZINC	106		0.642	MDL	3.44	PQL	mg/Kg	J	A

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0959	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z, Q

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.489		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.374		0.0666	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	8.37		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	1.12		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.311		0.0444	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	44.3		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	12.8		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	17.9		0.0732	MDL	0.444	PQL	mg/Kg	J	A
LEAD	13.6		0.0115	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	28.7		0.111	MDL	0.444	PQL	mg/Kg	J	Q, A
SILVER	0.0801	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.475		0.0333	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: PrepDE158_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	81.6		0.0244	MDL	0.111	PQL	mg/Kg	J	A
ZINC	88.2		0.621	MDL	3.33	PQL	mg/Kg	J	A

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0514	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z, Q

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.472		0.0532	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.199	J	0.0639	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	7.87		0.0852	MDL	0.426	PQL	mg/Kg	J	Q
BERYLLIUM	0.786		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.171		0.0426	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	27.1		0.128	MDL	0.426	PQL	mg/Kg	J	Q, A
COBALT	9.14		0.0213	MDL	0.106	PQL	mg/Kg	J	Q, A
COPPER	11.1		0.0703	MDL	0.426	PQL	mg/Kg	J	A
LEAD	9.62		0.0111	MDL	0.213	PQL	mg/Kg	J	A
NICKEL	17.0		0.106	MDL	0.426	PQL	mg/Kg	J	Q, A
SILVER	0.0484	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.294		0.0319	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	52.8		0.0234	MDL	0.106	PQL	mg/Kg	J	A
ZINC	60.6		0.596	MDL	3.19	PQL	mg/Kg	J	A

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0673	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.331		0.0566	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.220	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	7.80		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
BERYLLIUM	0.803		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.320		0.0453	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	34.3		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	8.97		0.0227	MDL	0.113	PQL	mg/Kg	J	Q, A
COPPER	12.6		0.0748	MDL	0.453	PQL	mg/Kg	J	A
LEAD	10.3		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	20.9		0.113	MDL	0.453	PQL	mg/Kg	J	Q, A
SILVER	0.0401	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.367		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	67.5		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	64.5		0.634	MDL	3.40	PQL	mg/Kg	J	A

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0625	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z, Q

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.626		0.0586	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.206	J	0.0704	MDL	0.235	PQL	mg/Kg	J	Z, Q
ARSENIC	8.58		0.0938	MDL	0.469	PQL	mg/Kg	J	Q
BERYLLIUM	0.949		0.0188	MDL	0.117	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: PrepDE158_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0535	J	0.0469	MDL	0.117	PQL	mg/Kg	J	Z, Q
CHROMIUM	30.2		0.141	MDL	0.469	PQL	mg/Kg	J	Q, A
COBALT	6.76		0.0235	MDL	0.117	PQL	mg/Kg	J	Q, A
COPPER	10.4		0.0774	MDL	0.469	PQL	mg/Kg	J	A
LEAD	9.38		0.0122	MDL	0.235	PQL	mg/Kg	J	A
NICKEL	15.7		0.117	MDL	0.469	PQL	mg/Kg	J	Q, A
SILVER	0.0357	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z, Q
THALLIUM	0.352		0.0352	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	56.9		0.0258	MDL	0.117	PQL	mg/Kg	J	A
ZINC	58.7		0.657	MDL	3.52	PQL	mg/Kg	J	A

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

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.56	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.59	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.66	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.76	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.73	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.77	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.94	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.85	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.64	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.95	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.80	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.0	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.0	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.71	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0127	J	0.0029	MDL	0.100	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0275	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0055	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0263	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0235	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0065	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0095	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0098	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0059	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0232	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0051	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: PrepDE158_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0069	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0069	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0184	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	99.2		17.6	MDL	35.2	PQL	ng/Kg	UJ	Q, B

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	58.9		19.3	MDL	38.5	PQL	ng/Kg	U	B

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	24.5	J	19.3	MDL	38.6	PQL	ng/Kg	U	B

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	24.9	J	19.2	MDL	38.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	63.0		19.2	MDL	38.5	PQL	ng/Kg	U	B

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	63.9		19.3	MDL	38.5	PQL	ng/Kg	U	B

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	68.3		19.1	MDL	38.2	PQL	ng/Kg	U	B

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	52.0		18.9	MDL	37.9	PQL	ng/Kg	U	B

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	50.4		19.0	MDL	38.1	PQL	ng/Kg	U	B

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	64.1		19.3	MDL	38.6	PQL	ng/Kg	U	B

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	51.8		19.5	MDL	39.1	PQL	ng/Kg	U	B

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	37.7	J	19.3	MDL	38.6	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	252	J	188	MDL	376	PQL	ng/Kg	U	B

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	57.3		18.2	MDL	36.3	PQL	ng/Kg	U	B

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	53.6		19.2	MDL	38.3	PQL	ng/Kg	U	B

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	30.4	J	18.9	MDL	37.8	PQL	ng/Kg	U	B

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	30.7	J	18.9	MDL	37.9	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	5.8	J	2.1	MDL	6.4	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.4	J	2.3	MDL	7.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: PrepDE158_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.3	J	2.3	MDL	6.9	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	5.2	J	2.3	MDL	7.0	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.5	J	2.3	MDL	7.0	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	5.9	J	2.3	MDL	7.0	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.1	J	2.3	MDL	6.9	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.8	J	2.3	MDL	7.0	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.5	J	2.3	MDL	6.8	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* REA2 *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	33	J	22	MDL	66	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.48	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.28	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
DIELDRIN	0.26	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z, *XIII
ENDRIN ALDEHYDE	0.082	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z, *XIII
MIREX	0.19	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.11	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.5	J	0.93	MDL	3.9	PQL	ug/Kg	J	Z, *XIII

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
4,4'-DDE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
4,4'-DDT	0.80		0.076	MDL	0.39	PQL	ug/Kg	J	C
ALDRIN	0.076	U	0.076	MDL	0.19	PQL	ug/Kg	UJ	C
DIELDRIN	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.14	U	0.14	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.10	U	0.10	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.27	U	0.27	MDL	0.39	PQL	ug/Kg	UJ	C
TOXAPHENE	2.5	U	2.5	MDL	7.6	PQL	ug/Kg	UJ	C

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
4,4'-DDE	0.32	U	0.32	MDL	0.39	PQL	ug/Kg	UJ	C
4,4'-DDT	1.4		0.076	MDL	0.39	PQL	ug/Kg	J	C
ALDRIN	0.076	U	0.076	MDL	0.19	PQL	ug/Kg	UJ	C
Chlordane	2.8	J	0.27	MDL	3.9	PQL	ug/Kg	J	Z, *XIII
DIELDRIN	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.20	U	0.20	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.28	U	0.28	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.064	U	0.064	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.32	U	0.32	MDL	0.39	PQL	ug/Kg	UJ	C
TOXAPHENE	2.5	U	2.5	MDL	7.6	PQL	ug/Kg	UJ	C

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
4,4'-DDE	0.10	U	0.10	MDL	0.39	PQL	ug/Kg	UJ	C
4,4'-DDT	0.95		0.075	MDL	0.39	PQL	ug/Kg	J	C
ALDRIN	0.075	U	0.075	MDL	0.19	PQL	ug/Kg	UJ	C
DIELDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.12	U	0.12	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.13	U	0.13	MDL	0.39	PQL	ug/Kg	UJ	C
TOXAPHENE	2.5	U	2.5	MDL	7.5	PQL	ug/Kg	UJ	C

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
4,4'-DDE	0.12	U	0.12	MDL	0.39	PQL	ug/Kg	UJ	C
4,4'-DDT	1.4		0.075	MDL	0.39	PQL	ug/Kg	J	C
ALDRIN	0.075	U	0.075	MDL	0.19	PQL	ug/Kg	UJ	C
Chlordane	1.8	J	0.92	MDL	3.9	PQL	ug/Kg	J	Z
DIELDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.21	U	0.21	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.39	U	0.39	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.22	U	0.22	MDL	0.39	PQL	ug/Kg	UJ	C
TOXAPHENE	2.5	U	2.5	MDL	7.5	PQL	ug/Kg	UJ	C

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
4,4'-DDT	0.88		0.077	MDL	0.40	PQL	ug/Kg	J	C
ALDRIN	0.077	U	0.077	MDL	0.19	PQL	ug/Kg	UJ	C
Chlordane	4.4		0.93	MDL	4.0	PQL	ug/Kg	J	*#
DIELDRIN	0.11	U	0.11	MDL	0.40	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.40	U	0.40	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.22	U	0.22	MDL	0.40	PQL	ug/Kg	UJ	C
TOXAPHENE	2.6	U	2.6	MDL	7.7	PQL	ug/Kg	UJ	C

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
4,4'-DDE	0.10	U	0.10	MDL	0.40	PQL	ug/Kg	UJ	C
4,4'-DDT	0.86		0.077	MDL	0.40	PQL	ug/Kg	J	C
ALDRIN	0.077	U	0.077	MDL	0.19	PQL	ug/Kg	UJ	C
Chlordane	1.3	J	0.93	MDL	4.0	PQL	ug/Kg	J	Z
DIELDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.16	U	0.16	MDL	0.40	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.40	U	0.40	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.12	U	0.12	MDL	0.40	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOXAPHENE	2.6	U	2.6	MDL	7.7	PQL	ug/Kg	UJ	C

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
4,4'-DDE	0.11	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z, C, *XIII
4,4'-DDT	0.56		0.077	MDL	0.40	PQL	ug/Kg	J	C
ALDRIN	0.077	U	0.077	MDL	0.19	PQL	ug/Kg	UJ	C
DIELDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.11	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z, C
ENDRIN KETONE	0.077	U	0.077	MDL	0.40	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.043	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z, C, *XIII
METHOXYCHLOR	0.40	U	0.40	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.19	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z, C
TOXAPHENE	2.6	U	2.6	MDL	7.7	PQL	ug/Kg	UJ	C

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	C
4,4'-DDE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	C
4,4'-DDT	0.32	J	0.075	MDL	0.38	PQL	ug/Kg	J	Z, C
ALDRIN	0.075	U	0.075	MDL	0.19	PQL	ug/Kg	UJ	C
DIELDRIN	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.19	J	0.075	MDL	0.38	PQL	ug/Kg	J	Z, C
TOXAPHENE	2.5	U	2.5	MDL	7.5	PQL	ug/Kg	UJ	C

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.18	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z, C
4,4'-DDE	2.2		0.073	MDL	0.37	PQL	ug/Kg	J	C
4,4'-DDT	1.7		0.073	MDL	0.37	PQL	ug/Kg	J	C
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	C
DIELDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.049	U	0.049	MDL	0.18	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	C
MIREX	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	C

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
4,4'-DDE	0.84		0.073	MDL	0.37	PQL	ug/Kg	J	C
4,4'-DDT	0.55		0.073	MDL	0.37	PQL	ug/Kg	J	C, *XIII
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	C
BETA-BHC	0.10	J	0.066	MDL	0.18	PQL	ug/Kg	J	Z
DIELDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8081A **Matrix:** SO

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	C
MIREX	0.074	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z, C, *XIII
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	C

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

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.60	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	C

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.91	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	1.3	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, C

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	5.1		1.2	MDL	3.8	PQL	ug/Kg	J	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	6.0		0.45	MDL	1.9	PQL	ug/Kg	J	*XIII
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	8.4		1.1	MDL	3.8	PQL	ug/Kg	J	C

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	2.6	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, C

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	2.0	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, C

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	2.3	U	2.3	MDL	7.6	PQL	ug/Kg	UJ	C
Aroclor 5460	2.3	U	2.3	MDL	7.6	PQL	ug/Kg	UJ	C

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	5.7	U	5.7	MDL	19	PQL	ug/Kg	UJ	C
Aroclor 5460	9.5	J	5.7	MDL	19	PQL	ug/Kg	J	Z, C

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	4.3		1.1	MDL	3.8	PQL	ug/Kg	J	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: PrepDE158_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	5.9		1.2	MDL	3.8	PQL	ug/Kg	J	C

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.7	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z, C

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	3.3	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, C

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.5	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	C
Aroclor 5460	3.5	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, C

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.0		0.36	MDL	1.9	PQL	ug/Kg	J	*XIII
AROCLOR 1260	1.6	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z, *XIII
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.4	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, C

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L
MCPA	310		89	MDL	290	PQL	ug/Kg	J	*IX

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.92	U	0.92	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.92	U	0.92	MDL	2.8	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: PrepDE158_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.5	J	0.70	MDL	1.9	PQL	ug/Kg	J	Z, *IX
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	3.6		0.71	MDL	2.0	PQL	ug/Kg	J	*IX
DINOSEB	0.92	U	0.92	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	2.2	J	1.4	MDL	4.2	PQL	ug/Kg	J	Z, *IX
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L
MCPA	150	J	88	MDL	290	PQL	ug/Kg	J	Z, *IX

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	2.4	J	1.4	MDL	4.2	PQL	ug/Kg	J	Z
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.7	J	0.70	MDL	1.9	PQL	ug/Kg	J	Z, *IX
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	6.9		0.68	MDL	1.9	PQL	ug/Kg	J	*IX
DICAMBA	0.49	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z, *IX
DINOSEB	7.0	U	7.0	MDL	7.0	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	350	U	350	MDL	1000	PQL	ug/Kg	UJ	Q, L

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	40	J	19	MDL	390	PQL	ug/Kg	J	Z, L

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
HEXACHLOROBUTADIENE	75	U	75	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	19	MDL	380	PQL	ug/Kg	J	Z, L

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	19	MDL	380	PQL	ug/Kg	J	Z, L

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	37	J	19	MDL	390	PQL	ug/Kg	J	Z, L

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	39	J	19	MDL	380	PQL	ug/Kg	J	Z, L

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L
BENZO(A)PYRENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	23	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	24	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	29	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-039-SA5DN-SS-0.0-0.5** ***Collected:*** **5/20/2011 10:10:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
ACENAPHTHENE	35	J	19	MDL	190	PQL	ug/Kg	J	Z
ANTHRACENE	48	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	140	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	150	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	75	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	72	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	54	J	19	MDL	390	PQL	ug/Kg	J	Z, L
CARBAZOLE	27	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	89	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-040-SA5DN-SS-0.0-0.5** ***Collected:*** **5/20/2011 10:40:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L

Sample ID: **SL-044-SA5DN-SS-0.0-0.5** ***Collected:*** **5/20/2011 2:40:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	43	J	19	MDL	380	PQL	ug/Kg	J	Z, L

Sample ID: **SL-050-SA5DN-SS-0.0-0.5** ***Collected:*** **5/20/2011 8:45:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	18	MDL	370	PQL	ug/Kg	J	Z, L

Sample ID: **SL-051-SA5DN-SS-0.0-0.5** ***Collected:*** **5/20/2011 9:15:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	60	J	18	MDL	360	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	380	PQL	ug/Kg	J	Z, L

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	19	MDL	380	PQL	ug/Kg	J	Z, L

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	360	PQL	ug/Kg	J	Z, L

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	380	PQL	ug/Kg	J	Z, L

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	20	MDL	390	PQL	ug/Kg	J	Z, L

Method Category: SVOA

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

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.7	J	1.7	MDL	8.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	5.6	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.95	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.58	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.86	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.98	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Diethylphthalate	7.1	J	6.9	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.98	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.49	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-029-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 3:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	9.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.7	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-036-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 9:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.1	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	8.3	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z
CHRYSENE	3.3	J	1.9	MDL	9.4	PQL	ug/Kg	J	Z
Di-n-butylphthalate	71	J	34	MDL	100	PQL	ug/Kg	J	Z

Sample ID: SL-037-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 11:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	5.2	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.1	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	91	J	35	MDL	100	PQL	ug/Kg	J	Z

Sample ID: SL-038-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 10:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.85	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.1	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	19	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-040-SA5DN-SS-0.0-0.5 ***Collected:*** 5/20/2011 10:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.82	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.91	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	0.77	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.78	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.68	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	0.78	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.77	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-050-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 8:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	6.7	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	4.5	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	7.9	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	8.2	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	4.2	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	6.3	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
NAPHTHALENE	4.6	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-020-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	42	U	42	MDL	130	PQL	ug/Kg	UJ	Q
HMX	110	U	110	MDL	320	PQL	ug/Kg	UJ	L
Nitroglycerin	850	U	850	MDL	2500	PQL	ug/Kg	UJ	Q, L
RDX	53	U	53	MDL	130	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-024-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	340	PQL	ug/Kg	UJ	L
Nitroglycerin	910	U	910	MDL	2700	PQL	ug/Kg	UJ	L

Sample ID: SL-025-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	340	PQL	ug/Kg	UJ	L
Nitroglycerin	920	U	920	MDL	2700	PQL	ug/Kg	UJ	L

Sample ID: SL-026-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	120	U	120	MDL	350	PQL	ug/Kg	UJ	L
Nitroglycerin	920	U	920	MDL	2800	PQL	ug/Kg	UJ	L

Sample ID: SL-027-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	120	U	120	MDL	350	PQL	ug/Kg	UJ	L
Nitroglycerin	930	U	930	MDL	2800	PQL	ug/Kg	UJ	L

Sample ID: SL-028-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	120	U	120	MDL	350	PQL	ug/Kg	UJ	L
Nitroglycerin	930	U	930	MDL	2800	PQL	ug/Kg	UJ	L

Sample ID: SL-029-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	120	U	120	MDL	350	PQL	ug/Kg	UJ	L
Nitroglycerin	930	U	930	MDL	2800	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-036-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	320	PQL	ug/Kg	UJ	L
Nitroglycerin	840	U	840	MDL	2500	PQL	ug/Kg	UJ	L

Sample ID: SL-037-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	330	PQL	ug/Kg	UJ	L
Nitroglycerin	890	U	890	MDL	2700	PQL	ug/Kg	UJ	L

Sample ID: SL-038-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	320	PQL	ug/Kg	UJ	L
Nitroglycerin	870	U	870	MDL	2600	PQL	ug/Kg	UJ	L

Sample ID: SL-039-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	330	PQL	ug/Kg	UJ	L
Nitroglycerin	870	U	870	MDL	2600	PQL	ug/Kg	UJ	L

Sample ID: SL-040-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	340	PQL	ug/Kg	UJ	L
Nitroglycerin	900	U	900	MDL	2700	PQL	ug/Kg	UJ	L

Sample ID: SL-044-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	320	PQL	ug/Kg	UJ	L
Nitroglycerin	860	U	860	MDL	2600	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	100	U	100	MDL	310	PQL	ug/Kg	UJ	L
Nitroglycerin	820	U	820	MDL	2500	PQL	ug/Kg	UJ	L

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	340	PQL	ug/Kg	UJ	L
Nitroglycerin	910	U	910	MDL	2700	PQL	ug/Kg	UJ	L

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	340	PQL	ug/Kg	UJ	L
Nitroglycerin	910	U	910	MDL	2700	PQL	ug/Kg	UJ	L

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	330	PQL	ug/Kg	UJ	L
Nitroglycerin	890	U	890	MDL	2700	PQL	ug/Kg	UJ	L

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	340	PQL	ug/Kg	UJ	L
Nitroglycerin	900	U	900	MDL	2700	PQL	ug/Kg	UJ	L

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	110	U	110	MDL	330	PQL	ug/Kg	UJ	L
Nitroglycerin	890	U	890	MDL	2700	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: PrepDE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA **Method:** 8015B **Matrix:** SO

Sample ID: SL-051-SA5DN-SS-0.0-0.5 *Collected:* 5/20/2011 9:15:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	3.9	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.7	U	1.7	MDL	3.9	PQL	mg/Kg	UJ	S
p-Terphenyl	1.7	U	1.7	MDL	3.9	PQL	mg/Kg	UJ	S

Method Category: VOA **Method:** 8260B **Matrix:** AQ

Sample ID: TB-052011 *Collected:* 5/20/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA **Method:** 8260B **Matrix:** SO

Sample ID: SL-064-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 11:34:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.54	U	0.54	MDL	5.4	PQL	ug/Kg	UJ	L
2-HEXANONE	1.7	U	1.7	MDL	8.6	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.42	U	0.42	MDL	8.6	PQL	ug/Kg	UJ	C
ACETONE	9.9		7.2	MDL	8.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.0	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-065-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 10:44:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	L
2-HEXANONE	1.6	U	1.6	MDL	8.2	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.2	PQL	ug/Kg	UJ	C
ACETONE	8.8		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.82	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-065-SA5DN-SB-7.0-8.0 *Collected:* 5/20/2011 10:52:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	L
2-HEXANONE	1.6	U	1.6	MDL	8.2	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.2	PQL	ug/Kg	UJ	C
ACETONE	8.6		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.81	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-086-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 3:35:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.56	U	0.56	MDL	5.6	PQL	ug/Kg	UJ	L
2-HEXANONE	1.8	U	1.8	MDL	9.0	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.44	U	0.44	MDL	9.0	PQL	ug/Kg	UJ	C
ACETONE	9.1		7.5	MDL	9.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.92	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-088-SA5DN-SB-4.0-5.0 *Collected:* 5/20/2011 2:04:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.57	U	0.57	MDL	5.7	PQL	ug/Kg	UJ	L
2-HEXANONE	1.8	U	1.8	MDL	9.1	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.45	U	0.45	MDL	9.1	PQL	ug/Kg	UJ	C
ACETONE	11		7.7	MDL	9.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.27	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*IX, *XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: PrepDE158_v2 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE158

Method Blank Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLI14B261029	6/3/2011 10:29:00 AM	N-NITROSODIMETHYLAMINE	24.7 ng/Kg	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-020-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	99.2 ng/Kg	99.2U ng/Kg
SL-024-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	58.9 ng/Kg	58.9U ng/Kg
SL-025-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	24.5 ng/Kg	38.6U ng/Kg
SL-026-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	24.9 ng/Kg	38.4U ng/Kg
SL-027-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	63.0 ng/Kg	63.0U ng/Kg
SL-028-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	63.9 ng/Kg	63.9U ng/Kg
SL-029-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	68.3 ng/Kg	68.3U ng/Kg
SL-036-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	52.0 ng/Kg	52.0U ng/Kg
SL-037-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	50.4 ng/Kg	50.4U ng/Kg
SL-038-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	64.1 ng/Kg	64.1U ng/Kg
SL-039-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	51.8 ng/Kg	51.8U ng/Kg
SL-040-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	37.7 ng/Kg	38.6U ng/Kg
SL-044-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	252 ng/Kg	376U ng/Kg
SL-051-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	57.3 ng/Kg	57.3U ng/Kg
SL-064-SA5DN-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	53.6 ng/Kg	53.6U ng/Kg
SL-065-SA5DN-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	30.4 ng/Kg	37.8U ng/Kg
SL-086-SA5DN-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	30.7 ng/Kg	37.9U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14708AB220801	6/1/2011 8:01:00 AM	ALUMINUM BORON CALCIUM PHOSPHORUS STRONTIUM	6.44 mg/Kg 0.910 mg/Kg 13.9 mg/Kg 1.20 mg/Kg 0.0710 mg/Kg	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0
P14708AB221535	6/2/2011 3:35:00 PM	TIN	1.48 mg/Kg	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-020-SA5DN-SS-0.0-0.5(REA)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-024-SA5DN-SS-0.0-0.5(REA)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-025-SA5DN-SS-0.0-0.5(REA)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-026-SA5DN-SS-0.0-0.5(REA)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-027-SA5DN-SS-0.0-0.5(REA)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-028-SA5DN-SS-0.0-0.5(REA)	TIN	3.02 mg/Kg	3.02U mg/Kg
SL-029-SA5DN-SS-0.0-0.5(REA)	TIN	3.21 mg/Kg	3.21U mg/Kg
SL-036-SA5DN-SS-0.0-0.5(REA)	TIN	3.16 mg/Kg	3.16U mg/Kg
SL-037-SA5DN-SS-0.0-0.5(REA)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-038-SA5DN-SS-0.0-0.5(REA2)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-039-SA5DN-SS-0.0-0.5(REA)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-040-SA5DN-SS-0.0-0.5(REA)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-044-SA5DN-SS-0.0-0.5(REA)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-050-SA5DN-SS-0.0-0.5(REA)	TIN	2.90 mg/Kg	2.90U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE158 Laboratory: LL

EDD Filename: DE158_v2 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-051-SA5DN-SS-0.0-0.5(REA)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-064-SA5DN-SB-4.0-5.0(REA)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-065-SA5DN-SB-4.0-5.0(REA2)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-065-SA5DN-SB-7.0-8.0(REA)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-086-SA5DN-SB-4.0-5.0(REA)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-088-SA5DN-SB-4.0-5.0(REA)	TIN	3.09 mg/Kg	3.09U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14726AB220940A	6/6/2011 9:40:00 AM	COPPER	0.0695 mg/Kg	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB67B211316A	5/27/2011 1:16:00 PM	ACETONE METHYLENE CHLORIDE	9.6 ug/Kg 1.1 ug/Kg	SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-064-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.9 ug/Kg	9.9U ug/Kg
SL-064-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.3U ug/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-065-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.8 ug/Kg	8.8U ug/Kg
SL-065-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.82 ug/Kg	4.1U ug/Kg
SL-065-SA5DN-SB-7.0-8.0(RES)	ACETONE	6.6 ug/Kg	6.6U ug/Kg
SL-065-SA5DN-SB-7.0-8.0(RES)	METHYLENE CHLORIDE	0.81 ug/Kg	4.1U ug/Kg
SL-086-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.1 ug/Kg	9.1U ug/Kg
SL-086-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.92 ug/Kg	4.5U ug/Kg
SL-088-SA5DN-SB-4.0-5.0(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-088-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.6U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC14B260203	6/1/2011 2:03:00 AM	Di-n-butylphthalate	17 ug/Kg	SL-020-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0
PLKLE15B260616	6/4/2011 6:16:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate	19 ug/Kg 25 ug/Kg 19 ug/Kg	SL-024-SA5DN-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5)	1,3,5-TRINITROBENZENE	-	79	82.00-126.00	-	1,3,5-TRINITROBENZENE	J (all detects) UJ (all non-detects)
	Nitroglycerin	-	78	80.00-120.00	-	Nitroglycerin	
	RDX	-	74	75.00-129.00	-	RDX	

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MS SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5)	EFH (C12-C14)	0	0	49.00-123.00	-	EFH (C12-C14)	No Qual, Diluted Out
	EFH (C15-C20)	-54	-133	49.00-123.00	23 (20.00)	EFH (C15-C20)	
	EFH (C21-C30)	-184	-237	49.00-123.00	-	EFH (C21-C30)	
	EFH (C30-C40)	-2679	-2328	49.00-123.00	-	EFH (C30-C40)	
	EFH (C8-C11)	0	0	49.00-123.00	-	EFH (C8-C11)	

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5)	4,6-DINITRO-2-METHYLPHENOL	-	-	24.00-116.00	43 (30.00)	4,6-DINITRO-2-METHYLPHEN	J(all detects)
SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5)	2,4-DINITROPHENOL	-	18	20.00-143.00	63 (30.00)	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5)	N-NITROSODIMETHYLAMINE	-	69	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5)	ACENAPHTHYLENE	-	-	67.00-114.00	31 (30.00)	ACENAPHTHYLENE	No Qual, Diluted Out
	Di-n-butylphthalate	-	211	65.00-148.00	68 (30.00)	Di-n-butylphthalate	
	INDENO(1,2,3-CD)PYRENE	-	-	21.00-143.00	38 (30.00)	INDENO(1,2,3-CD)PYRENE	
	PHENANTHRENE	-	-	12.00-165.00	50 (30.00)	PHENANTHRENE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MS SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5)	BENZO(A)ANTHRACENE	-4	-	59.00-128.00	56 (30.00)	BENZO(A)ANTHRACENE	No Qual, Diluted Out
	BENZO(A)PYRENE	-15	-	45.00-138.00	63 (30.00)	BENZO(A)PYRENE	
	BENZO(B)FLUORANTHENE	-73	-	43.00-155.00	64 (30.00)	BENZO(B)FLUORANTHENE	
	CHRYSENE	-41	-	48.00-134.00	71 (30.00)	CHRYSENE	
	Dimethylphthalate	0	-	74.00-118.00	200 (30.00)	Dimethylphthalate	
	FLUORANTHENE	-106	-	26.00-166.00	88 (30.00)	FLUORANTHENE	
	PYRENE	-117	-	15.00-153.00	86 (30.00)	PYRENE	
SL-020-SA5DN-SS-0.0-0.5MS SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5)	BENZO(G,H,I)PERYLENE	23	-	33.00-141.00	-	BENZO(G,H,I)PERYLENE	No Qual, Diluted Out
	BENZO(K)FLUORANTHENE	32	-	42.00-144.00	56 (30.00)	BENZO(K)FLUORANTHENE	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MS SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0)	ARSENIC	-	162	75.00-125.00	-	ARSENIC	Pb, V, Zn, No Qual, >4x
	BERYLLIUM	-	135	75.00-125.00	-	BERYLLIUM	
	CADMIUM	141	167	75.00-125.00	-	CADMIUM	
	CHROMIUM	-	141	75.00-125.00	-	CHROMIUM	
	COBALT	133	153	75.00-125.00	-	COBALT	J(all detects)
	LEAD	224	176	75.00-125.00	-	LEAD	
	NICKEL	-	151	75.00-125.00	-	NICKEL	
	SILVER	143	157	75.00-125.00	-	SILVER	
	THALLIUM	149	162	75.00-125.00	-	THALLIUM	
	VANADIUM	148	209	75.00-125.00	-	VANADIUM	
	ZINC	-	142	75.00-125.00	-	ZINC	
SL-020-SA5DN-SS-0.0-0.5MS SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0)	ANTIMONY	55	70	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0)	SELENIUM	-	145	75.00-125.00	-	SELENIUM	J(all detects)
SL-020-SA5DN-SS-0.0-0.5MS **SL-020-SA5DN-SS-0.0-0.5MSD** (SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0)	MOLYBDENUM	143	165	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0)	BARIUM	-	4	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MS	ALUMINUM	2091	1485	75.00-125.00	-	ALUMINUM	
SL-020-SA5DN-SS-0.0-0.5MSD	CALCIUM	317	130	75.00-125.00	-	CALCIUM	
(SL-020-SA5DN-SS-0.0-0.5	IRON	2128	145	75.00-125.00	-	IRON	
SL-024-SA5DN-SS-0.0-0.5	MAGNESIUM	403	228	75.00-125.00	-	MAGNESIUM	
SL-025-SA5DN-SS-0.0-0.5	PHOSPHORUS	172	-	75.00-125.00	-	PHOSPHORUS	
SL-026-SA5DN-SS-0.0-0.5	POTASSIUM	135	-	75.00-125.00	-	POTASSIUM	
SL-027-SA5DN-SS-0.0-0.5							J(all detects)
SL-028-SA5DN-SS-0.0-0.5							
SL-029-SA5DN-SS-0.0-0.5							
SL-036-SA5DN-SS-0.0-0.5							
SL-037-SA5DN-SS-0.0-0.5							
SL-038-SA5DN-SS-0.0-0.5							
SL-039-SA5DN-SS-0.0-0.5							
SL-040-SA5DN-SS-0.0-0.5							
SL-044-SA5DN-SS-0.0-0.5							Al, Ca, Fe, Mg, P, No Qual, >4x
SL-050-SA5DN-SS-0.0-0.5							
SL-051-SA5DN-SS-0.0-0.5							
SL-064-SA5DN-SB-4.0-5.0							
SL-065-SA5DN-SB-4.0-5.0							
SL-065-SA5DN-SB-7.0-8.0							
SL-086-SA5DN-SB-4.0-5.0							
SL-088-SA5DN-SB-4.0-5.0)							

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-020-SA5DN-SS-0.0-0.5MS	FLUORIDE	57	-	80.00-120.00	-	FLUORIDE	
(SL-020-SA5DN-SS-0.0-0.5							
SL-024-SA5DN-SS-0.0-0.5							
SL-025-SA5DN-SS-0.0-0.5							
SL-026-SA5DN-SS-0.0-0.5							
SL-027-SA5DN-SS-0.0-0.5							J(all detects)
SL-028-SA5DN-SS-0.0-0.5							UJ(all non-detects)
SL-029-SA5DN-SS-0.0-0.5							
SL-036-SA5DN-SS-0.0-0.5							
SL-037-SA5DN-SS-0.0-0.5							
SL-038-SA5DN-SS-0.0-0.5)							
SL-039-SA5DN-SS-0.0-0.5MS	FLUORIDE	68	-	80.00-120.00	-	FLUORIDE	
(SL-039-SA5DN-SS-0.0-0.5	Nitrate-NO3	78	-	80.00-120.00	-	Nitrate-NO3	
SL-040-SA5DN-SS-0.0-0.5							
SL-044-SA5DN-SS-0.0-0.5							
SL-050-SA5DN-SS-0.0-0.5							
SL-051-SA5DN-SS-0.0-0.5							J(all detects)
SL-064-SA5DN-SB-4.0-5.0							UJ(all non-detects)
SL-065-SA5DN-SB-4.0-5.0							
SL-065-SA5DN-SB-7.0-8.0							
SL-086-SA5DN-SB-4.0-5.0							
SL-088-SA5DN-SB-4.0-5.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-020-SA5DN-SS-0.0-0.5MS SL-020-SA5DN-SS-0.0-0.5MSD (SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0)	TITANIUM	303	270	75.00-125.00	-	TITANIUM	No Qual,>4x

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-020-SA5DN-SS-0.0-0.5DUP (SL-020-SA5DN-SS-0.0-0.5 SL -024-SA5DN-SS-0.0-0.5 SL -025-SA5DN-SS-0.0-0.5 SL -026-SA5DN-SS-0.0-0.5 SL -027-SA5DN-SS-0.0-0.5 SL -028-SA5DN-SS-0.0-0.5 SL -029-SA5DN-SS-0.0-0.5 SL -036-SA5DN-SS-0.0-0.5 SL -037-SA5DN-SS-0.0-0.5 SL -038-SA5DN-SS-0.0-0.5)	FLUORIDE	36	20.00	No Qual, OK by Difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-020-SA5DN-SS-0.0-0.5DUP (SL-020-SA5DN-SS-0.0-0.5 SL -024-SA5DN-SS-0.0-0.5 SL -025-SA5DN-SS-0.0-0.5 SL -026-SA5DN-SS-0.0-0.5 SL -027-SA5DN-SS-0.0-0.5 SL -028-SA5DN-SS-0.0-0.5 SL -029-SA5DN-SS-0.0-0.5 SL -036-SA5DN-SS-0.0-0.5 SL -037-SA5DN-SS-0.0-0.5 SL -038-SA5DN-SS-0.0-0.5 SL -039-SA5DN-SS-0.0-0.5 SL -040-SA5DN-SS-0.0-0.5 SL -044-SA5DN-SS-0.0-0.5 SL -050-SA5DN-SS-0.0-0.5 SL -051-SA5DN-SS-0.0-0.5 SL -064-SA5DN-SB-4.0-5.0 SL -065-SA5DN-SB-4.0-5.0 SL -065-SA5DN-SB-7.0-8.0 SL -086-SA5DN-SB-4.0-5.0 SL -088-SA5DN-SB-4.0-5.0)	Zirconium	200	20.00	No Qual, OK by Difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-020-SA5DN-SS-0.0-0.5DUP	MOLYBDENUM	30	20.00	
(SL-020-SA5DN-SS-0.0-0.5	SELENIUM	26	20.00	
SL -024-SA5DN-SS-0.0-0.5				
SL -025-SA5DN-SS-0.0-0.5				
SL -026-SA5DN-SS-0.0-0.5				
SL -027-SA5DN-SS-0.0-0.5				
SL -028-SA5DN-SS-0.0-0.5				
SL -029-SA5DN-SS-0.0-0.5				
SL -036-SA5DN-SS-0.0-0.5				
SL -037-SA5DN-SS-0.0-0.5				
SL -038-SA5DN-SS-0.0-0.5				No Qual, OK by Difference
SL -039-SA5DN-SS-0.0-0.5				
SL -040-SA5DN-SS-0.0-0.5				
SL -044-SA5DN-SS-0.0-0.5				
SL -050-SA5DN-SS-0.0-0.5				
SL -051-SA5DN-SS-0.0-0.5				
SL -064-SA5DN-SB-4.0-5.0				
SL -065-SA5DN-SB-4.0-5.0				
SL -065-SA5DN-SB-7.0-8.0				
SL -086-SA5DN-SB-4.0-5.0				
SL -088-SA5DN-SB-4.0-5.0)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-020-SA5DN-SS-0.0-0.5DUP	MERCURY	53	20.00	
(SL-020-SA5DN-SS-0.0-0.5				
SL -024-SA5DN-SS-0.0-0.5				
SL -025-SA5DN-SS-0.0-0.5				
SL -026-SA5DN-SS-0.0-0.5				
SL -027-SA5DN-SS-0.0-0.5				
SL -028-SA5DN-SS-0.0-0.5				
SL -029-SA5DN-SS-0.0-0.5				
SL -036-SA5DN-SS-0.0-0.5				
SL -037-SA5DN-SS-0.0-0.5				
SL -038-SA5DN-SS-0.0-0.5				No Qual, OK by Difference
SL -039-SA5DN-SS-0.0-0.5				
SL -040-SA5DN-SS-0.0-0.5				
SL -044-SA5DN-SS-0.0-0.5				
SL -050-SA5DN-SS-0.0-0.5				
SL -051-SA5DN-SS-0.0-0.5				
SL -064-SA5DN-SB-4.0-5.0				
SL -065-SA5DN-SB-4.0-5.0				
SL -065-SA5DN-SB-7.0-8.0				
SL -086-SA5DN-SB-4.0-5.0				
SL -088-SA5DN-SB-4.0-5.0)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-039-SA5DN-SS-0.0-0.5DUP (SL-039-SA5DN-SS-0.0-0.5 SL -040-SA5DN-SS-0.0-0.5 SL -044-SA5DN-SS-0.0-0.5 SL -050-SA5DN-SS-0.0-0.5 SL -051-SA5DN-SS-0.0-0.5 SL -064-SA5DN-SB-4.0-5.0 SL -065-SA5DN-SB-4.0-5.0 SL -065-SA5DN-SB-7.0-8.0 SL -086-SA5DN-SB-4.0-5.0 SL -088-SA5DN-SB-4.0-5.0)	FLUORIDE	200	20.00	No Qual OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11441AQ241849A (SL-020-SA5DN -SS-0.0-0.5 SL -024-SA5DN -SS-0.0-0.5 SL -025-SA5DN -SS-0.0-0.5 SL -026-SA5DN -SS-0.0-0.5 SL -027-SA5DN -SS-0.0-0.5 SL -028-SA5DN -SS-0.0-0.5 SL -029-SA5DN -SS-0.0-0.5 SL -036-SA5DN -SS-0.0-0.5 SL -037-SA5DN -SS-0.0-0.5 SL -038-SA5DN -SS-0.0-0.5 SL -039-SA5DN -SS-0.0-0.5 SL -040-SA5DN -SS-0.0-0.5 SL -044-SA5DN -SS-0.0-0.5 SL -050-SA5DN -SS-0.0-0.5 SL -051-SA5DN -SS-0.0-0.5)	DINOSEB	9	-	10.00-36.00	-	DINOSEB	J (all detects) R (all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11464AQ240841A (SL-020-SA5DN -SS-0.0-0.5 SL -024-SA5DN -SS-0.0-0.5 SL -025-SA5DN -SS-0.0-0.5 SL -026-SA5DN -SS-0.0-0.5 SL -027-SA5DN -SS-0.0-0.5 SL -028-SA5DN -SS-0.0-0.5 SL -029-SA5DN -SS-0.0-0.5 SL -036-SA5DN -SS-0.0-0.5 SL -037-SA5DN -SS-0.0-0.5 SL -038-SA5DN -SS-0.0-0.5 SL -039-SA5DN -SS-0.0-0.5 SL -040-SA5DN -SS-0.0-0.5 SL -044-SA5DN -SS-0.0-0.5 SL -051-SA5DN -SS-0.0-0.5 SL -064-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-7.0-8.0 SL -086-SA5DN -SB-4.0-5.0 SL -088-SA5DN -SB-4.0-5.0)	HMX Nitroglycerin	69 75	- -	74.00-130.00 80.00-120.00	- -	HMX Nitroglycerin	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11463AQ241713A (SL-020-SA5DN -SS-0.0-0.5 SL -024-SA5DN -SS-0.0-0.5 SL -025-SA5DN -SS-0.0-0.5 SL -026-SA5DN -SS-0.0-0.5 SL -027-SA5DN -SS-0.0-0.5 SL -028-SA5DN -SS-0.0-0.5 SL -029-SA5DN -SS-0.0-0.5 SL -036-SA5DN -SS-0.0-0.5 SL -037-SA5DN -SS-0.0-0.5 SL -038-SA5DN -SS-0.0-0.5 SL -039-SA5DN -SS-0.0-0.5 SL -040-SA5DN -SS-0.0-0.5 SL -044-SA5DN -SS-0.0-0.5 SL -050-SA5DN -SS-0.0-0.5 SL -051-SA5DN -SS-0.0-0.5)	METHOXYCHLOR	135	-	59.00-125.00	-	METHOXYCHLOR	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3LCLCSQ260229 (SL-020-SA5DN -SS-0.0-0.5 SL -025-SA5DN -SS-0.0-0.5 SL -027-SA5DN -SS-0.0-0.5 SL -028-SA5DN -SS-0.0-0.5 SL -029-SA5DN -SS-0.0-0.5 SL -036-SA5DN -SS-0.0-0.5 SL -037-SA5DN -SS-0.0-0.5 SL -038-SA5DN -SS-0.0-0.5 SL -039-SA5DN -SS-0.0-0.5 SL -040-SA5DN -SS-0.0-0.5 SL -044-SA5DN -SS-0.0-0.5 SL -050-SA5DN -SS-0.0-0.5 SL -051-SA5DN -SS-0.0-0.5 SL -064-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-7.0-8.0 SL -086-SA5DN -SB-4.0-5.0 SL -088-SA5DN -SB-4.0-5.0)	BIS(2-ETHYLHEXYL)PHTHALAT Butylbenzylphthalate	122 118	- -	75.00-117.00 75.00-115.00	- -	BIS(2-ETHYLHEXYL)PHTHALA Butylbenzylphthalate	J(all detects)
P3LCLCSQ260229 (SL-020-SA5DN -SS-0.0-0.5 SL -025-SA5DN -SS-0.0-0.5 SL -027-SA5DN -SS-0.0-0.5 SL -028-SA5DN -SS-0.0-0.5 SL -029-SA5DN -SS-0.0-0.5 SL -036-SA5DN -SS-0.0-0.5 SL -037-SA5DN -SS-0.0-0.5 SL -038-SA5DN -SS-0.0-0.5 SL -039-SA5DN -SS-0.0-0.5 SL -040-SA5DN -SS-0.0-0.5 SL -044-SA5DN -SS-0.0-0.5 SL -050-SA5DN -SS-0.0-0.5 SL -051-SA5DN -SS-0.0-0.5 SL -064-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-7.0-8.0 SL -086-SA5DN -SB-4.0-5.0 SL -088-SA5DN -SB-4.0-5.0)	2,4-DINITROPHENOL	33	-	37.00-120.00	-	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P5LDLCSQ260325 (SL-026-SA5DN -SS-0.0-0.5)	2-NITROPHENOL	80	-	81.00-114.00	-	2-NITROPHENOL	J(all detects) UJ(all non-detects)
	4-BROMOPHENYL-PHENYLETH	75	-	79.00-117.00	-	4-BROMOPHENYL-PHENYLET	
	HEXACHLOROBENZENE	75	-	78.00-116.00	-	HEXACHLOROBENZENE	
	HEXACHLOROBUTADIENE	66	-	70.00-112.00	-	HEXACHLOROBUTADIENE	

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P14708AQ220804 (SL-020-SA5DN -SS-0.0-0.5 SL -024-SA5DN -SS-0.0-0.5 SL -025-SA5DN -SS-0.0-0.5 SL -026-SA5DN -SS-0.0-0.5 SL -027-SA5DN -SS-0.0-0.5 SL -028-SA5DN -SS-0.0-0.5 SL -029-SA5DN -SS-0.0-0.5 SL -036-SA5DN -SS-0.0-0.5 SL -037-SA5DN -SS-0.0-0.5 SL -038-SA5DN -SS-0.0-0.5 SL -039-SA5DN -SS-0.0-0.5 SL -040-SA5DN -SS-0.0-0.5 SL -044-SA5DN -SS-0.0-0.5 SL -050-SA5DN -SS-0.0-0.5 SL -051-SA5DN -SS-0.0-0.5 SL -064-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-7.0-8.0 SL -086-SA5DN -SB-4.0-5.0 SL -088-SA5DN -SB-4.0-5.0)	ALUMINUM	79	-	80.00-120.00	-	ALUMINUM	No Qual, SRM Within QC Limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2LELCSQ260642 (SL-024-SA5DN -SS-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT	118	-	75.00-117.00	-	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B67Q211231A LCS1B67Y211254A (SL-064-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-4.0-5.0 SL -065-SA5DN -SB-7.0-8.0 SL -086-SA5DN -SB-4.0-5.0 SL -088-SA5DN -SB-4.0-5.0)	2-Chloro-1,1,1-trifluoroethane	77	77	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8015B**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-051-SA5DN-SS-0.0-0.5	n-Triacontane-d62	16	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: **8315A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-024-SA5DN-SS-0.0-0.5	Butyraldehyde	128	64.00-126.00	All Target Analytes	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE158 **Laboratory:** LL

EDD Filename: DE158_v2 **eQAPP Name:** CDM_SSFL_110509

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	24.5	38.6	PQL	ng/Kg	J (all detects)
SL-026-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	24.9	38.4	PQL	ng/Kg	J (all detects)
SL-040-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	37.7	38.6	PQL	ng/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	252	376	PQL	ng/Kg	J (all detects)
SL-065-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	30.4	37.8	PQL	ng/Kg	J (all detects)
SL-086-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	30.7	37.9	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.1	1.8	PQL	mg/Kg	J (all detects)
SL-027-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.1	1.7	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	0.94	1.7	PQL	mg/Kg	J (all detects)
SL-029-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.1	1.7	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	0.97	1.7	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.0	1.8	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.0	1.8	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.1	1.8	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.0	1.7	PQL	mg/Kg	J (all detects)
SL-064-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-065-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-065-SA5DN-SB-7.0-8.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-086-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	0.96	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5DN-SS-0.0-0.5	TIN	J	2.33	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.02	5.30	PQL	mg/Kg	
SL-024-SA5DN-SS-0.0-0.5	SODIUM	J	81.4	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	11.5	PQL	mg/Kg	
	Zirconium	J	3.30	5.74	PQL	mg/Kg	
SL-025-SA5DN-SS-0.0-0.5	TIN	J	3.04	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.23	5.78	PQL	mg/Kg	
SL-026-SA5DN-SS-0.0-0.5	TIN	J	2.99	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.81	5.70	PQL	mg/Kg	
SL-027-SA5DN-SS-0.0-0.5	TIN	J	2.90	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.99	5.66	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-028-SA5DN-SS-0.0-0.5	TIN	J	3.02	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.46	5.74	PQL	mg/Kg	
SL-029-SA5DN-SS-0.0-0.5	SODIUM	J	108	113	PQL	mg/Kg	J (all detects)
	TIN	J	3.21	11.3	PQL	mg/Kg	
	Zirconium	J	3.59	5.64	PQL	mg/Kg	
SL-036-SA5DN-SS-0.0-0.5	SODIUM	J	108	111	PQL	mg/Kg	J (all detects)
	TIN	J	3.16	11.1	PQL	mg/Kg	
	Zirconium	J	3.17	5.54	PQL	mg/Kg	
SL-037-SA5DN-SS-0.0-0.5	SODIUM	J	99.1	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.93	11.1	PQL	mg/Kg	
	Zirconium	J	2.81	5.55	PQL	mg/Kg	
SL-038-SA5DN-SS-0.0-0.5	SODIUM	J	110	114	PQL	mg/Kg	J (all detects)
	TIN	J	2.98	11.4	PQL	mg/Kg	
	Zirconium	J	3.25	5.68	PQL	mg/Kg	
SL-039-SA5DN-SS-0.0-0.5	SODIUM	J	97.0	114	PQL	mg/Kg	J (all detects)
	TIN	J	3.09	11.4	PQL	mg/Kg	
	Zirconium	J	3.37	5.69	PQL	mg/Kg	
SL-040-SA5DN-SS-0.0-0.5	SODIUM	J	110	116	PQL	mg/Kg	J (all detects)
	TIN	J	3.06	11.6	PQL	mg/Kg	
	Zirconium	J	3.15	5.78	PQL	mg/Kg	
SL-044-SA5DN-SS-0.0-0.5	TIN	J	2.94	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.54	5.64	PQL	mg/Kg	
SL-050-SA5DN-SS-0.0-0.5	SODIUM	J	94.2	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	10.7	PQL	mg/Kg	
	Zirconium	J	1.81	5.37	PQL	mg/Kg	
SL-051-SA5DN-SS-0.0-0.5	TIN	J	2.91	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.56	5.31	PQL	mg/Kg	
SL-064-SA5DN-SB-4.0-5.0	TIN	J	2.84	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.00	5.73	PQL	mg/Kg	
SL-065-SA5DN-SB-4.0-5.0	TIN	J	3.01	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.62	5.49	PQL	mg/Kg	
SL-065-SA5DN-SB-7.0-8.0	TIN	J	2.79	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.77	5.32	PQL	mg/Kg	
SL-086-SA5DN-SB-4.0-5.0	TIN	J	2.85	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.90	5.55	PQL	mg/Kg	
SL-088-SA5DN-SB-4.0-5.0	TIN	J	3.09	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.36	5.75	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5DN-SS-0.0-0.5	SELENIUM	J	0.110	0.420	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0532	0.105	PQL	mg/Kg	
SL-024-SA5DN-SS-0.0-0.5	SELENIUM	J	0.156	0.446	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0704	0.112	PQL	mg/Kg	
SL-025-SA5DN-SS-0.0-0.5	SELENIUM	J	0.173	0.454	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0749	0.113	PQL	mg/Kg	
SL-026-SA5DN-SS-0.0-0.5	SELENIUM	J	0.238	0.456	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0617	0.114	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.145 0.0757	0.457 0.114	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-028-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.146 0.0668	0.463 0.116	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-029-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.147 0.0640	0.455 0.114	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-036-SA5DN-SS-0.0-0.5	SELENIUM	J	0.165	0.443	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.172 0.0629	0.457 0.114	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-038-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.177 0.0697	0.454 0.114	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-039-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.170 0.0842	0.464 0.116	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-040-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.154 0.0698	0.449 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.140 0.0529	0.447 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-050-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.229 0.0770	0.425 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.192 0.0586	0.437 0.109	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-064-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.121 0.0651	0.458 0.115	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-065-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0959 0.0801	0.444 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-065-SA5DN-SB-7.0-8.0	ANTIMONY SELENIUM SILVER	J J J	0.199 0.0514 0.0484	0.213 0.426 0.106	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-086-SA5DN-SB-4.0-5.0	ANTIMONY SELENIUM SILVER	J J J	0.220 0.0673 0.0401	0.227 0.453 0.113	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-088-SA5DN-SB-4.0-5.0	ANTIMONY CADMIUM SELENIUM SILVER	J J J J	0.206 0.0535 0.0625 0.0357	0.235 0.117 0.469 0.117	PQL PQL PQL PQL	mg/Kg mg/Kg mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.56	1.1	PQL	mg/Kg	J (all detects)
SL-024-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.2	PQL	mg/Kg	J (all detects)
SL-025-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.66	1.2	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.76	1.2	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.73	1.2	PQL	mg/Kg	J (all detects)
SL-029-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.77	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.94	1.1	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.2	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.85	1.2	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.64	1.2	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.95	1.2	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.80	1.1	PQL	mg/Kg	J (all detects)
SL-050-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.0	1.1	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.0	1.1	PQL	mg/Kg	J (all detects)
SL-065-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.71	1.1	PQL	mg/Kg	J (all detects)
SL-088-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.65	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5DN-SS-0.0-0.5	MERCURY	J	0.0127	0.100	PQL	mg/Kg	J (all detects)
SL-024-SA5DN-SS-0.0-0.5	MERCURY	J	0.0275	0.112	PQL	mg/Kg	J (all detects)
SL-025-SA5DN-SS-0.0-0.5	MERCURY	J	0.0055	0.115	PQL	mg/Kg	J (all detects)
SL-027-SA5DN-SS-0.0-0.5	MERCURY	J	0.0263	0.116	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SS-0.0-0.5	MERCURY	J	0.0235	0.114	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SS-0.0-0.5	MERCURY	J	0.0065	0.109	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SS-0.0-0.5	MERCURY	J	0.0095	0.116	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SS-0.0-0.5	MERCURY	J	0.0098	0.111	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	MERCURY	J	0.0059	0.107	PQL	mg/Kg	J (all detects)
SL-050-SA5DN-SS-0.0-0.5	MERCURY	J	0.0232	0.105	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	MERCURY	J	0.0051	0.109	PQL	mg/Kg	J (all detects)
SL-064-SA5DN-SB-4.0-5.0	MERCURY	J	0.0069	0.112	PQL	mg/Kg	J (all detects)
SL-065-SA5DN-SB-4.0-5.0	MERCURY	J	0.0069	0.111	PQL	mg/Kg	J (all detects)
SL-065-SA5DN-SB-7.0-8.0	MERCURY	J	0.0184	0.110	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	5.8	6.4	PQL	mg/Kg	J (all detects)
SL-024-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	4.4	7.0	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	4.3	6.9	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	5.2	7.0	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	4.5	7.0	PQL	mg/Kg	J (all detects)
SL-029-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	5.9	7.0	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.1	6.9	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.8	7.0	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.5	6.8	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	33	66	PQL	mg/Kg	J (all detects)
SL-086-SA5DN-SB-4.0-5.0	EFH (C21-C30)	J	0.48	1.4	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5DN-SS-0.0-0.5	4,4'-DDE DIELDRIN ENDRIN ALDEHYDE MIREX	J J J J	0.28 0.26 0.082 0.19	0.39 0.39 0.39 0.39	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-025-SA5DN-SS-0.0-0.5	DIELDRIN	J	0.11	0.40	PQL	ug/Kg	J (all detects)
SL-027-SA5DN-SS-0.0-0.5	Chlordane	J	1.5	3.9	PQL	ug/Kg	J (all detects)
SL-029-SA5DN-SS-0.0-0.5	Chlordane	J	2.8	3.9	PQL	ug/Kg	J (all detects)
SL-037-SA5DN-SS-0.0-0.5	Chlordane	J	1.8	3.9	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SS-0.0-0.5	Chlordane	J	1.3	4.0	PQL	ug/Kg	J (all detects)
SL-040-SA5DN-SS-0.0-0.5	4,4'-DDE ENDRIN ALDEHYDE HEPTACHLOR EPOXIDE MIREX	J J J J	0.11 0.11 0.043 0.19	0.40 0.40 0.19 0.40	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	4,4'-DDT MIREX	J J	0.32 0.19	0.38 0.38	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-050-SA5DN-SS-0.0-0.5	4,4'-DDD	J	0.18	0.37	PQL	ug/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	BETA-BHC MIREX	J J	0.10 0.074	0.18 0.37	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	0.60	1.8	PQL	ug/Kg	J (all detects)
SL-024-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	0.91 1.3	2.0 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-027-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.6	3.8	PQL	ug/Kg	J (all detects)
SL-028-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.0	3.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5DN-SS-0.0-0.5	Aroclor 5460	J	9.5	19	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.3 1.7	2.0 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-040-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.3	3.8	PQL	ug/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.5	1.9	PQL	ug/Kg	J (all detects)
SL-050-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.5	3.6	PQL	ug/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.6 1.4	1.9 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5DN-SS-0.0-0.5	2,4-DB	J	1.5	1.9	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SS-0.0-0.5	2,4-D MCPA	J J	2.2 150	4.2 290	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-040-SA5DN-SS-0.0-0.5	2,4-D	J	2.4	4.2	PQL	ug/Kg	J (all detects)
SL-044-SA5DN-SS-0.0-0.5	2,4-DB	J	1.7	1.9	PQL	ug/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	DICAMBA	J	0.49	1.3	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-064-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.3	PQL	ug/Kg	J (all detects)
SL-065-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.82	4.1	PQL	ug/Kg	J (all detects)
SL-065-SA5DN-SB-7.0-8.0	METHYLENE CHLORIDE	J	0.81	4.1	PQL	ug/Kg	J (all detects)
SL-086-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.92	4.5	PQL	ug/Kg	J (all detects)
SL-088-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.6	4.6	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	40	390	PQL	ug/Kg	J (all detects)
SL-027-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	380	PQL	ug/Kg	J (all detects)
SL-028-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	380	PQL	ug/Kg	J (all detects)
SL-029-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	37	390	PQL	ug/Kg	J (all detects)
SL-036-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	39	380	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	22	190	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	23	190	PQL	ug/Kg	
	CHRYSENE	J	26	190	PQL	ug/Kg	
	FLUORANTHENE	J	24	190	PQL	ug/Kg	
	PYRENE	J	29	190	PQL	ug/Kg	
SL-039-SA5DN-SS-0.0-0.5	ACENAPHTHENE	J	35	190	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	48	190	PQL	ug/Kg	
	BENZO(A)PYRENE	J	140	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	150	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	75	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	72	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	54	390	PQL	ug/Kg	
	CARBAZOLE	J	27	190	PQL	ug/Kg	
	FLUORENE	J	21	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	89	190	PQL	ug/Kg	
SL-044-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	43	380	PQL	ug/Kg	J (all detects)
SL-050-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	370	PQL	ug/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	60	360	PQL	ug/Kg	J (all detects)
SL-064-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	380	PQL	ug/Kg	J (all detects)
SL-065-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	380	PQL	ug/Kg	J (all detects)
SL-065-SA5DN-SB-7.0-8.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	360	PQL	ug/Kg	J (all detects)
SL-086-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	380	PQL	ug/Kg	J (all detects)
SL-088-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5DN-SS-0.0-0.5	ANTHRACENE	J	2.7	8.7	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	5.6	8.7	PQL	ug/Kg	
SL-025-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.6	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	PYRENE	J	1.5	1.9	PQL	ug/Kg	
SL-026-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.3	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.95	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.9	PQL	ug/Kg	
SL-027-SA5DN-SS-0.0-0.5	ANTHRACENE	J	0.58	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.86	1.9	PQL	ug/Kg	
SL-028-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.98	1.9	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	7.1	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.98	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE158 **Laboratory: LL**

EDD Filename: DE158_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5DN-SS-0.0-0.5	CHRYSENE	J	0.49	1.9	PQL	ug/Kg	J (all detects)
	Diethylphthalate	J	9.6	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.7	21	PQL	ug/Kg	
SL-036-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	4.1	9.4	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	8.3	9.4	PQL	ug/Kg	
	CHRYSENE	J	3.3	9.4	PQL	ug/Kg	
	Di-n-butylphthalate	J	71	100	PQL	ug/Kg	
SL-037-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	5.2	9.6	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	7.1	9.6	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	91	100	PQL	ug/Kg	
SL-038-SA5DN-SS-0.0-0.5	ANTHRACENE	J	0.85	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.1	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	19	21	PQL	ug/Kg	
SL-040-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.82	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.91	1.9	PQL	ug/Kg	
	ANTHRACENE	J	0.77	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	
SL-044-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.78	1.9	PQL	ug/Kg	
	CHRYSENE	J	0.68	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.6	20	PQL	ug/Kg	
	FLUORANTHENE	J	0.78	1.9	PQL	ug/Kg	
	PYRENE	J	0.77	1.9	PQL	ug/Kg	
SL-050-SA5DN-SS-0.0-0.5	DIBENZO(A,H)ANTHRACENE	J	6.7	9.1	PQL	ug/Kg	J (all detects)
SL-051-SA5DN-SS-0.0-0.5	ANTHRACENE	J	4.5	9.1	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	7.9	9.1	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	8.2	9.1	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	4.2	9.1	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.3	9.1	PQL	ug/Kg	
	NAPHTHALENE	J	4.6	9.1	PQL	ug/Kg	

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: September 30, 2011

Matrix: Soil/Water

Parameters: Volatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-088-SA5DN-SB-4.0-5.0
TB-052011

Introduction

This data review covers 5 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/27/11	4-Methyl-2-pentanone 2-Hexanone	27 36	All soil samples in SDG DE158	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
5/24/11	Trichlorofluoromethane	26	All water samples in SDG DE158	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB67	5/27/11	Acetone Methylene chloride	9.6 ug/Kg 1.1 ug/Kg	All soil samples in SDG DE158

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-064-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	9.9 ug/Kg 1.0 ug/Kg	9.9U ug/Kg 4.3U ug/Kg
SL-065-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	8.8 ug/Kg 0.82 ug/Kg	8.8U ug/Kg 4.1U ug/Kg
SL-065-SA5DN-SB-7.0-8.0	Acetone Methylene chloride	8.6 ug/Kg 0.81 ug/Kg	8.6U ug/Kg 4.1U ug/Kg
SL-086-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	9.1 ug/Kg 0.92 ug/Kg	9.1U ug/Kg 4.5U ug/Kg
SL-088-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	11 ug/Kg 1.6 ug/Kg	11U ug/Kg 4.6U ug/Kg

Sample TB-052011 was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS/D 1867 (All soil samples in SDG DE158)	Freon-133a	77 (78-120)	77 (78-120)	-	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE158	TB-052011	Trichlorofluoromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE158	SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Freon-133a	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE158	SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0 TB-052011	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE158

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE158	SL-064-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	9.9U ug/Kg 4.3U ug/Kg	A	B
DE158	SL-065-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	8.8U ug/Kg 4.1U ug/Kg	A	B
DE158	SL-065-SA5DN-SB-7.0-8.0	Acetone Methylene chloride	8.6U ug/Kg 4.1U ug/Kg	A	B
DE158	SL-086-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	9.1U ug/Kg 4.5U ug/Kg	A	B
DE158	SL-088-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	11U ug/Kg 4.6U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q1a **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE158 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation (RL)/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 6

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

Validated Samples:
soil + water

1	SL-064-SA5DN-SB-4.0-5.0	11	VBLK.B67	21		31	
2	SL-065-SA5DN-SB-4.0-5.0	12	VBLK L65	22		32	
3	SL-065-SA5DN-SB-7.0-8.0	13		23		33	
4	SL-086-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-088-SA5DN-SB-4.0-5.0	15		25		35	
6	TB-052011 W	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 20275Q1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate Spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26275Q1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XI. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIV. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XV. System performance				
System performance was found to be acceptable.		✓		
XVI. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVII. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzena	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26275 Q1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y (N) N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	5/27/11	by27co3-ccv	Y	27		All soils	J/UJ/A (c)
			Z	36		↓	↓
	5/24/11	ly24co1-ccv	KK	26		All water	J/UJ/A (c)

LDC #: 26275Q/a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

(B)

Blank analysis date: 5/27/11
Conc. units: ug/kg
Associated Samples: All soils

Compound	Blank ID	10Y		Sample Identification						
	YBLKB67			1	2	3	4	5		
F	9.6	96		9.9/U	8.8/U	8.6/U	9.1/U	11/U		
E	1.1	11		1.0/4.3U	0.82/4.1U	0.81/4.1U	0.92/4.5U	1.6/4.6U		
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26275Q1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 6 of 7
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS/D 1867	Freon 133a	77 (78-120)	77 (78-120)	( )	~~VBLKB6~~ All	J/UJ/P (L)
				( )	( )	( )	SOILS	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26275Q1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL-S	5/24/11	C (1st internal standard)	0.3569	0.3569	0.3517	0.3517	7	7
			CC (2nd internal standard)	0.9017	0.9017	0.8572	0.8572	5	5
			BB (3rd internal standard)	0.6558	0.6558	0.6887	0.6887	7	7
			(4th internal standard)						
2	ICAL-W	4/21/11	C (1st internal standard)	0.3956	0.3956	0.4093	0.4093	4	4
			CC (2nd internal standard)	1.0098	1.0098	1.0092	1.0092	2	2
			BBB (3rd internal standard)	1.1471	1.1471	1.1204	1.1204	3	3
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	by27c03	5/27/11	C (1st internal standard)	0.3517	0.3004	0.3004	15	15
	10:06		CC (2nd internal standard)	0.8572	0.8349	0.8349	3	3
			BB (3rd internal standard)	0.6887	0.7093	0.7093	3	3
			(4th internal standard)					
2	by24c01	5/24/11	C (1st internal standard)	0.4093	0.4696	0.4696	15	15
			CC (2nd internal standard)	1.0092	1.0237	1.0237	1	1
			BB (3rd internal standard)	1.1204	1.2222	1.2222	9	9
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50	50.319	101	101	0
1,2-Dichloroethane-d4		50.285	101	101	
Toluene-d8		49.589	99	99	
Bromofluorobenzene		47.747	95	95	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 26273 9F4

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS/D 1867

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	20	21.63	20.58	108	108	103	103	5	5
Trichloroethene			20.29	19.78	101	101	99	99	3	3
Benzene			21.15	20.64	106	106	103	103	2	2
Toluene			20.66	20.45	103	103	102	102	1	1
Chlorobenzene			20.52	20.08	103	103	100	100	2	2

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q/a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1 , E :

Conc. = $\frac{(4235)(50)(5)}{(968157)(0.2290)(5.38)(0.86)}$

=

1.03 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	May 20, 2011
LDC Report Date:	September 30, 2011
Matrix:	Soil/Water
Parameters:	1,4-Dioxane
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE158

Sample Identification

SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-088-SA5DN-SB-4.0-5.0
TB-052011

Introduction

This data review covers 5 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-052011 was identified as a trip blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0 TB-052011	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q1b **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE158 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV ± 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 6

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

Validated Samples:
soil + water

1	SL-064-SA5DN-SB-4.0-5.0	11	VBLKE40	21		31	
2	SL-065-SA5DN-SB-4.0-5.0	12	VBLKE38	22		32	
3	SL-065-SA5DN-SB-7.0-8.0	13		23		33	
4	SL-086-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-088-SA5DN-SB-4.0-5.0	15		25		35	
6	TB-052011 W	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26275a1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?		✓	✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?				
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

DC #: 26275215

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Banzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethene	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26275916

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL-S	11/7/10	1,4-Dioxane (1st internal standard)	1.3539	1.3539	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
2	ICAL-W	11/01/10	↓ (1st internal standard)	1.3359	1.3359	1.3219	1.3219	1	1
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ey2401	5/24/11	1,4-Dioxane (1st internal standard)	1.3396	1.4848	1.4848	11	11
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
2	ey2301	5/23/11	↓ (1st internal standard)	1.3219	1.5063	1.5063	14	14
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 Q1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8	10	9.669	97	97	0
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS/D E40

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene										
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										
1,4-Dioxane	125	125	133.3	142.87	107	107	114	114	7	7

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____ , _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)}$ = ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: September 30, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-050-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-088-SA5DN-SB-4.0-5.0

SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKLE152	6/2/11	Diethylphthalate Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	25 ug/Kg 19 ug/Kg 19 ug/Kg	SL-024-SA5DN-SS-0.0-0.5
SBLKLC143	5/24/11	Di-n-butylphthalate	17 ug/Kg	SL-020-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-020-SA5DN-SS-0.0-0.5MS/MSD (SL-020-SA5DN-SS-0.0-0.5)	2,4-Dinitrophenol	-	18 (20-143)	63 (≤30)	J (all detects) UJ (all non-detects)	A
SL-020-SA5DN-SS-0.0-0.5MS/MSD (SL-020-SA5DN-SS-0.0-0.5)	4,6-Dinitro-2-methylphenol	-	-	43 (≤30)	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
145LDLCS	2-Nitrophenol Hexachlorobutadiene 4-Bromophenyl-phenyl ether Hexachlorobenzene	80 (81-114) 66 (70-112) 75 (79-117) 75 (78-116)	SL-026-SA5DN-SS-0.0-0.5 SBLKLD145	J (all detects) UJ (all non-detects)	P
152LELCS	Bis(2-ethylhexyl)phthalate	118 (75-117)	SL-024-SA5DN-SS-0.0-0.5 SBLKLE152	J (all detects)	P
143LCLCS	Butylbenzylphthalate	118 (75-115)	SL-020-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SBLKLC143	J (all detects)	P
143LCLCS	Bis(2-ethylhexyl)phthalate	122 (75-117)	SL-020-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0 SBLKLC143	J (all detects)	P
143LCLCS	2,4-Dinitrophenol	33 (37-120)	SL-020-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0 SBLKLC143	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5	2,4-Dinitrophenol	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE158	SL-020-SA5DN-SS-0.0-0.5	4,6-Dinitro-2-methylphenol	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE158	SL-026-SA5DN-SS-0.0-0.5	2-Nitrophenol Hexachlorobutadiene 4-Bromophenyl-phenyl ether Hexachlorobenzene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE158	SL-024-SA5DN-SS-0.0-0.5 SL-020-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	J (all detects)	P	Laboratory control samples (%R) (L)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	Butylbenzylphthalate	J (all detects)	P	Laboratory control samples (%R) (L)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	2,4-Dinitrophenol	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q2a **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11
SDG #: DE158 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples:

Soil

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	SBLKLC143	31	
2 3	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22	SBLKLD145	32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23	SBLKLE152	33	
4 2	SL-026-SA5DN-SS-0.0-0.5	14	SL-050-SA5DN-SS-0.0-0.5	24	#1 MS	34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-051-SA5DN-SS-0.0-0.5	25	#1 MSD	35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-064-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-4.0-5.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-065-SA5DN-SB-7.0-8.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	SL-086-SA5DN-SB-4.0-5.0	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	SL-088-SA5DN-SB-4.0-5.0	30		40	

LDC #: 26275 Q2a

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26275 Q29

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fludranthene	WWW.

LDC #: 24275Q29

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y/N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 5/26/11 **Blank analysis date:** 6/4/11
Conc. units: ug/kg 6/2/11 6/2/11 Associated Samples: 2 (ND)

Compound	Blank ID	Sample Identification							
[redacted]	SBLKE	152							
LL	25								
XX	19								
BEF	19								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26275Q29

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 5/24/11 **Blank analysis date:** 6/01/11

Conc. units: ug/Kg Associated Samples: 1, 7, 9, 14, 15

Compound	Blank ID	Sample Identification							
	SBLKLC	143	~~7~~						
XX	17		~~27/2~~	No Qual					

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26275Q2S

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		24+25	HH	( )	18 (20-143)	63 (30)	#1	J/UJ/A (Q)
			PP	( )	( )	43 (30)	↓	J/Adt (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )	

LDC #: 26275629

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		143LCA.CS	AAA	118 (75-115)	( )	( )	SBLKLC143,	J/UJ/A
			EEE	122 (75-117)	( )	( )	1, 3, 5 → 20	
			HH	33 (37-120)	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		145LDLCS	N	80 (81-114)	( )	( )	SBLKLD145, 4	J/UJ/P (L)
			U	66 (70-112)	( )	( )		
			RR	75 (79-117)	( )	( )		
			SS	75 (78-116)	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		152LELCS	EEE	118 (75-117)	( )	( )	SBLKLE152, 2	J/UJ/P (L)
				( )	( )	( )		
				( )	( )	( )		
		143LCLCS	AAA	118 (75-115)	→)	SBLK(LC143),	1, 9, 14, 15	J/Part (L)
			EEE	122 (75-117)	→)	( )	1, 3, 5→8, 11, 13, 14→20	↓
			HH	33 (37-120)	→)	( )	1, 3, 5 → 20	J/UJ/P
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26275Q29

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/31/11	Phenol (1st internal standard)	2.394	2.394	2.513	2.513	5	5
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.516	0.516	0.517	0.517	3	3
			~~Fluorene~~ 3-Nitroaniline (3rd internal standard)	0.328	0.328	0.323	0.323	4	4
			Pentachlorophenol (4th internal standard)	0.143	0.143	0.135	0.135	10	10
			~~Bis(2-ethylhexyl)phthalate~~ 3,3-Dichlorobenzidine (5th internal standard)	0.423	0.423	0.411	0.411	12	12
			~~Benzo(a)pyrene~~ Di-n-octyl Phthalate (6th internal standard)	1.708	1.708	1.525	1.525	21	21
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q29

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	FF006)	6/01/11	Phenol (1st internal standard)	2.513	2.594	2.596	3	3
			Nitrobenzene Naphthalene (2nd internal standard)	0.517	0.497	0.497	4	4
			5-Nitroaniline Fluorene (3rd internal standard)	0.323	0.334	0.334	3	3
			Pentachlorophenol (4th internal standard)	0.135	0.143	0.143	6	6
			3,3-Dichlorobenzidine Bis(2-ethylhexyl)phthalate (5th internal standard)	0.411	0.448	0.448	9	9
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)	1.525	1.912	1.912	7	7
2	FF012)	6/02/11	Phenol (1st internal standard)		2.919	2.919	16	16
			Naphthalene (2nd internal standard)		0.517	0.517	0	0
			Fluorene (3rd internal standard)		0.388	0.388	20	20
			Pentachlorophenol (4th internal standard)		0.141	0.141	4	4
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.468	0.468	14	14
			Benzo(a)pyrene (6th internal standard)		1.678	1.678	2	2
3	FF026)	6/04/11	Phenol (1st internal standard)		2.581	2.581	3	3
			Naphthalene (2nd internal standard)		0.523	0.523	1	1
			Fluorene (3rd internal standard)		0.358	0.358	11	11
			Pentachlorophenol (4th internal standard)		0.136	0.136	1	1
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.455	0.455	11	11
			Benzo(a)pyrene (6th internal standard)		1.850	1.850	7	7

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q29

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	73.925	74	74	0
2-Fluorobiphenyl	↓	79.658	80	80	↓
Terphenyl-d14	↓	79.761	80	80	↓
Phenol-d5	200	166.156	83	83	↓
2-Fluorophenol	↓	162.790	81	81	↓
2,4,6-Tribromophenol	↓	178.985	89	89	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26275Q2q

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 24 + 25

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1655.63	~~1667.03~~ 1655.63	ND	1667.03	1666.65	101	101	100	100	0	0
N-Nitroso-di-n-propylamine				1637.89	1635.94	99	99	98	98	0	0
4-Chloro-3-methylphenol				1665.22	1777.28	101	101	107	107	7	7
Acenaphthene				1546.98	1503.71	93	93	90	90	3	3
Pentachlorophenol				1351.2	1106.57	82	82	66	66	20	20
Pyrene				1776.85	1671.29	107	107	100	100	6	6

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275029

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 143 LCLS

Compound	Spike Added (ug/Kg)		Spike Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	NA	1746.23	NA	105	105				
N-Nitroso-di-n-propylamine			1626.79		98	98				
4-Chloro-3-methylphenol			1729.89		104	104				
Acenaphthene			1565.24		94	94				
Pentachlorophenol			1346.65		81	81				
Pyrene			1754.34		105	105	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q2g

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #3, EEE:

Conc. = $\frac{(7402)(40)(1000)(\quad)(\quad)(\quad)}{(364047)(0.785)(30)(0.86)}$

= 40 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: September 30, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5	SL-020-SA5DN-SS-0.0-0.5MS
SL-024-SA5DN-SS-0.0-0.5	SL-020-SA5DN-SS-0.0-0.5MSD
SL-025-SA5DN-SS-0.0-0.5	
SL-026-SA5DN-SS-0.0-0.5	
SL-027-SA5DN-SS-0.0-0.5	
SL-028-SA5DN-SS-0.0-0.5	
SL-029-SA5DN-SS-0.0-0.5	
SL-036-SA5DN-SS-0.0-0.5	
SL-037-SA5DN-SS-0.0-0.5	
SL-038-SA5DN-SS-0.0-0.5	
SL-039-SA5DN-SS-0.0-0.5	
SL-040-SA5DN-SS-0.0-0.5	
SL-044-SA5DN-SS-0.0-0.5	
SL-050-SA5DN-SS-0.0-0.5	
SL-051-SA5DN-SS-0.0-0.5	
SL-064-SA5DN-SB-4.0-5.0	
SL-065-SA5DN-SB-4.0-5.0	
SL-065-SA5DN-SB-7.0-8.0	
SL-086-SA5DN-SB-4.0-5.0	
SL-088-SA5DN-SB-4.0-5.0	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatiles were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within the QC limits. Since the samples were diluted out, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	All TCL compounds	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

9/29/11

LDC #: 26275Q2b **VALIDATION COMPLETENESS WORKSHEET** Date: ~~2/10/11~~ 9/29/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer:

SVOA 2nd Reviewer:

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ (EPA SW 846 Method 8270C-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples:

SOIL

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	SBLKLE145	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22	#1 MS	32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23	#1 MSD	33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-050-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-051-SA5DN-SS-0.0-0.5	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-064-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-4.0-5.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-065-SA5DN-SB-7.0-8.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	SL-086-SA5DN-SB-4.0-5.0	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	SL-088-SA5DN-SB-4.0-5.0	30		40	

LDC #: 26275B2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	NA	✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26275 Q26

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26275Q2b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		22 + 23	general	% R + %	RPD outside	limit	1	no QUAL SX DL
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 26275926

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (/ std)	Recalculated RRF (/ std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/31/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	0.978	0.978	0.967	0.967	3	3
			Fluorene (3rd internal standard)	1.206	1.206	1.178	1.178	5	5
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.033	1.033	0.989	0.989	9	9
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.113	1.113	1.086	1.086	3	3
			Benzo(a)pyrene (6th internal standard)	0.957	0.957	0.923	0.923	8	8
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 Q2b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ifo001	6/01/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	0.967	0.970	0.970	0	0
			Fluorene (3rd internal standard)	1.178	1.210	1.210	3	3
			Anthracene Pentachlorophenol (4th internal standard)	0.989	1.041	1.041	5	5
			Chrysene ~~Bis(2-ethylhexyl)phthalate~~ (5th internal standard)	1.086	1.106	1.106	2	2
			Benzo(a)pyrene (6th internal standard)	0.923	0.994	0.994	8	8
2	ifo02	6/2/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)		0.911	0.911	5.0	5.0
			Fluorene (3rd internal standard)		1.153	1.153	2	2
			Anthracene ~~Pentachlorophenol~~ (4th internal standard)		1.007	1.007	2	2
			Chrysene ~~Bis(2-ethylhexyl)phthalate~~ (5th internal standard)		1.040	1.040	4	4
			Benzo(a)pyrene (6th internal standard)		0.946	0.946	3	3
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275926

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	0.20	0.220	110	110	0
2-Fluorobiphenyl	↓	0.209	104	104	↓
Terphenyl-d14	↓	0.223	112	112	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26275a26

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 22 + 23

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.11	33.11	ND	26.43	33.5	80	80	100	100	24	24
Pentachlorophenol											
Pyrene	↓	↓	70.64	31.48	78.8	-117	-117	24	24	86	86

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275026

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 11145 SLE026

Compound	Spike Added (ug/Kg)		Spike Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	32.02	NA	96	96				
Pentachlorophenol										
Pyrene	↓	↓	33.56	↓	101	101	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_t = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, chrysene

Conc. = $\frac{(13212)(1.0)(1000)(5)(\quad)}{(449770)(1.086)(30)(0.94)(\quad)}$

= 47.96 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: September 30, 2011

Matrix: Soil

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKI143	5/24/11	N-Nitrosodimethylamine	24.70 ng/Kg	All samples in SDG DE158

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-020-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	99.2 ng/Kg	99.2U ng/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-024-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	58.9 ng/Kg	58.9U ng/Kg
SL-025-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	24.5 ng/Kg	38.6U ng/Kg
SL-026-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	24.9 ng/Kg	38.4U ng/Kg
SL-027-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	63.0 ng/Kg	63.0U ng/Kg
SL-028-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	63.9 ng/Kg	63.9U ng/Kg
SL-029-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	68.3 ng/Kg	68.3U ng/Kg
SL-036-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	52.0 ng/Kg	52.0U ng/Kg
SL-037-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	50.4 ng/Kg	50.4U ng/Kg
SL-038-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	64.1 ng/Kg	64.1U ng/Kg
SL-039-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	51.8 ng/Kg	51.8U ng/Kg
SL-040-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	37.7 ng/Kg	38.6U ng/Kg
SL-044-SA5DN-SS-0.0-0.5 (10X)	N-Nitrosodimethylamine	252 ng/Kg	376U ng/Kg
SL-051-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	57.3 ng/Kg	57.3U ng/Kg
SL-064-SA5DN-SB-4.0-5.0	N-Nitrosodimethylamine	53.6 ng/Kg	53.6U ng/Kg
SL-065-SA5DN-SB-4.0-5.0	N-Nitrosodimethylamine	30.4 ng/Kg	37.8U ng/Kg
SL-086-SA5DN-SB-4.0-5.0	N-Nitrosodimethylamine	30.7 ng/Kg	37.9U ng/Kg

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-020-SA5DN-SS-0.0-0.5MS/MSD (SL-020-SA5DN-SS-0.0-0.5)	N-Nitrosodimethylamine	-	69 (70-130)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5	N-nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE158

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE158	SL-020-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	99.2U ng/Kg	A	B
DE158	SL-024-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	58.9U ng/Kg	A	B
DE158	SL-025-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	38.6U ng/Kg	A	B
DE158	SL-026-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	38.4U ng/Kg	A	B
DE158	SL-027-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	63.0U ng/Kg	A	B
DE158	SL-028-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	63.9U ng/Kg	A	B
DE158	SL-029-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	68.3U ng/Kg	A	B
DE158	SL-036-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	52.0U ng/Kg	A	B
DE158	SL-037-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	50.4U ng/Kg	A	B

LDC #: 26275Q2c **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE158 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: E
2nd Reviewer:

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	GC/MS Instrument performance check	N	not Required
III.	Initial calibration	A	%RSD ≤ 30
IV.	Continuing calibration/ICV	A	CCV ≤ 20 ICV ≤ 30
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples:
SOIL

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	SBLKLI143	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23		33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-051-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-064-SA5DN-SB-4.0-5.0	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-065-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-7.0-8.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-086-SA5DN-SB-4.0-5.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	#1 MS	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	#1 MSD	30		40	

LDC #: 26275B2C

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?			✓	
Were all samples analyzed within the 12 hour clock criteria?			✓	
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate recoveries				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26275Q2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation and CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	1	✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Mathylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26275Q2C

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y/N N/A Was the blank contaminated? If yes, please see qualification below.

B

Blank extraction date: 5/24/11 **Blank analysis date:** 6/3/11

Conc. units: ng/kg Associated Samples: All

Compound	Blank ID	5X	Sample Identification						
	SBLKLI43		1	2	3	4	5	6	7
N-Nitrosodimethylamine	24-70	123.5	99.2/U	58.9/U	24.5/38.6U	24.9/38.4U	63.0/U	63.9/U	68.3/U
			8	9	10	11	12	13 (10X)	14
			52.0/U	50.4/U	64.1/U	51.8/U	37.7/38.6U	252/376U	57.3/U
			15	16	17	18			
↓	↓		53.6/U	30.4/37.8U	(503)	30.7/37.9U			

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26275Q2C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT

2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		19 of 20	*	( )	69 (70-130)	( )	1	J/UJ/A (a)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		* N-Nitrosodimethylamine		( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC #: 26275a2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (25 std)	Recalculated RRF (25 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/2/11	~~Phenol (1st internal standard)~~ NDNA	1.282	1.282	1.198	1.196	5	5
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	af 118	6/4/11	~~Phenol (1st internal standard)~~ ND MA	1.19767	1.25691	1.25691	4.94639	4.946
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2	af 129	6/4/11	~~Phenol (1st internal standard)~~ ↓	↓	1.25568	1.25568	4.84328	4.84328
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
	af 153	6/6/11	Pentachlorophenol (4th internal standard) ↓	↓	1.15567	1.15567	3.507	3507
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
3	af 068	6/3/11	~~Phenol (1st internal standard)~~ ↓	1.19767	1.27994	1.27994	6.867	6.869
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 Q2C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Nitrobenzene-d5~~ N- NDMA - d6	25	21.649	87	87	0
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26275Q2C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD samples: 19 + 20

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
~~Phenol~~ NPMA	830.56	830.56	93.64	695.02	667.76	72	72	69	69	4	4
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 Q2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 14316

Compound	Spike Added (ng/Kg)		Spike Concentration (ng/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	833.33	NA	894.5	NA	107	107	NA			
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
~~Pyrene~~										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, NDMPA

Conc. = $\frac{(77368)(25)(1000)}{(542954)(1.19767)(30)(0.94)}$

= 99. ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 3, 2011

Matrix: Soil

Parameters: Chlorinated Pesticides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-050-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
6/2/11	CCV (21:33)	RTX-CLPI	Aldrin Heptachlor epoxide 4,4'-DDE Endosulfan I Dieldrin Endrin 4,4'-DDD 4,4'-DDT Endrin aldehyde Endosulfan sulfate Endrin ketone	23.7 29.9 24.3 31.0 26.3 29.1 23.1 26.6 24.2 22.6 22.2	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P
6/2/11	CCV (21:46)	RTX-CLPI	Mirex	29.3	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
6/2/11	CCV (21:59)	RTX-CLPI	Toxaphene	28.5	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
6/2/11	CCV (21:33)	RTX-CLPII	Endosulfan I Dieldrin Endrin Endosulfan II 4,4'-DDT Endrin aldehyde Endosulfan sulfate Methoxychlor Endrin ketone	24.2 22.5 24.7 23.1 27.5 26.7 25.8 26.3 33.1	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
6/2/11	CCV (21:46)	RTX-CLPII	Mirex	36.7	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
6/2/11	CCV (21:59)	RTX-CLPII	Mirex	23.3	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limit.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS23146	Methoxychlor	135 (59-125)	All samples in SDG DE158	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-024-SA5DN-SS-0.0-0.5	Dieldrin Endrin aldehyde	43.30 87.89	J (all detects) J (all detects)	A
SL-027-SA5DN-SS-0.0-0.5	Chlordane (Technical)	58.44	J (all detects)	A
SL-029-SA5DN-SS-0.0-0.5	Chlordane (Technical)	124.78	J (all detects)	A
SL-038-SA5DN-SS-0.0-0.5	Chlordane (Technical)	84.94	J (all detects)	A
SL-040-SA5DN-SS-0.0-0.5	Heptachlor epoxide 4,4'-DDE	51.30 69.02	J (all detects) J (all detects)	A
SL-051-SA5DN-SS-0.0-0.5	4,4'-DDT Mirex	66.24 66.85	J (all detects) J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Chlorinated Pesticides - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	Aldrin Heptachlor epoxide 4,4'-DDE Endosulfan I Dieldrin Endrin 4,4'-DDD 4,4'-DDT Endrin aldehyde Endosulfan sulfate Endrin ketone	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)
DE158	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	Mirex Toxaphene Endosulfan I Dieldrin Endrin Endosulfan II 4,4'-DDT Endrin aldehyde Endosulfan sulfate Methoxychlor Endrin ketone	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	Methoxychlor	J (all detects)	P	Laboratory control samples (%R) (L)
DE158	SL-024-SA5DN-SS-0.0-0.5	Dieldrin Endrin aldehyde	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE158	SL-027-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5	Chlordane (Technical)	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE158	SL-040-SA5DN-SS-0.0-0.5	Heptachlor epoxide 4,4'-DDE	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE158	SL-051-SA5DN-SS-0.0-0.5	4,4'-DDT Mirex	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q3a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/02/11
SDG #: DE158 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC Chlorinated Pesticides (EPA SW846 Method 8081A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	GC/ECD Instrument Performance Check	A	
III.	Initial calibration	A	% RSD ≤20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	N	

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

Validated Samples:
SOIL

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK23146	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23		33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-050-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-051-SA5DN-SS-0.0-0.5	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	#1 MS	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	#1 MSD	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18		28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19		29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 26275Q3a
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: PT
2nd Reviewer: [illegible]

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptanca criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ___%D or ___%R	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15%.0 for individual breakdown in the Evaluation mix standards?	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ ~~15%~~ 20.0 or percent recoveries ~~85-115~~ 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?				
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	

LDC #: 26275Q3a
SDG #: all cores

VALIDATION FINDINGS CHECKLIST

Reviewer: MT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 26275639

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/2/11	CCV	RTX-CLP1	F	23.7	( )	6-9 15	J/UJ/P (C)
	21:33			G	29.9	( )		
				J	24.3	( )		
				H	31.0	( )		
				I	26.3	( )		
				K	29.1	( )		
				M	23.1	( )		
				O	26.6	( )		
				R	24.2	( )		
				N	22.6	( )		
				Q	22.2	( )		
						( )		
	6/2/11	CCV	↓	Mirex	29.3	( )		J/UJ/A (C)
	21:46					( )		
						( )		
						( )		
	6/2/11	CCV	↓	U	28.5	( )	↓	J/UJ/A (C)
	21:59					( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 26275Q3q

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer: ✓

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/2/11	CCV	RTX-CLP II	H	24.2	( )	6-015	J/UJ/A (C)
	21:33			I	22.5	( )	↓	↓
				K	24.7	( )		
				L	23.1	( )		
				O	27.5	( )		
				R	26.7	( )		
				N	25.8	( )		
				P	26.3	( )		
				Q	33.1	( )	↓	↓
						( )		
	6/2/11	CCV	↓	Mirex	36.7	( )	↓	J/UJ/A (C)
	21:46					( )		
						( )		
						( )		
						( )		
	6/2/11	CCV	↓	↓	23.3	( )	↓	J/UJ/A (C)
	21:59					( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 26275 & 3a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS23146	P	135 (59-125)	( )	( )	All	J/Pdet (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26275Q 3a
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding (%RPD Bet 2 col ≤ 40)	Associated Samples	Qualifications
	I	43.30	2	J/A qlt (* x III)
	R	87.89		
	chlordane (Technical)	58.44	5	↓
	↓	124.78	7	↓
	↓	84.94	10	↓
	G	51.30	12	↓
	J	69.02		
	θ	66.24	15	J
	Mirex	~~66.85~~ 66.85		

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26275Q3c
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JMB
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (10.0 std)	Recalculated CF (10.0 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/2/11	endosulfan I RTX-CLP1	5.38×10^3	5.38×10^3	5.48×10^3	5.48×10^3	6.7	6.7
			methoxychlor	1.73×10^3	1.73×10^3	1.85×10^3	1.85×10^3	5.7	5.7
2			↓ RTX CLP2	4.46×10^3	4.46×10^3	4.58×10^3	4.58×10^3	11.1	11.1
				1.70×10^3	1.70×10^3	1.67×10^3	1.67×10^3	4.0	4.0
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 & 39
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	IP10153 58	6/2/11	endosulfan I RTX CLP	10.0	6.90	6.90	31.0	31.0
		21:33	methoxychlor	100.00	84.33	84.33	15.7	15.7
2			RTX CLP I	↓	7.58	7.58	24.2	24.2
			↓		73.65	73.65	26.3	26.3
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 Q35
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer:
2nd reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene	ZTX01P1	1.03	81 0.83485	81	81	0
Decachlorobiphenyl	↓	1.03	88 0.91488	88	88	0
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes:

LDC #: 26275 Q 3C
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: 1
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = I MS - MSD I * 2/(MS + MSD)

MS = Matrix spike percent recovery

MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 16 + 17

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
gamma-BHC	0.33	0.33	ND	0.3	0.3	91	91	91	91	0	0
4,4'-DDT	0.77	0.77	6	0.88	0.93	114	114	121	121	6	6

Comments: Refer ot Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26775q 3q
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: 1
2nd Reviewer: 2

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = I LCS - LCSD I * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS23146

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma-BHC	0.33	~~0.3~~NA	0.38	NA	115	115				
4,4'-DDT	0.77	↓	0.97	↓	126	126	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275a39
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

Sample I.D. #2 4,4-PDE:

Conc. = $\frac{(18763)(10)(0.4)}{(5100)(60.5)(0.862)}$

=

0.28 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note: _____

C:\WPDOCS\WRK\PEST\RECALC.3S

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 3, 2011

Matrix: Soil

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-050-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-088-SA5DN-SB-4.0-5.0
SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
6/2/11	CCV (15:59)	ZBMultiR2	Aroclor-5460	35.6	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-020-SA5DN-SS-0.0-0.5MS SL-020-SA5DN-SS-0.0-0.5MSD PBLK22146	Aroclor-5460	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
6/2/11	CCV (16:67)	ZBMultiR2	Aroclor-5442	24.9	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-020-SA5DN-SS-0.0-0.5MS SL-020-SA5DN-SS-0.0-0.5MSD PBLK22146	Aroclor-5442	J (all detects) UJ (all non-detects)	A
6/2/11	CCV (23:23)	ZBMultiR2	Aroclor-5460	32.6	SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Aroclor-5460	J (all detects) UJ (all non-detects)	A
6/2/11	CCV (23:41)	ZBMultiR2	Aroclor-5442	23.0	SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Aroclor-5442	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-026-SA5DN-SS-0.0-0.5	Aroclor-1260	41.90	J (all detects)	A
SL-051-SA5DN-SS-0.0-0.5	Aroclor-1254 Aroclor-1260	68.76 62.95	J (all detects) J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Aroclor-5460 Aroclor-5442	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE158	SL-026-SA5DN-SS-0.0-0.5	Aroclor-1260	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE158	SL-051-SA5DN-SS-0.0-0.5	Aroclor-1254 Aroclor-1260	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q3b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/2/11
SDG #: DE158 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD ≤ 20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	N	

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

Validated Samples:
SOIL

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK22146	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23	#1 MS	33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-050-SA5DN-SS-0.0-0.5	24	#1 MSD	34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-051-SA5DN-SS-0.0-0.5	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-064-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-4.0-5.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-065-SA5DN-SB-7.0-8.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	SL-086-SA5DN-SB-4.0-5.0	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	SL-088-SA5DN-SB-4.0-5.0	30		40	

Notes:

DC #: 260756 3b
DG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓	✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓		✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26275G3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 26275B3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: ___ GC ___ HPLC

2nd Reviewer:

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/2/11	CCV	ZB multi R2	Arodor 5460	35.6	( )	PB LK22146,	J/UJ/A (C)
	15:59					( )	1-12, 23, 24	qual 5460 only
						( )		
						( )		
						( )		
	6/2/11	CCV	ZB multi R2	Aroclor 5442	24.9	( )	↓	↓
	16:67					( )		qual 5442 only
						( )		
						( )		
						( )		
	6/2/11	CCV	ZBmulti R2	Arodor 5460	32.6	( )	13-20	J/UJ/A (C)
	23:33					( )		qual 5460 only
						( )		
						( )		
						( )		
	6/2/11	CCV	↓	Aroclor 5442	23.0	( )	13-20	J/UJ/A (C)
	23:41					( )		qual 5442 only
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 26275636
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer:

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Between 2 col / Finding ≤40	Associated Samples	Qualifications
	BB	41.90	4	J/A dct * XIII
	AA	68.76	1/4 15	J
	BB	62.95		

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26275B 3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200_{std})	Recalculated CF (200_{std})	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	Aroclor 1260-1	36	36	37	37	9.3	9.3
			ZBmulti-R1						
2	↓	↓	Aroclor 1260-1	212	212	219	219	9.6	9.6
			ZBmulti-R2						
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: /
SDG #: pw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC_____HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	6/2/11 15:41	Aroclor 1260 ZBR1	200	211.09	211.09	5.5	5.5
			ZBR2	200	184.74	184.74	7.6	7.6
2	ccv	6/2/11 23:04	↓	200	208.09	208.09	4.0	4.0
			↓	↓	178.60	178.60	10.7	10.7
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26249 3

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ___ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TCMX	ZB-5MS Hi RI	1.025	1.229065	119	119	0
DCB	↓	↓	1.105642	107	107	↓

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #:_____ VALIDATION FINDINGS WORKSHEET Page:__of__

SDG #: pw comes

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: EZ

2nd Reviewer: C

METHOD: __ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 23 & 24

Compound	Spike Added (ug/Kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB-1260	16.53	16.53	0.52	16.52	16.72	97	97	98	98	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #:_____
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 7
Reviewer: F2
2nd Reviewer: A

METHOD: ___ GC ___HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: Aroclor 5442

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Aroclor 5442	16.67	16.67	13.71	13.61	82	82	82	82	1	1

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #:_____
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name PCB-1260

Concentration = $\frac{0.5627}{0.944}$

= 0.596 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	Aroclo 1260-1 =	630.13452 (Σ) / (37)(60.5)	= 0.56	1260-1 = 0.56	
				2 = 0.841244	
				3 = 0.556029	
				4 = 0.447414	
				5 = 0.560159	
				6 = 0.41661	
				0.5627	

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: September 29, 2011

Matrix: Soil

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-050-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-088-SA5DN-SB-4.0-5.0
SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5MSD
SL-020-SA5DN-SS-0.0-0.5DUP

Introduction

This data review covers 23 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7471A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Aluminum Boron Calcium Copper Phosphorus Strontium Tin	6.439 mg/Kg 0.910 mg/Kg 13.915 mg/Kg 0.069 mg/Kg 1.204 mg/Kg 0.071 mg/Kg 1.482 mg/Kg	All samples in SDG DE158
ICB/CCB	Titanium	0.94 ug/L	All samples in SDG DE158
ICB/CCB	Calcium Iron Magnesium	296 ug/L 129 ug/L 291 ug/L	SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5
ICB/CCB	Calcium Magnesium	72.6 ug/L 48.2 ug/L	SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Calcium Magnesium	252 ug/L 250 ug/L	SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0
ICB/CCB	Iron	144 ug/L	SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-065-SA5DN-SB-4.0-5.0

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-020-SA5DN-SS-0.0-0.5	Tin	2.3 mg/Kg	2.3U mg/Kg
SL-024-SA5DN-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-025-SA5DN-SS-0.0-0.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-026-SA5DN-SS-0.0-0.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-027-SA5DN-SS-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-028-SA5DN-SS-0.0-0.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-029-SA5DN-SS-0.0-0.5	Tin	3.2 mg/Kg	3.2U mg/Kg
SL-036-SA5DN-SS-0.0-0.5	Tin	3.2 mg/Kg	3.2U mg/Kg
SL-037-SA5DN-SS-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-038-SA5DN-SS-0.0-0.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-039-SA5DN-SS-0.0-0.5	Tin	3.1 mg/Kg	3.1U mg/Kg
SL-040-SA5DN-SS-0.0-0.5	Tin	3.1 mg/Kg	3.1U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-044-SA5DN-SS-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-050-SA5DN-SS-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-051-SA5DN-SS-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-064-SA5DN-SB-4.0-5.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-065-SA5DN-SB-4.0-5.0	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-065-SA5DN-SB-7.0-8.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-086-SA5DN-SB-4.0-5.0	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-088-SA5DN-SB-4.0-5.0	Tin	3.1 mg/Kg	3.1U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-020-SA5DN-SS-0.0-0.5MS/MSD (All samples in SDG DE158)	Antimony	55 (75-125)	70 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-020-SA5DN-SS-0.0-0.5MS/MSD (All samples in SDG DE158)	Arsenic	-	162 (75-125)	-	J (all detects)	A
	Beryllium	-	135 (75-125)	-	J (all detects)	
	Cadmium	141 (75-125)	167 (75-125)	-	J (all detects)	
	Chromium	-	141 (75-125)	-	J (all detects)	
	Cobalt	133 (75-125)	153 (75-125)	-	J (all detects)	
	Molybdenum	143 (75-125)	165 (75-125)	-	J (all detects)	
	Nickel	-	151 (75-125)	-	J (all detects)	
	Potassium	135 (75-125)	-	-	J (all detects)	
	Selenium	-	145 (75-125)	-	J (all detects)	
	Silver	143 (75-125)	157 (75-125)	-	J (all detects)	
	Thallium	149 (75-125)	162 (75-125)	-	J (all detects)	

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-020-SA5DN-SS-0.0-0.5	Chromium Cobalt Copper Lead Nickel Vanadium Zinc	19 (≤10) 27 (≤10) 12 (≤10) 26 (≤10) 28 (≤10) 20 (≤10) 25 (≤10)	All samples in SDG DE158	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE158	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE158

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Arsenic Beryllium Cadmium Chromium Cobalt Molybdenum Nickel Potassium Selenium Silver Thallium	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Chromium Cobalt Copper Lead Nickel Vanadium Zinc	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE158

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE158	SL-020-SA5DN-SS-0.0-0.5	Tin	2.3U mg/Kg	A	B
DE158	SL-024-SA5DN-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE158	SL-025-SA5DN-SS-0.0-0.5	Tin	3.0U mg/Kg	A	B
DE158	SL-026-SA5DN-SS-0.0-0.5	Tin	3.0U mg/Kg	A	B
DE158	SL-027-SA5DN-SS-0.0-0.5	Tin	2.9U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE158	SL-028-SA5DN-SS-0.0-0.5	Tin	3.0U mg/Kg	A	B
DE158	SL-029-SA5DN-SS-0.0-0.5	Tin	3.2U mg/Kg	A	B
DE158	SL-036-SA5DN-SS-0.0-0.5	Tin	3.2U mg/Kg	A	B
DE158	SL-037-SA5DN-SS-0.0-0.5	Tin	2.9U mg/Kg	A	B
DE158	SL-038-SA5DN-SS-0.0-0.5	Tin	3.0U mg/Kg	A	B
DE158	SL-039-SA5DN-SS-0.0-0.5	Tin	3.1U mg/Kg	A	B
DE158	SL-040-SA5DN-SS-0.0-0.5	Tin	3.1U mg/Kg	A	B
DE158	SL-044-SA5DN-SS-0.0-0.5	Tin	2.9U mg/Kg	A	B
DE158	SL-050-SA5DN-SS-0.0-0.5	Tin	2.9U mg/Kg	A	B
DE158	SL-051-SA5DN-SS-0.0-0.5	Tin	2.9U mg/Kg	A	B
DE158	SL-064-SA5DN-SB-4.0-5.0	Tin	2.8U mg/Kg	A	B
DE158	SL-065-SA5DN-SB-4.0-5.0	Tin	3.0U mg/Kg	A	B
DE158	SL-065-SA5DN-SB-7.0-8.0	Tin	2.8U mg/Kg	A	B
DE158	SL-086-SA5DN-SB-4.0-5.0	Tin	2.9U mg/Kg	A	B
DE158	SL-088-SA5DN-SB-4.0-5.0	Tin	3.1U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9-29-11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020~~A/7000~~) 7471A

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW A	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

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

Validated Samples: Soil

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	(X1) MS	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22	MSD	32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23	Dup	33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-050-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-051-SA5DN-SS-0.0-0.5	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-064-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-4.0-5.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-065-SA5DN-SB-7.0-8.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	SL-086-SA5DN-SB-4.0-5.0	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	SL-088-SA5DN-SB-4.0-5.0	30		40	

Notes: _____

LDC #: 26275Q4

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [illegible]

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

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.				
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were < 5X the RL.	✓			
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

LDC #: 26795Q4

VALIDATION FINDINGS CHECKLIST

Reviewer: nc
2nd Reviewer: W

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?	✓			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 26275Q 4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-20		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
QC 21-23		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

LDC #: 26275Q4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10
Al	6.439			32.2										
B	0.910			4.55										
Ca	13.915			69.58										
Cu	0.069			0.345										
P	1.204			6.02										
Sr	0.071			0.355										
Sn	1.482			7.41	2.3	2.7	3.0	3.0	2.9	3.0	3.2	3.2	2.9	3.0
Ti			0.94	0.47										

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	11	12	13	14	15	16	17	18	19	20
Al	6.439			32.2										
B	0.910			4.55										
Ca	13.915			69.58										
Cu	0.069			0.345										
P	1.204			6.02										
Sr	0.071			0.355										
Sn	1.482			7.41	3.1	3.1	2.9	2.9	2.9	2.8	3.0	2.8	2.9	3.1
Ti			0.94	0.47										

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 3, 4

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers (>5x)									
Ca			296	148										
Fe			129	322.5										
Mg			291	145.5										

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 5-16

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers (>5x)									
Ca			72.6	36.3										
Mg			48.2	24.1										

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 17-20

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers (>5x)									
Ca			252	126										
Mg			250	125										

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 6-12, 17

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers (>5x)									
Fe			144	360										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 26275Q4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: 1

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were ICP interference check samples performed as required?

(Y) N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	~~6/2/11~~ 6/1/11	ICSA ~~(15:21/18:01)~~ (07:45/10:26)	Mn	5	0.78	All	No Qual (>10x)

Comments: Fe 790%

LDC #: 26275Q1

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

(Y) N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	21/22	S	Sb	55	70		All	J/UJ/A (Q)
			As		162			Jdet/A
			Be		135			
			Cd	141	167			
			Cr		141			
			Co	133	153			
			Mo	143	165			
			Ni		151			
			Ti	135				
			Se		145			
			Ag	143	157			
			Tl	149	162			

Comments: _____

LDC #: 26275Q4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer:

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		1	S	Cr	19	All	J/UJ/A (A)
				Co	27		
				Cu	12		
				Pb	26		
				Ni	28		
				V	20		
				Zn	25		

Comments:

LDC #: 28259C4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CS
2nd Reviewer:

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

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Al	28410,42	30000	94,7	94,7	Y
ICV	ICP/MS (Initial calibration)	As	475,80	500	95,2	95,2	
ICV	CVAA (Initial calibration)	Hg	2,31	2,5	92,4	92,4	
CCV (08:40)	ICP (Continuing calibration)	Li	595,29	600	99,2	99,2	
CCV (10:15)	ICP/MS (Continuing calibration)	Be	~~50~~24,68	25	98,7	98,7	
CCV (19:12)	CVAA (Continuing calibration)	Hg	1,03	1	103	103	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 20275Q7

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 2
Reviewer: CR
2nd Reviewer: [illegible]

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

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result). True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration, D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L), SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units) mg/kg	True / D / SDR (units) mg/kg	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Ag	20 ug/L	20 ug/L	100	100	Y
LCS	Laboratory control sample	Zn	1033 ug/L	1000 ug/L	103	103	
21	Matrix spike	Se	(SSR-SR) 2.5339	2.0771	122	122	
23	Duplicate	Ni	19.2272	16.5254	15	15	
1	ICP serial dilution	Ti	12767.11 ug/L	13184.15 ug/L	6	6	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26495Q4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 3
Reviewer: CR
2nd reviewer: VC

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for P were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL\ (6.63433mg/L)}{0.944(1.0g)} = 702.8\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	14000	14000	Y
		Sb	0.28	0.28	
		As	6.1	6.1	
		Ba	151	151	
		Be	0.64	0.64	
		B	11.5	11.5	
		Cd	0.24	0.24	
		Ca	5770	5770	
		Cr	27.2	27.2	
		Co	11.9	11.9	
		Cu	19.4	19.4	
		Fe	22400	22400	
		Pb	12.5	12.5	
		Li	13.9	13.9	
		Mg	5580	5580	
		Mn	342	342	
		Hg	0.013	0.013	
		Mo	0.59	0.59	
		Ni	19.2	19.2	
		P	703	703	

Note: _____

LDC #: 26655Q4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 2 of 3
Reviewer: AR
2nd reviewer:

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for AS were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

11 = $\frac{(100ml)(2)\ 37.27ug/L}{0.853(1.0g)(1000)} = 8.65mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	3610	3610	Y
		Se	0.11	0.11	
		AS	0.053	0.053	
		NA	137	137	
		Sr	33.2	33.2	
		Tl	0.36	0.36	
		Sn	2.3	2.3	
		Ti	1300	1300	
		V	71.1	71.1	
		Zn	103	103	
		Zr	1.0	1.0	
	11	Al	26400	26400	Y
		Sb	0.37	0.37	
		As	8.7	8.7	
		Ba	159	159	
		Be	1.2	1.2	
		B	17.9	17.9	
		Cd	0.54	0.54	
		Ca	9210	9210	

Note:

LDC #: 26765Q4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CC
2nd reviewer: [illegible]

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A	Have results been reported and calculated correctly?
Y N N/A	Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A	Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: See Previous Page

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	11	Cr	45.7	45.7	Y
		Co	15.1	15.1	
		Cu	18.5	18.5	
		Fe	31900	31900	
		Pb	16.9	16.9	
		Li	23.5	23.5	
		Mg	6660	6660	
		Mn	375	375	
		Hg	0.0098	0.0098	
		Mo	0.71	0.71	
		Ni	31.1	31.1	
		P	363	363	
		K	4240	4240	
		Se	0.17	0.17	
		As	0.084	0.084	
		Na	97.0	97.0	
		Sr	40.4	40.4	
		Tl	0.49	0.49	
		Sn	3.1	3.1	
		Ti	1170	1170	
		V	88.0	88.0	
		Zn	103	103	
		Ca	3.4	3.4	

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 3, 2011

Matrix: Soil

Parameters: Herbicides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-050-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5

Introduction

This data review covers 15 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151A for Herbicides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No herbicide contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/(Matrix Spike) Duplicate

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS21144	Dinoseb	9 (10-36)	All samples in SDG DE158	J (all detects) R (all non-detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-025-SA5DN-SS-0.0-0.5	MCPA	90	J (all detects)	A
SL-036-SA5DN-SS-0.0-0.5	2,4-DB	94	J (all detects)	A
SL-037-SA5DN-SS-0.0-0.5	2,4-DB	80	J (all detects)	A
SL-039-SA5DN-SS-0.0-0.5	MCPA 2,4-D	97 63	J (all detects) J (all detects)	A
SL-044-SA5DN-SS-0.0-0.5	2,4-DB	81	J (all detects)	A
SL-051-SA5DN-SS-0.0-0.5	Dicamba 2,4-DB	46 146	J (all detects) J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Herbicides - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	Dinoseb	J (all detects) R (all non-detects)	P	Laboratory control samples (%R) (L)
DE158	SL-025-SA5DN-SS-0.0-0.5	MCPA	J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE158	SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5	2,4-DB	J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE158	SL-039-SA5DN-SS-0.0-0.5	MCPA 2,4-D	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE158	SL-051-SA5DN-SS-0.0-0.5	Dicamba 2,4-DB	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Herbicides - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Herbicides - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q5 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/2/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Herbicides (EPA SW 846 Method 8151A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II	Initial calibration	A	%RSD ≤ 20, r²
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	SW	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples: SOIL

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK21144	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23		33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-050-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-051-SA5DN-SS-0.0-0.5	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16		26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17		27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18		28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19		29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20		30		40	

Notes: _____

DC #: 260275Q5
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate Spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26275Q5
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26275A5

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS 21144	Dinoseb	9 (10-36)	( )	( )	All	J/R/P (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26275Q5
SDG #: All cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

* IX

#	Compound Name	% RPD Bet 2 col Finding ≤40	Associated Samples	Qualifications
	MCPA	90	3	J/Adet
	2,4-DB	94	8	↓
	↓	80	9	↓
	MCPA	97	11	↓
	2,4-D	63		
	2,4-DB	81	13	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26275a5
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: A

METHOD: ✓GC __HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD But 2 Finding co/ ±40	Associated Samples	Qualifications
	Dicamba	46	15	J/A det *IX
	2,4-DB	146	↓	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26275B5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

4

#	Standard ID	Calibration Date	Compound	Reported 410.4/ CF 20020 (std)	Recalculated 410.4 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/20/11	Dalapon RTX CLP	2.00×10^{-1}	2.0×10^{-1}	1.95×10^{-1}	1.95×10^{-1}	14.0	14.0
			Dicamba ↓	5.86×10^{-1}	5.86×10^{-1}	5.81×10^{-1}	5.81×10^{-1}	9.0	9.0
2	ICAL	5/20/11	↓ RTX CLP2	1.90×10^{-1}	1.90×10^{-1}	1.87×10^{-1}	1.87×10^{-1}	14.3	14.3
			↓	5.28×10^{-1}	5.28×10^{-1}	5.20×10^{-1}	5.20×10^{-1}	7.3	7.3
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26025Q5
SDG #: fw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	3H15_04R	5/25/11 17:26	Dalapon RTX CLP	820.80	774.64	774.64	5.6	5.6
			Dicamba	40.04	37.44	37.44	6.5	6.5
			RTX CLPII	↓	782.99	782.99	4.6	4.6
2	~~16R~~	↓	↓	↓	39.41	39.41	1.6	1.6
	16R	5/25/11 22:57	↓	820.80	784.90	784.90	4.4	4.4
		↓	↓	40.04	37.90	37.90	5.3	5.3
3			↓	↓	769.44	769.44	6.3	6.3
			↓	↓	39.00	39.00	2.6	2.6
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: a

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2,4- D CAA	RTX cuP II	6.6829	6.415652	96	96	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26275Q5
SDG #: LL cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 21144

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	8.33	NA	7.86	NA	94	94				
Dinoseb (8151)	14.2	"	1.34	"	9	9	NA			
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #:_____
SDG #: yu ganes

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: _____
2nd Reviewer: _____

METHOD: ___ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #15 Compound Name 2, 4-DB

Concentration = $\frac{(9747)(0.2)(2000)}{(72317)(0.0718)(60.4)(0.906)(2)}$

6.9 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 17, 2011

Matrix: Soil

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-050-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-088-SA5DN-SB-4.0-5.0
SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5DUP
SL-039-SA5DN-SS-0.0-0.5MS
SL-039-SA5DN-SS-0.0-0.5DUP
SL-029-SA5DN-SS-0.0-0.5MS
SL-029-SA5DN-SS-0.0-0.5DUP

Introduction

This data review covers 26 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

No field blanks were identified in this SDG.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-020-SA5DN-SS-0.0-0.5MS (SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5)	Fluoride	57 (80-120)	J (all detects) UJ (all non-detects)	A
SL-039-SA5DN-SS-0.0-0.5MS (SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0)	Fluoride Nitrate as N	68 (80-120) 78 (80-120)	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE158	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE158

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE158	SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	Fluoride Nitrate as N	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-050-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q6 **VALIDATION COMPLETENESS WORKSHEET** Date: 9-29-11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: CC

2nd Reviewer: W

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), Perchlorate (EPA Method 314.0)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

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

Validated Samples: soil

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	(~~#1~~) MS	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22	↓ DUP	32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23	(~~#11~~) MS	33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-050-SA5DN-SS-0.0-0.5	24	↓ DUP	34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-051-SA5DN-SS-0.0-0.5	25	(~~#7~~) (#7) MS	35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-064-SA5DN-SB-4.0-5.0	26	(~~#7~~) (#7) DUP	36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-4.0-5.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-065-SA5DN-SB-7.0-8.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	SL-086-SA5DN-SB-4.0-5.0	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	SL-088-SA5DN-SB-4.0-5.0	30		40	

Notes:

DC #: 2627506

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: VC

Method: Inorganics (EPA Method See Cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
X. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

DC #: 2627506

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: AR
2nd reviewer: [illegible]

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-13, 15-19		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC (CR6+) (ClO4)
14, 20		pH TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (CR6+) (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
QC: 21, 22		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK CN- NH3 TKN TOC (CR6+) (ClO4)
23, 24		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC CR6+ ClO4
25, 26		pH TDS Cl F NO3 NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4

Comments:

LDC #: 26275Q6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Page: 1 of 1
Reviewer: AR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method see cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125~~ 80-120 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		21	S	F	57	1-10	J/UJ/A
		23	S	F	68	11-20	J/UJ/A
				NO_3	78		

Comments:

LDC #: 26275Q6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of COT was recalculated. Calibration date: 5/27/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	COT	s1	0	0	*0.9996*	0.9995	Y
		s2	50	0.5839			
		s3	100	1.3782			
		s4	200	2.7422			
		s5	300	4.0719			
Calibration verification	F	CCV	1.5	1.3554	90	90	
Calibration verification	NO3	↓	↓	1.3553	90	90	
Calibration verification	CN	↓	0.15	0.14990	100	100	↓

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 02626D

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	Cl	106	100	106	106	Y
23	Matrix spike sample	CN	(SSR-SR) 39.67	40.2	99	99	J
22	Duplicate sample	NO_3	3.4	3.8	11	11	J

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: V

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for NO_3/Cr^{6+} reported with a positive detect were recalculated and verified using the following equation:

Concentration =

NO_3: $y = 0.3295x - 0.0098$

Recalculation:

1: $NO_3 = \left(\frac{0.103 + 0.0098}{0.3295}\right) \times \frac{50mL}{5.05g(0.944)} = 36 mg/kg$

Cr^{6+}: $y = 0.0137x - 0.0305$

11: $Cr^{6+} \left(\frac{0.1289 + 0.0305}{0.0137}\right) \times \frac{100mL}{2.53g(0.853)(1000)} = 0.54 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
0.944	1	F	1.6	1.6	Y
		NO_3	3.6	3.6	
		Cr^{6+}	0.56	~~0.57~~ 0.57	
0.853	11	F	1.3	1.3	
		NO_3	1.0	1.0	
		Cr^{6+}	0.64	~~0.62~~ 0.54	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 3, 2011

Matrix: Soil/Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
TB-052011

Introduction

This data review covers 4 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-052011 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

LDC #: 26275Q7 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/2/11
SDG #: DE158 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: T
2nd Reviewer: J

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	% ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	TB = 5

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

Validated Samples: soil + water

1 1	SL-064-SA5DN-SB-4.0-5.0	11 1	BLKCL	21		31	
2 1	SL-065-SA5DN-SB-4.0-5.0	12 2	BLKE9	22		32	
3 1	SL-065-SA5DN-SB-7.0-8.0	13		23		33	
4 1	SL-086-SA5DN-SB-4.0-5.0	14		24		34	
5 2	TB-052011	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

DC #: 2627507
SDG #: all water

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: JF

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.				
VI. Surrogate spikes		✓		
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 2627587
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26275Q7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (220 std)	Recalculated CF (220 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/29/10	GRO	35488	35488	37329	37329	12.7	12.7
				(5522)	(5522)				
2	ICAL	5/14/10	GRO	8420	8420	8050	8050	5.2	5.2
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q7
SDG #: fw Conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: R

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	5/23/11	GRO	220.00	191.63	191.63	12.9	12.9
	12:07							
2	CCV	5/26/11	GRO	550.00	541.67	541.67	1.5	1.5
	21:49							
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: R

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
1	N5	631	460 85723	73	73	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #: 26273B7
SDG #: all cores

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: EJ
2nd Reviewer: R

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS29/LCSD

Compound	Spike Added (mg/Kg)		Spiked Sample Concentration (mg/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	11	7.86	7.99	71	71	73	73	2	2
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26278B7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

NP

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	May 20, 2011
LDC Report Date:	September 30, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since the samples were diluted out, no data were qualified.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q8 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:

SOIL

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK02147	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23		33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-051-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-064-SA5DN-SB-4.0-5.0	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-065-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-7.0-8.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-086-SA5DN-SB-4.0-5.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	#/MS	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	#/MSD	30		40	

Notes: _____

DC #: 26275 08
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 2627528
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26275Q8

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	19 & 20	several	%R & RPD outside limit			1	no qual SX PL
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26275B8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FP
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/28/11	C8 - C40	288047.44	288047	20671.85	20671.85	5.07	5.07
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

INICIAL ISB

LDC #: 26275Q8
SDG #: fw Conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JT
2nd Reviewer: Q

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	J149.70	5/30/11 2308	C8-C40	143.99	151.1457	151.1457	5.0	5.0
2	J149.84	5/31/11 4:56	↓	288.00	288.25	288.25	0.1	0.1
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: _____

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: R

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	NS	1.0	0.9788	97	97	0
orthoterphenyl	↓	1.0	1.1006	110	110	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #:_____ SDG #:_____

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page:___of___
Reviewer:_____
2nd Reviewer:_____

METHOD: ___GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples:_____

Compound	Spike Added (mg/kg)		Sample Conc (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EFH (C30-C40)	2.5	2.5	176.69	103.43	118.22	-26	-28	-23	-23	8	8

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q8
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: EJ
2nd Reviewer: 8

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS02147

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH C30-40	2.51	NA	2.1	NA	8.4	8.4				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26225O8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name $C_{30} - C_{40}$

Concentration = $\frac{4383097\ (1000)\ (5)}{2067.85\ (60)(0.944)(1000)}$

187 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 3, 2011

Matrix: Soil

Parameters: Explosives

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5	SL-020-SA5DN-SS-0.0-0.5MSD
SL-024-SA5DN-SS-0.0-0.5	
SL-025-SA5DN-SS-0.0-0.5	
SL-026-SA5DN-SS-0.0-0.5	
SL-027-SA5DN-SS-0.0-0.5	
SL-028-SA5DN-SS-0.0-0.5	
SL-029-SA5DN-SS-0.0-0.5	
SL-036-SA5DN-SS-0.0-0.5	
SL-037-SA5DN-SS-0.0-0.5	
SL-038-SA5DN-SS-0.0-0.5	
SL-039-SA5DN-SS-0.0-0.5	
SL-040-SA5DN-SS-0.0-0.5	
SL-044-SA5DN-SS-0.0-0.5	
SL-051-SA5DN-SS-0.0-0.5	
SL-064-SA5DN-SB-4.0-5.0	
SL-065-SA5DN-SB-4.0-5.0	
SL-065-SA5DN-SB-7.0-8.0	
SL-086-SA5DN-SB-4.0-5.0	
SL-088-SA5DN-SB-4.0-5.0	
SL-020-SA5DN-SS-0.0-0.5MS	

Introduction

This data review covers 21 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-020-SA5DN-SS-0.0-0.5MS/MSD (SL-020-SA5DN-SS-0.0-0.5)	RDX 1,3,5-Trinitrobenzene Nitroglycerin	- - -	74 (75-129) 79 (82-126) 78 (80-120)	- - -	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS04146	HMX Nitroglycerin	69 (74-130) 75 (80-120)	All samples in SDG DE158	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5	RDX 1,3,5-Trinitrobenzene Nitroglycerin	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	HMX Nitroglycerin	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q40 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/02/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II	Initial calibration	A	%D RSD ≤ 20, r^2
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:

Soil

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK04146	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23	# 1 MS	33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-051-SA5DN-SS-0.0-0.5	24	# 1 MSD	34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-064-SA5DN-SB-4.0-5.0	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-065-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-7.0-8.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-086-SA5DN-SB-4.0-5.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	SL-088-SA5DN-SB-4.0-5.0	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20		30		40	

Notes: _____

DC #: 26275040
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: ~~GC~~ / HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.			✓	
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?				
IX. Regional Quality Assurance and Quality Control			✓	
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 1627504
SDG #: all cancel

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: J

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: ✓ GC ___ HPLC

8310	8330	8151	8141	8141 (Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2,4,6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotoluene	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	
O. Phenanthrene	O. Nitroglycerin		O. Chlorpyrifos		
P. Pyrene	P.		P. Fenthion		
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichloronate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes: _____

cmpd_list.wpd

LDC #: 26275Q4C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y (N) N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y (N) N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	23 + 24	B	( )	74 (75-129)	( )	#1	J/UJ/A~~der~~ (Q)
		C	( )	79 (82-126)	( )	↓	↓
		D	( )	78 (80-120)	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		

LDC #: 26275040

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ___ GC ___ HPLC ✓

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS04146	A	69 (74-130)	( )	( )	All	J/UJ/P (L)
		e	75 (80-120)	( )	( )	✓	✓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: 26275Q4U
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: PJ
2nd Reviewer: e

METHOD: GC _____ HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

Level 3

#	Standard ID	Calibration Date	Compound	Reported CF (498/501 or 501/497 std)	Recalculated CF (498/501 or 501/497 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL chrompack	5/31/11	RDX	8.77 X10^{1}	8.77X10^{1}	9.50 X10^{1}	9.50X10^{1}	12.7	12.7
			1,3,5-TNB	1.97X10^{2}	1.97X10^{2}	2.00 X10^{2}	2.00X10^{2}	0.8	0.8
			4-nitrotoluene	9.58 X10^{1}	9.58X10^{1}	9.86 X10^{1}	9.86X10^{1}	2.3	2.3
2	ICAL CAPCELL	5/31/11	↓	3.31X10^{2}	3.31X10^{2}	3.32 X10^{2}	3.32X10^{2}	7.0	7.0
				1.89X10^{2}	1.89X10^{2}	2.00 X10^{2}	2.0 X10^{2}	9.3	9.3
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26375Q4O
SDG #: fw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 7
Reviewer: EJ
2nd Reviewer: 9

METHOD: GC_____HPLC✓_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	6/01/11	1,3,5- TNB	500.50	503.41	503.41	0.6	0.6
	15:03	chrompack	4- Nitrotoluene	497.50	494.61	494.61	0.6	0.6
2	ccv	6/01/11	↓	1001.00	1013.59	1013.59	1.3	1.3
	23:33	chrompack	↓	995.00	992.14	992.14	0.3	0.3
3	ccv	6/8/11	↓	500.50	503.59	503.59	0.6	0.6
	19:08	capcell	↓	497.50	471.19	471.19	5.3	5.3
4	ccv	6/9/11	↓	1001.00	1048.10	1048.10	4.7	4.7
	3:37	capcell	↓	1014.00	967.05	967.05	4.6	4.6

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: __ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: R

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2-Nitro-m-xylene	chrompack	2000	1808	90	90	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: [illegible]
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ___ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 23 + 24

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)	1923.08	1923.08	ND	1448.96	1417.03	75	75	72	72	2	2
2,4,6-Trinitrotoluene (8330)	1922.31	1922.31	ND	1676.76	1643.14	87	87	84	84	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26273 (42c)
SDG #: MW cores

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: EJ
2nd Reviewer: R

METHOD: __ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS S04/46

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2000	NA	1375.91	NA	69	69				
2,4,6-Trinitrotoluene (8330)	1999.2	↓	1688.8	↓	84	84	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 @ 4U
SDG #: 4U seven

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: P
2nd Reviewer: 2

METHOD: ___ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 4, 2011

Matrix: Soil

Parameters: Terphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-051-SA5DN-SS-0.0-0.5	n-Triacontane	16 (50-150)	All TCL compounds	J (all detects) UJ (all non-detects)	P

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-051-SA5DN-SS-0.0-0.5	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R) (S)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q41 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FT

2nd Reviewer: G

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II	Initial calibration	A	%D RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples: SOIL

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK29146	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23		33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-051-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-064-SA5DN-SB-4.0-5.0	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-065-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-7.0-8.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-086-SA5DN-SB-4.0-5.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	#1 MS	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	#1 MSD	30		40	

Notes:

DC #: 26275 Q41
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 26275641
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26275 Q41

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ✓ **GC** __ **HPLC**

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	14	NS	Z	16 (50-150)	J/UJ/p
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	n-Triacontane-d62
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26275Q41
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 35.482 CF (std)	Recalculated 35.482 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	o-Terphenyl	2.23×10^4	2.23×10^4	2.18×10^4	2.18×10^4	1.6	1.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q4/
SDG #: per Comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: R

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	R151.13R	6/01/11 4:34	o-Terphenyl	35.48	35.25	35.25	0.7	0.7
2	R151.24R	6/01/11 12:44	↓	↓	34.48	34.48	2.8	2.8
3	R151.35R	6/01/11 20:57	↓	↓	34.38	34.38	3.1	3.1
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: R

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Tricontane - 462	MS	0.333	0.336665	101	101	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: [illegible]
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 19 + 20

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
m-Terphenyl	1.67	1.67	ND	1.4	1.41	84	84	84	84	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q4/
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS29146

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl	1.67	NA	1.4	NA	84	84				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275G4/
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: / GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 4, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-038-SA5DN-SS-0.0-0.5MS
SL-038-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q43 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FT

2nd Reviewer: [illegible]

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:

soil

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK43144	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23		33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-051-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-064-SA5DN-SB-4.0-5.0	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-065-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-7.0-8.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-086-SA5DN-SB-4.0-5.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	#10 MS	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	#10 MSD	30		40	

Notes: _____

DC #: 26275043
DG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 26275243
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: EJ
2nd Reviewer: [signature]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓		✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26275G43

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 7
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: __ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	14	N3	Z	16 (50-150)	J/UJ/P (5)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	n-Triacontane -462
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26225643
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: F?
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported CF (5000 std)	Recalculated CF (5000 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/19/11	Methanol	2.82 X10^0	2.82	2.95	2.95	10.3	10.3
2	ICAL	5/20/11	↓	6.94	6.94	8.14	8.14	12.2	12.2
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 #43
SDG #: pw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: R

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV_0003	5/24/11 21:06	methanol	10000	9831.52	9831.52	1.7	1.7
	0016	5/25/11 0:20	"	10000	9873.18	9873.18	1.3	1.3
2								
	CCV_0003	5/25/11 15:19	"	10000	10293.71	10293.71	2.9	2.9
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	NS	250	199.479	80	80	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #:_____ VALIDATION FINDINGS WORKSHEET Page:__of__

SDG #: pw comes

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ

2nd Reviewer: Q

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration

SA = Spike added

RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 19 + 20

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Methane	2500	2500	ND	1718.42	1644.91	69	69	66	66	4	4

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q43
SDG #: 44 cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 43144

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol	2500	NA	2249.07	NA	90	90	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275Q43
SDG #: eu ones

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: September 30, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0

Introduction

This data review covers 18 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q45 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Glycols (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II	Initial calibration	A	%D ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK03144	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22	PBLK01145	32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23		33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-051-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-064-SA5DN-SB-4.0-5.0	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-065-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-7.0-8.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-086-SA5DN-SB-4.0-5.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19		29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20		30		40	

Notes: _____

DC #: 26275 & 45
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FM
2nd Reviewer: A

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26275645
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: 9

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.		✓		

LDC #: 26275945
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: F?
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (191.6874 std)	Recalculated CF (191.6874 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/23/11	Propylene Glycol	4.71×10^2	471.49	4.60×10^2	4.60×10^2	5.0	5.0
2	ICAL	5/26/11	↓	4.56×10^2	4.56×10^2	4.35×10^2	4.35×10^2	8.0	8.0
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 & 45
SDG #: fw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: R

METHOD: GC_____HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	F144.0052	5/24/11	Propylene Glycol	95.84	100.73	100.73	5.1	5.1
	F144.0064	↓	↓	95.84	106.07	106.07	10.7	10.7
2								
	F144.0076	↓	↓	95.84	97.11	97.11	1.3	1.3
3	F147.0012	5/26/11	↓	305.07	322.75	322.75	5.8	5.8
	F147.0023	5/26/11	↓	101.49	100.84	100.84	0.6	0.6
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene Glycol	N7	197.75	179.950424	91	91	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26275Q5F
SDG #: MU cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS03144/

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Ethylene Glycol	225.43	NA	1945	NA	86	86	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275845
SDG #: yu [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: May 20, 2011

LDC Report Date: October 3, 2011

Matrix: Soil

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE158

Sample Identification

SL-020-SA5DN-SS-0.0-0.5
SL-024-SA5DN-SS-0.0-0.5
SL-025-SA5DN-SS-0.0-0.5
SL-026-SA5DN-SS-0.0-0.5
SL-027-SA5DN-SS-0.0-0.5
SL-028-SA5DN-SS-0.0-0.5
SL-029-SA5DN-SS-0.0-0.5
SL-036-SA5DN-SS-0.0-0.5
SL-037-SA5DN-SS-0.0-0.5
SL-038-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-040-SA5DN-SS-0.0-0.5
SL-044-SA5DN-SS-0.0-0.5
SL-051-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-020-SA5DN-SS-0.0-0.5MS
SL-020-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-024-SA5DN-SS-0.0-0.5	Not specified	Butyraldehyde	128 (64-126)	All TCL compounds	J (all detects)	P

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-024-SA5DN-SS-0.0-0.5	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
DE158	SL-020-SA5DN-SS-0.0-0.5 SL-024-SA5DN-SS-0.0-0.5 SL-025-SA5DN-SS-0.0-0.5 SL-026-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SS-0.0-0.5 SL-028-SA5DN-SS-0.0-0.5 SL-029-SA5DN-SS-0.0-0.5 SL-036-SA5DN-SS-0.0-0.5 SL-037-SA5DN-SS-0.0-0.5 SL-038-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-040-SA5DN-SS-0.0-0.5 SL-044-SA5DN-SS-0.0-0.5 SL-051-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q71 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/2/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FD

2nd Reviewer: Q

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II	Initial calibration	A	%D RSD ≤ 20, r^2
III.	Calibration verification/ICV	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:

Soil

1	SL-020-SA5DN-SS-0.0-0.5	11	SL-039-SA5DN-SS-0.0-0.5	21	PBLK02145	31	
2	SL-024-SA5DN-SS-0.0-0.5	12	SL-040-SA5DN-SS-0.0-0.5	22		32	
3	SL-025-SA5DN-SS-0.0-0.5	13	SL-044-SA5DN-SS-0.0-0.5	23		33	
4	SL-026-SA5DN-SS-0.0-0.5	14	SL-051-SA5DN-SS-0.0-0.5	24		34	
5	SL-027-SA5DN-SS-0.0-0.5	15	SL-064-SA5DN-SB-4.0-5.0	25		35	
6	SL-028-SA5DN-SS-0.0-0.5	16	SL-065-SA5DN-SB-4.0-5.0	26		36	
7	SL-029-SA5DN-SS-0.0-0.5	17	SL-065-SA5DN-SB-7.0-8.0	27		37	
8	SL-036-SA5DN-SS-0.0-0.5	18	SL-086-SA5DN-SB-4.0-5.0	28		38	
9	SL-037-SA5DN-SS-0.0-0.5	19	#1 MS	29		39	
10	SL-038-SA5DN-SS-0.0-0.5	20	#1 MSD	30		40	

Notes:

DC #: 26275071
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: G

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 3027527
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: JL

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓		✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26275Q/

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Are surrogates required by the method? Yes___ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were surrogates spiked into all samples and blanks?

Y (N) N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	2	NS	Butyraldehyde	128 (64-126)	J / Pdet (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26275Q71
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				2002 CF (std)	2002 CF (std)	Average CF (initial)	Average CF (initial)	%RSD	%RSD
1	5/26/11 ICAL	5/26/11	Formaldehyde	$7.74 \times 10^{+1}$	7.74×10^{1}	8.19×10^{1}	8.19×10^{1}	8.5	8.5
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 67/
SDG #: fw Conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: F
2nd Reviewer: R

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	IF4146.31	5/27/11	formaldehyde	2002.00	182/-86	182/.86	9.0	9.0
	IF4146.42	5/27/11	✓	✓	1868.05	1868.05	6.7	6.7
2								
	IF4146.53	5/27/11	✓	✓	1779.34	1779.34	11.1	11.1
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	NS	4000	4762-77	120	119	1

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: [illegible]
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SA = Spike added SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 19 & 20

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Formaldehyde	5010	5010	ND	4234.44	4080.45	85	85	81	81	4	4

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275 Q11
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS02145

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde	5010	NA	4453.72	NA	89	89	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26257G7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	May 20, 2011
LDC Report Date:	September 30, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE158

Sample Identification

SL-025-SA5DN-SS-0.0-0.5
SL-039-SA5DN-SS-0.0-0.5
SL-064-SA5DN-SB-4.0-5.0
SL-065-SA5DN-SB-7.0-8.0
SL-086-SA5DN-SB-4.0-5.0
SL-088-SA5DN-SB-4.0-5.0

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE158	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE158

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE158	SL-025-SA5DN-SS-0.0-0.5 SL-039-SA5DN-SS-0.0-0.5 SL-064-SA5DN-SB-4.0-5.0 SL-065-SA5DN-SB-7.0-8.0 SL-086-SA5DN-SB-4.0-5.0 SL-088-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE158

No Sample Data Qualified in this SDG

LDC #: 26275Q87 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE158 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: PT

2nd Reviewer: JL

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 5/20/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r^2
IV.	Continuing calibration/ICV	A	ICV. %D/CCV ≤ 15/50 LODV ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples: SOIL

1	SL-025-SA5DN-SS-0.0-0.5	11	PBLK24143	21		31	
2	SL-039-SA5DN-SS-0.0-0.5	12		22		32	
3	SL-064-SA5DN-SB-4.0-5.0	13		23		33	
4	SL-065-SA5DN-SB-7.0-8.0	14		24		34	
5	SL-086-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-088-SA5DN-SB-4.0-5.0	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26275Q87

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: [signature]

Perchlorate Method 6850

Method: ~~Semivolatiles (EPA SW 846 Method 8270C)~~

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ~~≤ 25%~~ 15/20 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?				
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26275687

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: FT
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 26275087
SDG# see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JT
2nd Reviewer: JS

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
05/27/2011	LCMS	perchlorate	0.0197	0.020	
			0.0417	0.040	
			0.1006	0.100	
			0.2118	0.200	
			0.4205	0.400	
			1.0531	1.000	
			2.6124	2.500	

Regression Output:		Regression Output:	Reported	
Constant		0.00064		6.4288E-004
Std Err of Y Est		0.00411		
R Squared		0.99998		0.99999
No. of Observations		7.00000		
Degrees of Freedom		5.00000		
X Coefficient(s)	1.046E+000		0.10460	
Std Err of Coef.	0.001861	0.04		

LDC #: 26275q87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	MS_1010	5/26/11	~~Phenol (1st internal standard)~~ Perchlorotri	4	4.2	4.2	5	5
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
	MS_1021	↓	Pentachlorophenol (4th internal standard) ↓	0.4	0.42	0.42	5	5
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2	MS_1032	↓	~~Phenol (1st internal standard)~~ ↓	4	4.1	4.1	2	2
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275087

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: 2

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 24143

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
Perchlorate	100	NA	104	NA	104	104				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26275A87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_t	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____ , _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)(\quad)(\quad)}$

= NP

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE160

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3050B	6010B	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3050B	6020	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3060A	7199	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3546	1625C	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3550B	8015B	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3550B	8015M	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3550B	8081A	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3550B	8082	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3550B	8151A	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3550B	8270C	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	3550B	8270C SIM	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	8330	8330A	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	METHOD	300.0	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	METHOD	314.0	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	METHOD	6850	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	METHOD	7471A	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	METHOD	8015B	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	METHOD	8015M	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	METHOD	8315A	III
23-May-2011	SL-018-SA5DN-SS-0.0-0.5	6297559	N	METHOD	9012B	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3050B	6010B	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3050B	6020	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3060A	7199	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3546	1625C	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3550B	8015B	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3550B	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3550B	8081A	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3550B	8082	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3550B	8151A	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3550B	8270C	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	3550B	8270C SIM	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	8330	8330A	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	METHOD	300.0	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	METHOD	314.0	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	METHOD	6850	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	METHOD	7471A	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	METHOD	8015B	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	METHOD	8015M	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	METHOD	8315A	III
23-May-2011	SL-014-SA5DN-SS-0.0-0.5	6297558	N	METHOD	9012B	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3050B	6010B	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3050B	6020	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3060A	7199	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3546	1625C	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3550B	8015B	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3550B	8015M	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3550B	8081A	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3550B	8082	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3550B	8151A	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3550B	8270C	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	3550B	8270C SIM	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	8330	8330A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	METHOD	300.0	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	METHOD	314.0	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	METHOD	6850	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	METHOD	7471A	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	METHOD	8015B	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	METHOD	8015M	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	METHOD	8315A	III
23-May-2011	SL-013-SA5DN-SS-0.0-0.5	6297557	N	METHOD	9012B	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3050B	6010B	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3050B	6020	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3060A	7199	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3546	1625C	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3550B	8015B	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3550B	8015M	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3550B	8081A	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3550B	8082	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3550B	8151A	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3550B	8270C	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	3550B	8270C SIM	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	8330	8330A	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	METHOD	300.0	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	METHOD	314.0	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	METHOD	6850	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	METHOD	7471A	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	METHOD	8015B	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	METHOD	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	METHOD	8315A	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5	6297556	N	METHOD	9012B	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5DU	P297556D270850A	DUP	METHOD	9012B	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5MS	P297556R261327	MS	3546	1625C	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5MS	P297556R270851A	MS	METHOD	9012B	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5MS	P297556R320027A	MS	METHOD	8015M	III
23-May-2011	SL-012-SA5DN-SS-0.0-0.5MS	P297556R320029A	MS	3550B	8015M	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	3050B	6010B	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	3050B	6020	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	3060A	7199	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	3550B	8081A	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	3550B	8082	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	3550B	8151A	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	3550B	8270C	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	3550B	8270C SIM	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	METHOD	300.0	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	METHOD	314.0	III
23-May-2011	SL-011-SA5DN-SS-0.0-0.5	6297555	N	METHOD	7471A	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	3050B	6010B	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	3050B	6020	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	3060A	7199	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	3550B	8081A	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	3550B	8082	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	3550B	8151A	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	3550B	8270C	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	METHOD	300.0	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	METHOD	314.0	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5	6297554	N	METHOD	7471A	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5DU	P297554D220506	DUP	3050B	6010B	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5MS	P297554R220639	MS	3050B	6010B	III
23-May-2011	SL-010-SA5DN-SS-0.0-0.5MS	P297554R240624A	MS	3550B	8151A	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	3050B	6010B	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	3060A	7199	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	3550B	8081A	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	3550B	8082	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	3550B	8151A	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	3550B	8270C	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	3550B	8270C SIM	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	METHOD	300.0	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	METHOD	314.0	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5	6297552	N	METHOD	7471A	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D220229	DUP	3050B	6010B	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D221512	DUP	METHOD	7471A	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D221534A	DUP	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D221534B	DUP	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D221534C	DUP	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D221534D	DUP	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D270125A	DUP	METHOD	300.0	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D270940A	DUP	METHOD	314.0	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5DU	P297552D272100A	DUP	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552M221540D	MS	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552M221921A	MS	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552M241919A	MS	3550B	8082	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552M260109	MS	3550B	8270C SIM	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552M260146	MS	3550B	8270C	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552R220234	MS	3050B	6010B	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552R221513	MS	METHOD	7471A	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552R221537B	MS	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552R221537C	MS	3050B	6020	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552R270208A	MS	METHOD	300.0	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552R271002A	MS	METHOD	314.0	III
23-May-2011	SL-008-SA5DN-SS-0.0-0.5MS	P297552R272014A	MS	3060A	7199	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	3050B	6010B	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	3050B	6020	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	3060A	7199	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	3550B	8081A	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	3550B	8082	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	3550B	8151A	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	3550B	8270C	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	3550B	8270C SIM	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	METHOD	300.0	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	METHOD	314.0	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5	6297553	N	METHOD	7471A	III
23-May-2011	SL-009-SA5DN-SS-0.0-0.5MS	P297553R241752A	MS	3550B	8081A	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3050B	6010B	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3050B	6020	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3060A	7199	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3546	1625C	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3550B	8015B	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3550B	8015M	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3550B	8081A	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3550B	8082	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3550B	8151A	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3550B	8270C	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	3550B	8270C SIM	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	8330	8330A	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	METHOD	300.0	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	METHOD	314.0	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	METHOD	7471A	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	METHOD	8015B	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	METHOD	8015M	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	METHOD	8315A	III
24-May-2011	SL-198-SA5DN-SS-0.0-0.5	6297571	N	METHOD	9012B	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	3050B	6010B	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	3050B	6020	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	3060A	7199	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	3550B	8081A	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	3550B	8082	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	3550B	8151A	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	3550B	8270C	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	3550B	8270C SIM	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	METHOD	314.0	III
24-May-2011	SL-196-SA5DN-SS-0.0-0.5	6297569	N	METHOD	7471A	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3050B	6010B	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3050B	6020	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3060A	7199	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3546	1625C	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3550B	8015B	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3550B	8015M	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3550B	8081A	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3550B	8082	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3550B	8151A	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3550B	8270C	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	3550B	8270C SIM	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	8330	8330A	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	METHOD	300.0	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	METHOD	314.0	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	METHOD	7471A	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	METHOD	8015B	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	METHOD	8015M	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	METHOD	8315A	III
24-May-2011	SL-197-SA5DN-SS-0.0-0.5	6297570	N	METHOD	9012B	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	3050B	6010B	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	3050B	6020	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	3060A	7199	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	3550B	8081A	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	3550B	8151A	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	3550B	8270C	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	3550B	8270C SIM	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	METHOD	300.0	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	METHOD	314.0	III
24-May-2011	SL-195-SA5DN-SS-0.0-0.5	6297568	N	METHOD	7471A	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3050B	6010B	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3050B	6020	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3060A	7199	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3546	1625C	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3550B	8015B	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3550B	8015M	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3550B	8081A	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3550B	8082	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3550B	8151A	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3550B	8270C	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	3550B	8270C SIM	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	8330	8330A	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	METHOD	300.0	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	METHOD	314.0	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	METHOD	7471A	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	METHOD	8015B	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	METHOD	8015M	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	METHOD	8315A	III
24-May-2011	SL-191-SA5DN-SS-0.0-0.5	6297564	N	METHOD	9012B	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3050B	6020	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3060A	7199	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3546	1625C	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3550B	8015B	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3550B	8015M	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3550B	8081A	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3550B	8082	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3550B	8151A	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3550B	8270C	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	3550B	8270C SIM	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	8330	8330A	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	METHOD	300.0	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	METHOD	314.0	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	METHOD	7471A	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	METHOD	8015B	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	METHOD	8015M	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	METHOD	8315A	III
24-May-2011	SL-192-SA5DN-SS-0.0-0.5	6297565	N	METHOD	9012B	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	3050B	6010B	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	3050B	6020	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	3060A	7199	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	3550B	8081A	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	3550B	8082	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	3550B	8151A	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	3550B	8270C	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	METHOD	300.0	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	METHOD	314.0	III
24-May-2011	SL-189-SA5DN-SS-0.0-0.5	6297563	N	METHOD	7471A	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	3050B	6010B	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	3050B	6020	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	3060A	7199	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	3550B	8081A	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	3550B	8082	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	3550B	8151A	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	3550B	8270C	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	3550B	8270C SIM	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	METHOD	300.0	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	METHOD	314.0	III
24-May-2011	SL-193-SA5DN-SS-0.0-0.5	6297566	N	METHOD	7471A	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	3050B	6010B	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	3050B	6020	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	3060A	7199	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	3550B	8081A	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	3550B	8082	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	3550B	8151A	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	3550B	8270C	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	3550B	8270C SIM	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	METHOD	300.0	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	METHOD	314.0	III
24-May-2011	SL-194-SA5DN-SS-0.0-0.5	6297567	N	METHOD	7471A	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	3050B	6020	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	3060A	7199	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	3550B	8081A	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	3550B	8082	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	3550B	8151A	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	3550B	8270C	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	3550B	8270C SIM	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	METHOD	300.0	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	METHOD	314.0	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5	6297562	N	METHOD	7471A	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5DU	P297562D270513B	DUP	METHOD	300.0	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5DU	P297562D271857B	DUP	METHOD	314.0	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5MS	P297562R270527B	MS	METHOD	300.0	III
24-May-2011	SL-188-SA5DN-SS-0.0-0.5MS	P297562R271919B	MS	METHOD	314.0	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3050B	6010B	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3050B	6020	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3060A	7199	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3546	1625C	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3550B	8015B	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3550B	8015M	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3550B	8081A	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3550B	8082	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3550B	8151A	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3550B	8270C	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	3550B	8270C SIM	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	8330	8330A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	METHOD	300.0	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	METHOD	314.0	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	METHOD	7471A	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	METHOD	8015B	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	METHOD	8015M	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	METHOD	8315A	III
24-May-2011	SL-186-SA5DN-SS-0.0-0.5	6297560	N	METHOD	9012B	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	3050B	6010B	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	3050B	6020	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	3060A	7199	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	3550B	8081A	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	3550B	8082	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	3550B	8151A	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	3550B	8270C	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	3550B	8270C SIM	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	METHOD	300.0	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	METHOD	314.0	III
24-May-2011	SL-187-SA5DN-SS-0.0-0.5	6297561	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2	J	1.1	MDL	1.3	PQL	mg/Kg	J	Z, Q

Sample ID: SL-010-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-011-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.83	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.83	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.1		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-186-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-187-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2	J	0.98	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.87	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.0	U	1.0	MDL	1.3	PQL	mg/Kg	UJ	Q

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

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

Method Category: GENCHEM

Method: 9012B **Matrix:** SO

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.23	J	0.21	MDL	0.59	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1420		0.399	MDL	1.05	PQL	mg/Kg	J	E

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.49	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	3.47	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1500		0.499	MDL	1.31	PQL	mg/Kg	J	E

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	111	J	47.6	MDL	128	PQL	mg/Kg	J	Z
TIN	3.35	J	1.28	MDL	12.8	PQL	mg/Kg	U	B
Zirconium	2.84	J	1.07	MDL	6.38	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1530		0.383	MDL	1.01	PQL	mg/Kg	J	E

Sample ID: SL-010-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.92	J	0.896	MDL	5.04	PQL	mg/Kg	J	Z
TIN	2.21	J	1.01	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-011-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:22:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1420		0.428	MDL	1.13	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-011-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.62	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.22	J	0.918	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1190		0.419	MDL	1.10	PQL	mg/Kg	J	E

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.89	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.78	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1310		0.386	MDL	1.02	PQL	mg/Kg	J	E

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.31	J	1.01	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.71	J	0.846	MDL	5.04	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1510		0.405	MDL	1.06	PQL	mg/Kg	J	E

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.77	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	4.20	J	0.894	MDL	5.32	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1520		0.405	MDL	1.07	PQL	mg/Kg	J	E

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.99	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.65	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:48:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1480		0.430	MDL	1.13	PQL	mg/Kg	J	E

Sample ID: SL-186-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	103	J	42.2	MDL	113	PQL	mg/Kg	J	Z
TIN	2.96	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.59	J	0.950	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:08:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1510		0.480	MDL	1.26	PQL	mg/Kg	J	E

Sample ID: SL-187-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	123	J	47.1	MDL	126	PQL	mg/Kg	J	Z
TIN	3.32	J	1.26	MDL	12.6	PQL	mg/Kg	U	B
Zirconium	3.18	J	1.06	MDL	6.31	PQL	mg/Kg	J	Z

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1550		0.429	MDL	1.13	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	82.0	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	3.06	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.35	J	0.929	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1540		0.429	MDL	1.13	PQL	mg/Kg	J	E

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	94.9	J	42.6	MDL	114	PQL	mg/Kg	J	Z
TIN	2.91	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.88	J	0.958	MDL	5.70	PQL	mg/Kg	J	Z

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1260		0.407	MDL	1.07	PQL	mg/Kg	J	E

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	86.1	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.93	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.78	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1350		0.454	MDL	1.19	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	88.3	J	44.1	MDL	118	PQL	mg/Kg	J	Z
TIN	3.07	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	2.88	J	0.993	MDL	5.91	PQL	mg/Kg	J	Z

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1280		0.410	MDL	1.08	PQL	mg/Kg	J	E

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	87.7	J	39.5	MDL	106	PQL	mg/Kg	J	Z
TIN	3.03	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.08	J	0.889	MDL	5.29	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1440		0.472	MDL	1.24	PQL	mg/Kg	J	E

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	74.0	J	46.3	MDL	124	PQL	mg/Kg	J	Z
TIN	3.19	J	1.24	MDL	12.4	PQL	mg/Kg	U	B
Zirconium	3.93	J	1.04	MDL	6.21	PQL	mg/Kg	J	Z

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1200		0.460	MDL	1.21	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-195-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 9:44:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	90.1	J	46.0	MDL	123	PQL	mg/Kg	J	Z
TIN	3.26	J	1.23	MDL	12.3	PQL	mg/Kg	U	B
Zirconium	1.69	J	1.04	MDL	6.17	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 9:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1490		0.439	MDL	1.15	PQL	mg/Kg	J	E

Sample ID: SL-196-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	92.1	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	3.08	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.41	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 9:20:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1430		0.439	MDL	1.15	PQL	mg/Kg	J	E

Sample ID: SL-197-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 9:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	81.0	J	43.0	MDL	115	PQL	mg/Kg	J	Z
TIN	3.17	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.34	J	0.969	MDL	5.77	PQL	mg/Kg	J	Z

Sample ID: SL-198-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 8:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1240		0.415	MDL	1.09	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6010B **Matrix:** SO

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.15	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.34	J	0.891	MDL	5.30	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.510		0.0173	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.178	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	85.0		0.117	MDL	0.433	PQL	mg/Kg	J	E, A

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	4.26		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
CHROMIUM	21.3		0.130	MDL	0.433	PQL	mg/Kg	J	Q, A
COBALT	6.96		0.0216	MDL	0.108	PQL	mg/Kg	J	E, A
COPPER	10.8		0.0714	MDL	0.433	PQL	mg/Kg	J	Q, E, A
LEAD	7.36		0.0113	MDL	0.216	PQL	mg/Kg	J	Q, E, A
NICKEL	13.6		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E, A
SILVER	0.0289	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	40.7		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	52.1		0.606	MDL	3.25	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.584		0.0202	MDL	0.126	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.219	J	0.0505	MDL	0.505	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	134		0.136	MDL	0.505	PQL	mg/Kg	J	E, A

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.286		0.0758	MDL	0.253	PQL	mg/Kg	J	Q
ARSENIC	7.21		0.101	MDL	0.505	PQL	mg/Kg	J	Q
CHROMIUM	30.1		0.152	MDL	0.505	PQL	mg/Kg	J	Q, A
COBALT	9.94		0.0253	MDL	0.126	PQL	mg/Kg	J	E, A
COPPER	16.3		0.0834	MDL	0.505	PQL	mg/Kg	J	Q, E, A
LEAD	13.8		0.0131	MDL	0.253	PQL	mg/Kg	J	Q, E, A
NICKEL	19.5		0.126	MDL	0.505	PQL	mg/Kg	J	Q, E, A
SILVER	0.0445	J	0.0152	MDL	0.126	PQL	mg/Kg	J	Z
VANADIUM	57.3		0.0278	MDL	0.126	PQL	mg/Kg	J	Q, A
ZINC	123		0.708	MDL	3.79	PQL	mg/Kg	J	E

Sample ID: SL-010-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:40:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.143		0.0155	MDL	0.0969	PQL	mg/Kg	J	Q

Sample ID: SL-010-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:40:00 *Analysis Type:* REA5 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.262	MDL	0.969	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-010-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 4:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0581	U	0.0581	MDL	0.194	PQL	mg/Kg	UJ	Q
ARSENIC	1.72		0.0775	MDL	0.388	PQL	mg/Kg	J	Q
CADMIUM	0.0697	J	0.0388	MDL	0.0969	PQL	mg/Kg	J	Z
CHROMIUM	21.5		0.116	MDL	0.388	PQL	mg/Kg	J	Q, A
COBALT	7.34		0.0194	MDL	0.0969	PQL	mg/Kg	J	E, A
COPPER	14.8		0.0639	MDL	0.388	PQL	mg/Kg	J	Q, E, A
LEAD	3.17		0.0101	MDL	0.194	PQL	mg/Kg	J	Q, E, A
NICKEL	9.04		0.0969	MDL	0.388	PQL	mg/Kg	J	Q, E, A
VANADIUM	41.8		0.0213	MDL	0.0969	PQL	mg/Kg	J	Q, A
ZINC	61.0		0.543	MDL	2.91	PQL	mg/Kg	J	E

Sample ID: SL-011-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 4:22:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.551		0.0177	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-011-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 4:22:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.207	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 4:22:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	138		0.119	MDL	0.442	PQL	mg/Kg	J	E, A

Sample ID: SL-011-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 4:22:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.171	J	0.0662	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	6.38		0.0883	MDL	0.442	PQL	mg/Kg	J	Q
CHROMIUM	30.4		0.132	MDL	0.442	PQL	mg/Kg	J	Q, A
COBALT	10.5		0.0221	MDL	0.110	PQL	mg/Kg	J	E, A
COPPER	15.9		0.0729	MDL	0.442	PQL	mg/Kg	J	Q, E, A
LEAD	11.5		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-011-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:22:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	19.8		0.110	MDL	0.442	PQL	mg/Kg	J	Q, E, A
SILVER	0.0310	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	59.3		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, A
ZINC	77.9		0.618	MDL	3.31	PQL	mg/Kg	J	E

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.763		0.0180	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	181		1.57	MDL	8.43	PQL	mg/Kg	J	E

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.148	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	184		0.121	MDL	0.449	PQL	mg/Kg	J	E, A

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0674	MDL	0.225	PQL	mg/Kg	J	Z, Q
ARSENIC	7.34		0.0899	MDL	0.449	PQL	mg/Kg	J	Q
CHROMIUM	32.7		0.135	MDL	0.449	PQL	mg/Kg	J	Q, A
COBALT	9.76		0.0225	MDL	0.112	PQL	mg/Kg	J	E, A
COPPER	19.9		0.0742	MDL	0.449	PQL	mg/Kg	J	Q, E, A
LEAD	13.1		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E, A
NICKEL	22.7		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0568	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	58.7		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.295		0.0164	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.111	MDL	0.411	PQL	mg/Kg	J	E, A

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0962	J	0.0616	MDL	0.205	PQL	mg/Kg	J	Z, Q
ARSENIC	3.56		0.0822	MDL	0.411	PQL	mg/Kg	J	Q
CHROMIUM	17.8		0.123	MDL	0.411	PQL	mg/Kg	J	Q, A
COBALT	7.38		0.0205	MDL	0.103	PQL	mg/Kg	J	E, A
COPPER	15.4		0.0678	MDL	0.411	PQL	mg/Kg	J	Q, E, A
LEAD	7.54		0.0107	MDL	0.205	PQL	mg/Kg	J	Q, E, A
NICKEL	12.2		0.103	MDL	0.411	PQL	mg/Kg	J	Q, E, A
SILVER	0.0320	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	38.7		0.0226	MDL	0.103	PQL	mg/Kg	J	Q, A
ZINC	62.7		0.575	MDL	3.08	PQL	mg/Kg	J	E

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.773		0.0170	MDL	0.106	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* REA5 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.288	MDL	1.06	PQL	mg/Kg	J	E, A

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.172	J	0.0639	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	7.98		0.0852	MDL	0.426	PQL	mg/Kg	J	Q
CHROMIUM	39.5		0.128	MDL	0.426	PQL	mg/Kg	J	Q, A
COBALT	13.6		0.0213	MDL	0.106	PQL	mg/Kg	J	E, A
COPPER	21.5		0.0703	MDL	0.426	PQL	mg/Kg	J	Q, E, A
LEAD	14.5		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E, A
NICKEL	27.5		0.106	MDL	0.426	PQL	mg/Kg	J	Q, E, A
SILVER	0.0625	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	74.3		0.0234	MDL	0.106	PQL	mg/Kg	J	Q, A
ZINC	99.5		0.596	MDL	3.19	PQL	mg/Kg	J	E

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.733		0.0172	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.225	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	184		0.116	MDL	0.431	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-018-SA5DN-SS-0.0-0.5 **Collected:** 5/23/2011 2:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.231		0.0646	MDL	0.215	PQL	mg/Kg	J	Q
ARSENIC	7.96		0.0862	MDL	0.431	PQL	mg/Kg	J	Q
CHROMIUM	37.3		0.129	MDL	0.431	PQL	mg/Kg	J	Q, A
COBALT	14.7		0.0215	MDL	0.108	PQL	mg/Kg	J	E, A
COPPER	20.9		0.0711	MDL	0.431	PQL	mg/Kg	J	Q, E, A
LEAD	21.8		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, E, A
NICKEL	26.5		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E, A
SILVER	0.0631	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	68.6		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	116		0.603	MDL	3.23	PQL	mg/Kg	J	E

Sample ID: SL-186-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 2:48:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.703		0.0178	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-186-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 2:48:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.287	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 2:48:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	154		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: SL-186-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 2:48:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.208	J	0.0666	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	7.54		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
CHROMIUM	36.8		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	12.7		0.0222	MDL	0.111	PQL	mg/Kg	J	E, A
COPPER	23.1		0.0732	MDL	0.444	PQL	mg/Kg	J	Q, E, A
LEAD	16.5		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-186-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 2:48:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	26.1		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E, A
SILVER	0.0583	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	69.3		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	101		0.621	MDL	3.33	PQL	mg/Kg	J	E

Sample ID: SL-187-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:08:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.726		0.0198	MDL	0.124	PQL	mg/Kg	J	Q

Sample ID: SL-187-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:08:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.324	J	0.0495	MDL	0.495	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:08:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	173		0.134	MDL	0.495	PQL	mg/Kg	J	E, A

Sample ID: SL-187-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:08:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.243	J	0.0743	MDL	0.248	PQL	mg/Kg	J	Z, Q
ARSENIC	7.81		0.0991	MDL	0.495	PQL	mg/Kg	J	Q
CHROMIUM	37.7		0.149	MDL	0.495	PQL	mg/Kg	J	Q, A
COBALT	13.9		0.0248	MDL	0.124	PQL	mg/Kg	J	E, A
COPPER	25.5		0.0817	MDL	0.495	PQL	mg/Kg	J	Q, E, A
LEAD	20.3		0.0129	MDL	0.248	PQL	mg/Kg	J	Q, E, A
NICKEL	28.0		0.124	MDL	0.495	PQL	mg/Kg	J	Q, E, A
SILVER	0.0616	J	0.0149	MDL	0.124	PQL	mg/Kg	J	Z
VANADIUM	70.5		0.0272	MDL	0.124	PQL	mg/Kg	J	Q, A
ZINC	128		0.693	MDL	3.72	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.773		0.0182	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.247	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	151		0.123	MDL	0.456	PQL	mg/Kg	J	E, A

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.133	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	6.79		0.0911	MDL	0.456	PQL	mg/Kg	J	Q
CHROMIUM	31.6		0.137	MDL	0.456	PQL	mg/Kg	J	Q, A
COBALT	11.6		0.0228	MDL	0.114	PQL	mg/Kg	J	E, A
COPPER	19.4		0.0752	MDL	0.456	PQL	mg/Kg	J	Q, E, A
LEAD	14.1		0.0118	MDL	0.228	PQL	mg/Kg	J	Q, E, A
NICKEL	22.9		0.114	MDL	0.456	PQL	mg/Kg	J	Q, E, A
SILVER	0.0410	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	60.7		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, A
ZINC	86.1		0.638	MDL	3.42	PQL	mg/Kg	J	E

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.781		0.0188	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.360	J	0.0470	MDL	0.470	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	162		0.127	MDL	0.470	PQL	mg/Kg	J	E, A

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.204	J	0.0705	MDL	0.235	PQL	mg/Kg	J	Z, Q
ARSENIC	8.13		0.0940	MDL	0.470	PQL	mg/Kg	J	Q
CHROMIUM	41.2		0.141	MDL	0.470	PQL	mg/Kg	J	Q, A
COBALT	13.7		0.0235	MDL	0.118	PQL	mg/Kg	J	E, A
COPPER	24.2		0.0776	MDL	0.470	PQL	mg/Kg	J	Q, E, A
LEAD	18.4		0.0122	MDL	0.235	PQL	mg/Kg	J	Q, E, A
NICKEL	27.5		0.118	MDL	0.470	PQL	mg/Kg	J	Q, E, A
SILVER	0.0572	J	0.0141	MDL	0.118	PQL	mg/Kg	J	Z
VANADIUM	78.2		0.0259	MDL	0.118	PQL	mg/Kg	J	Q, A
ZINC	128		0.658	MDL	3.53	PQL	mg/Kg	J	E

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.606		0.0170	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.327	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.114	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.250		0.0636	MDL	0.212	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-191-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 10:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.81		0.0848	MDL	0.424	PQL	mg/Kg	J	Q
CHROMIUM	31.7		0.127	MDL	0.424	PQL	mg/Kg	J	Q, A
COBALT	11.1		0.0212	MDL	0.106	PQL	mg/Kg	J	E, A
COPPER	23.8		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E, A
LEAD	17.6		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E, A
NICKEL	23.5		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E, A
VANADIUM	57.2		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, A
ZINC	101		0.594	MDL	3.18	PQL	mg/Kg	J	E

Sample ID: SL-192-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 11:00:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.660		0.0189	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: SL-192-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 11:00:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.230	J	0.0473	MDL	0.473	PQL	mg/Kg	J	Z

Sample ID: SL-192-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 11:00:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	149		0.128	MDL	0.473	PQL	mg/Kg	J	E, A

Sample ID: SL-192-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 11:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.248		0.0710	MDL	0.237	PQL	mg/Kg	J	Q
ARSENIC	6.31		0.0946	MDL	0.473	PQL	mg/Kg	J	Q
CHROMIUM	29.9		0.142	MDL	0.473	PQL	mg/Kg	J	Q, A
COBALT	11.5		0.0237	MDL	0.118	PQL	mg/Kg	J	E, A
COPPER	19.4		0.0781	MDL	0.473	PQL	mg/Kg	J	Q, E, A
LEAD	11.6		0.0123	MDL	0.237	PQL	mg/Kg	J	Q, E, A
NICKEL	21.2		0.118	MDL	0.473	PQL	mg/Kg	J	Q, E, A
SILVER	0.0815	J	0.0142	MDL	0.118	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	56.7		0.0260	MDL	0.118	PQL	mg/Kg	J	Q, A
ZINC	89.4		0.662	MDL	3.55	PQL	mg/Kg	J	E

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.589		0.0174	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.200	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.118	MDL	0.436	PQL	mg/Kg	J	E, A

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.145	J	0.0654	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	6.95		0.0872	MDL	0.436	PQL	mg/Kg	J	Q
CHROMIUM	35.1		0.131	MDL	0.436	PQL	mg/Kg	J	Q, A
COBALT	10.3		0.0218	MDL	0.109	PQL	mg/Kg	J	E, A
COPPER	27.8		0.0720	MDL	0.436	PQL	mg/Kg	J	Q, E, A
LEAD	16.7		0.0113	MDL	0.218	PQL	mg/Kg	J	Q, E, A
NICKEL	37.5		0.109	MDL	0.436	PQL	mg/Kg	J	Q, E, A
VANADIUM	49.3		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, A
ZINC	88.8		0.611	MDL	3.27	PQL	mg/Kg	J	E

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.693		0.0195	MDL	0.122	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	122		0.0317	MDL	0.609	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.302	J	0.0487	MDL	0.487	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	164		0.132	MDL	0.487	PQL	mg/Kg	J	E, A

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	41.4		0.0731	MDL	0.244	PQL	mg/Kg	J	Q
ARSENIC	6.50		0.0975	MDL	0.487	PQL	mg/Kg	J	Q
CHROMIUM	33.6		0.146	MDL	0.487	PQL	mg/Kg	J	Q, A
COBALT	11.9		0.0244	MDL	0.122	PQL	mg/Kg	J	E, A
COPPER	23.0		0.0804	MDL	0.487	PQL	mg/Kg	J	Q, E, A
NICKEL	23.6		0.122	MDL	0.487	PQL	mg/Kg	J	Q, E, A
SILVER	0.0541	J	0.0146	MDL	0.122	PQL	mg/Kg	J	Z
VANADIUM	61.8		0.0268	MDL	0.122	PQL	mg/Kg	J	Q, A
ZINC	96.7		0.682	MDL	3.65	PQL	mg/Kg	J	E

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.718		0.0195	MDL	0.122	PQL	mg/Kg	J	Q

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.236	J	0.0488	MDL	0.488	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	152		0.132	MDL	0.488	PQL	mg/Kg	J	E, A

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.273		0.0733	MDL	0.244	PQL	mg/Kg	J	Q
ARSENIC	9.55		0.0977	MDL	0.488	PQL	mg/Kg	J	Q
CHROMIUM	29.7		0.147	MDL	0.488	PQL	mg/Kg	J	Q, A
COBALT	13.3		0.0244	MDL	0.122	PQL	mg/Kg	J	E, A
COPPER	24.1		0.0806	MDL	0.488	PQL	mg/Kg	J	Q, E, A
LEAD	18.5		0.0127	MDL	0.244	PQL	mg/Kg	J	Q, E, A
NICKEL	29.1		0.122	MDL	0.488	PQL	mg/Kg	J	Q, E, A
VANADIUM	51.3		0.0269	MDL	0.122	PQL	mg/Kg	J	Q, A
ZINC	112		0.684	MDL	3.66	PQL	mg/Kg	J	E

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.742		0.0179	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.291	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	190		0.121	MDL	0.448	PQL	mg/Kg	J	E, A

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.195	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	7.41		0.0897	MDL	0.448	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	39.4		0.135	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	14.2		0.0224	MDL	0.112	PQL	mg/Kg	J	E, A
COPPER	24.5		0.0740	MDL	0.448	PQL	mg/Kg	J	Q, E, A
LEAD	16.9		0.0117	MDL	0.224	PQL	mg/Kg	J	Q, E, A
NICKEL	28.1		0.112	MDL	0.448	PQL	mg/Kg	J	Q, E, A
SILVER	0.109	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	72.8		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, A
ZINC	108		0.628	MDL	3.36	PQL	mg/Kg	J	E

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.738		0.0178	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.348	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	167		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0666	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	7.77		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
CHROMIUM	37.6		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	13.2		0.0222	MDL	0.111	PQL	mg/Kg	J	E, A
COPPER	24.0		0.0733	MDL	0.444	PQL	mg/Kg	J	Q, E, A
LEAD	17.8		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E, A
NICKEL	26.6		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E, A
VANADIUM	71.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	110		0.622	MDL	3.33	PQL	mg/Kg	J	E

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.567		0.0173	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* REA3 *Dilution:* 2

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

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	6.55		0.0865	MDL	0.432	PQL	mg/Kg	J	Q
CHROMIUM	26.9		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
COBALT	8.31		0.0216	MDL	0.108	PQL	mg/Kg	J	E, A
COPPER	20.4		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E, A
LEAD	12.6		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E, A
NICKEL	22.6		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E, A
VANADIUM	42.8		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	142		0.605	MDL	3.24	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-008-SA5DN-SS-0.0-0.5 **Collected:** 5/23/2011 5:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5DN-SS-0.0-0.5 **Collected:** 5/23/2011 5:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.26	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA5DN-SS-0.0-0.5 **Collected:** 5/23/2011 4:22:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.67	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-012-SA5DN-SS-0.0-0.5 **Collected:** 5/23/2011 3:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.64	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5DN-SS-0.0-0.5 **Collected:** 5/23/2011 3:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5DN-SS-0.0-0.5 **Collected:** 5/23/2011 2:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.56	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 2:48:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.75	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-191-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.69	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.78	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.25	MDL	1.3	PQL	mg/Kg	J	Z

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

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0034	J	0.0028	MDL	0.0985	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0084	J	0.0036	MDL	0.126	PQL	mg/Kg	J	Z

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0376	J	0.0031	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0415	J	0.0035	MDL	0.122	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0083	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	21.5	J	18.7	MDL	37.5	PQL	ng/Kg	J	Z

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	18.4	J	17.3	MDL	34.6	PQL	ng/Kg	J	Z

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	32.1	J	18.3	MDL	36.6	PQL	ng/Kg	J	Z

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	21.3	J	18.4	MDL	36.8	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	11	PQL	mg/Kg	UJ	Q

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* REA2 *Dilution:* 25

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	11	U	11	MDL	34	PQL	mg/Kg	R	Q
EFH (C15-C20)	11	U	11	MDL	34	PQL	mg/Kg	R	Q
EFH (C8-C11)	11	U	11	MDL	34	PQL	mg/Kg	R	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* REA2 *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	350		21	MDL	62	PQL	mg/Kg	U	B

Sample ID: SL-186-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:48:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.63	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.98	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	1.9	J	0.93	MDL	2.8	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.40	U	0.40	MDL	0.40	PQL	ug/Kg	UJ	L

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.47		0.087	MDL	0.45	PQL	ug/Kg	J	Q, Q
4,4'-DDT	1.8		0.087	MDL	0.45	PQL	ug/Kg	J	Q
BETA-BHC	0.23		0.079	MDL	0.22	PQL	ug/Kg	J	Q, Q
DELTA-BHC	0.13	J	0.047	MDL	0.22	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.37	U	0.37	MDL	0.45	PQL	ug/Kg	UJ	L
ENDRIN	0.087	U	0.087	MDL	0.45	PQL	ug/Kg	R	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-010-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	L
ENDRIN KETONE	0.087	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.1	J	0.90	MDL	3.8	PQL	ug/Kg	J	Z
DELTA-BHC	0.11	J	0.040	MDL	0.19	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.26	U	0.26	MDL	0.38	PQL	ug/Kg	UJ	L
gamma-BHC (Lindane)	0.13	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.17	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	L

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.15	U	0.15	MDL	0.35	PQL	ug/Kg	UJ	L

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.15	J	0.066	MDL	0.18	PQL	ug/Kg	J	Z
Chlordane	1.9	J	0.88	MDL	3.8	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	L

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.6	J	0.88	MDL	3.7	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-186-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.075	U	0.075	MDL	0.39	PQL	ug/Kg	UJ	L

Sample ID: SL-187-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	4.3		1.0	MDL	4.3	PQL	ug/Kg	J	S
DELTA-BHC	0.27		0.046	MDL	0.21	PQL	ug/Kg	J	S
DIELDRIN	2.0		0.084	MDL	0.43	PQL	ug/Kg	J	S
ENDOSULFAN II	1.5	U	1.5	MDL	1.5	PQL	ug/Kg	UJ	L

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.9	J	0.92	MDL	3.9	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	L
MIREX	0.22	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.5	J	0.94	MDL	4.0	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.21	U	0.21	MDL	0.40	PQL	ug/Kg	UJ	L

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.33	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
DELTA-BHC	0.056	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.39	U	0.39	MDL	0.39	PQL	ug/Kg	UJ	L

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.4	J	0.98	MDL	4.2	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.081	U	0.081	MDL	0.42	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.080	J	0.042	MDL	0.20	PQL	ug/Kg	J	Z

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.060	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.45	U	0.45	MDL	0.45	PQL	ug/Kg	UJ	L
HEPTACHLOR EPOXIDE	0.14	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.8	J	1.0	MDL	4.3	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.095	U	0.095	MDL	0.43	PQL	ug/Kg	UJ	L

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.97	U	0.97	MDL	0.97	PQL	ug/Kg	UJ	L

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	L
ENDRIN ALDEHYDE	0.32	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.12	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.069	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.3	J	0.93	MDL	3.9	PQL	ug/Kg	J	Z
DELTA-BHC	0.059	J	0.042	MDL	0.19	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.15	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z, L
gamma-BHC (Lindane)	0.077	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.18	J	0.077	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	15	J	11	MDL	36	PQL	ug/Kg	J	Z

Sample ID: SL-186-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.1	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-187-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.6	J	1.3	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.8	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.7	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	7.0	J	1.9	MDL	10	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	3.6	J	2.3	MDL	10	PQL	ug/Kg	J	Z

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	10	J	5.5	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.8	J	0.41	MDL	2.1	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	J	0.48	MDL	2.1	PQL	ug/Kg	J	Z
Aroclor 5460	1.4	J	1.2	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.1	J	2.1	MDL	9.3	PQL	ug/Kg	J	Z

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.1	J	0.41	MDL	2.1	PQL	ug/Kg	J	Z
AROCLOR 1260	0.66	J	0.49	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	11	J	6.3	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	2.3		0.45	MDL	2.0	PQL	ug/Kg	J	S
Aroclor 5460	3.6	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 100

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	170	J	43	MDL	190	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8151A **Matrix:** SO

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	200	J	100	MDL	330	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.11	J	0.076	MDL	0.17	PQL	ug/Kg	J	Z
MCPA	200	J	77	MDL	250	PQL	ug/Kg	J	Z

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	160	J	85	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.55	J	0.49	MDL	1.5	PQL	ug/Kg	J	Z
DICHLOROPROP	1.3	J	0.98	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.8	J	1.3	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A Matrix: SO

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	2.3	J	1.5	MDL	4.5	PQL	ug/Kg	J	Z

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.9	J	1.4	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	100	J	84	MDL	280	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C Matrix: SO

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	61	J	22	MDL	440	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	90	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	85	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	37	J	19	MDL	370	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-012-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 3:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBAZOLE	26	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	29	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	78	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 3:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	78	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-014-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 2:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA5DN-SS-0.0-0.5 ***Collected:*** 5/23/2011 2:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	18	MDL	360	PQL	ug/Kg	J	Z
Di-n-butylphthalate	19	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-186-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 2:48:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	55	J	19	MDL	380	PQL	ug/Kg	J	Z
CHRYSENE	38	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-187-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:08:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	49	J	21	MDL	210	PQL	ug/Kg	J	Z
ANTHRACENE	150	J	21	MDL	210	PQL	ug/Kg	J	Z
CARBAZOLE	130	J	21	MDL	210	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: PrepDE160_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	360	J	19	MDL	380	PQL	ug/Kg	J	Z
FLUORANTHENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	25	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	20	MDL	410	PQL	ug/Kg	J	Z

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	49	J	21	MDL	410	PQL	ug/Kg	J	Z

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	58	J	21	MDL	420	PQL	ug/Kg	J	Z

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	250	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	45	J	19	MDL	190	PQL	ug/Kg	J	Z
ANTHRACENE	110	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	87	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	89	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	89	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	130	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	30	J	19	MDL	190	PQL	ug/Kg	J	Z
Di-n-octylphthalate	25	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	75	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	88	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	150	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	29	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	88	J	18	MDL	370	PQL	ug/Kg	J	Z
CHRYSENE	34	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.95	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	4.2		0.72	MDL	1.8	PQL	ug/Kg	J	L
INDENO(1,2,3-CD)PYRENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z, Q
NAPHTHALENE	0.95	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory:** LL

EDD Filename: PrepDE160_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-008-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 5:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	93		4.4	MDL	11	PQL	ug/Kg	J	L
Di-n-octylphthalate	51	J	39	MDL	120	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 4:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.7	J	1.9	MDL	9.4	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	18		3.8	MDL	9.4	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	3.8	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.1	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z

Sample ID: SL-012-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	340		3.7	MDL	9.4	PQL	ug/Kg	J	L

Sample ID: SL-013-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 3:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	20		3.5	MDL	8.6	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	8.4	J	3.5	MDL	8.6	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	50	J	31	MDL	93	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.7	J	3.5	MDL	8.6	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	7.0	J	3.5	MDL	8.6	PQL	ug/Kg	J	Z
PHENANTHRENE	4.0	J	3.5	MDL	8.6	PQL	ug/Kg	J	Z

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	22		3.7	MDL	9.2	PQL	ug/Kg	J	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-014-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	7.8	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PHENANTHRENE	5.4	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA5DN-SS-0.0-0.5 *Collected:* 5/23/2011 2:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	6.0	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	8.6	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	11		3.7	MDL	9.2	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	5.8	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.7	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	6.7	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PHENANTHRENE	5.6	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-186-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.80	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHENE	0.82	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	16		0.76	MDL	1.9	PQL	ug/Kg	J	L
Butylbenzylphthalate	11	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.9	MDL	21	PQL	ug/Kg	J	Z, L
FLUORENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-187-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	5.9	J	4.3	MDL	11	PQL	ug/Kg	J	Z
FLUORENE	7.3	J	4.3	MDL	11	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-188-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.81	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.5	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	0.48	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	4.1		0.77	MDL	1.9	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	0.41	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.9		0.78	MDL	2.0	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	0.99	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.96	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.70	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.9		0.73	MDL	1.8	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.6	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.46	J	0.41	MDL	2.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-192-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.1	J	0.41	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	7.6		0.82	MDL	2.1	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	1.1	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z
FLUORENE	2.0	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-193-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	4.1	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z, L
BENZO(G,H,I)PERYLENE	3.7	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	61	J	33	MDL	98	PQL	ug/Kg	J	Z
CHRYSENE	3.5	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
FLUORANTHENE	4.4	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
PYRENE	4.8	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-194-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.8	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
ANTHRACENE	0.87	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	16		0.84	MDL	2.1	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	1.6	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.6	J	7.5	MDL	23	PQL	ug/Kg	J	Z, L
FLUORENE	1.5	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	4.4	J	4.2	MDL	10	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	5.3	J	4.2	MDL	10	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	10	J	4.2	MDL	10	PQL	ug/Kg	J	L
CHRYSENE	7.3	J	2.1	MDL	10	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.4	J	4.2	MDL	10	PQL	ug/Kg	J	Z
PHENANTHRENE	5.0	J	4.2	MDL	10	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-195-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	9.0	J	4.2	MDL	10	PQL	ug/Kg	J	Z

Sample ID: SL-196-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.82	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.5	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	14		0.77	MDL	1.9	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z, L
FLUORENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.8	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-197-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	6.7	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z

Sample ID: SL-198-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	8.0	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	6.3	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PHENANTHRENE	5.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-191-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
RDX	68	J	55	MDL	130	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: PrepDE160_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE160

Method Blank Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15108EB220209	6/2/2011 2:09:00 AM	CALCIUM	6.51 mg/Kg	SL-008-SA5DN-SS-0.0-0.5
		PHOSPHORUS	1.32 mg/Kg	SL-009-SA5DN-SS-0.0-0.5
		TIN	1.56 mg/Kg	SL-010-SA5DN-SS-0.0-0.5
				SL-011-SA5DN-SS-0.0-0.5
				SL-012-SA5DN-SS-0.0-0.5
				SL-013-SA5DN-SS-0.0-0.5
				SL-014-SA5DN-SS-0.0-0.5
				SL-018-SA5DN-SS-0.0-0.5
				SL-186-SA5DN-SS-0.0-0.5
				SL-187-SA5DN-SS-0.0-0.5
				SL-188-SA5DN-SS-0.0-0.5
				SL-189-SA5DN-SS-0.0-0.5
				SL-191-SA5DN-SS-0.0-0.5
				SL-192-SA5DN-SS-0.0-0.5
				SL-193-SA5DN-SS-0.0-0.5
				SL-194-SA5DN-SS-0.0-0.5
				SL-195-SA5DN-SS-0.0-0.5
				SL-196-SA5DN-SS-0.0-0.5
				SL-197-SA5DN-SS-0.0-0.5
				SL-198-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-008-SA5DN-SS-0.0-0.5(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-009-SA5DN-SS-0.0-0.5(RES)	TIN	3.35 mg/Kg	3.35U mg/Kg
SL-010-SA5DN-SS-0.0-0.5(RES)	TIN	2.21 mg/Kg	2.21U mg/Kg
SL-011-SA5DN-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-012-SA5DN-SS-0.0-0.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-013-SA5DN-SS-0.0-0.5(RES)	TIN	2.31 mg/Kg	2.31U mg/Kg
SL-014-SA5DN-SS-0.0-0.5(RES)	TIN	2.77 mg/Kg	2.77U mg/Kg
SL-018-SA5DN-SS-0.0-0.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-186-SA5DN-SS-0.0-0.5(RES)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-187-SA5DN-SS-0.0-0.5(RES)	TIN	3.32 mg/Kg	3.32U mg/Kg
SL-188-SA5DN-SS-0.0-0.5(RES)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-189-SA5DN-SS-0.0-0.5(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-191-SA5DN-SS-0.0-0.5(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-192-SA5DN-SS-0.0-0.5(RES)	TIN	3.07 mg/Kg	3.07U mg/Kg
SL-193-SA5DN-SS-0.0-0.5(RES)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-194-SA5DN-SS-0.0-0.5(RES)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-195-SA5DN-SS-0.0-0.5(RES)	TIN	3.26 mg/Kg	3.26U mg/Kg
SL-196-SA5DN-SS-0.0-0.5(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-197-SA5DN-SS-0.0-0.5(RES)	TIN	3.17 mg/Kg	3.17U mg/Kg
SL-198-SA5DN-SS-0.0-0.5(RES)	TIN	3.15 mg/Kg	3.15U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15726AB221522A	6/7/2011 3:22:00 PM	LEAD	0.0120 mg/Kg	SL-008-SA5DN-SS-0.0-0.5 SL-009-SA5DN-SS-0.0-0.5 SL-010-SA5DN-SS-0.0-0.5 SL-011-SA5DN-SS-0.0-0.5 SL-012-SA5DN-SS-0.0-0.5 SL-013-SA5DN-SS-0.0-0.5 SL-014-SA5DN-SS-0.0-0.5 SL-018-SA5DN-SS-0.0-0.5 SL-186-SA5DN-SS-0.0-0.5 SL-187-SA5DN-SS-0.0-0.5 SL-188-SA5DN-SS-0.0-0.5 SL-189-SA5DN-SS-0.0-0.5 SL-191-SA5DN-SS-0.0-0.5 SL-192-SA5DN-SS-0.0-0.5 SL-193-SA5DN-SS-0.0-0.5 SL-194-SA5DN-SS-0.0-0.5 SL-195-SA5DN-SS-0.0-0.5 SL-196-SA5DN-SS-0.0-0.5 SL-197-SA5DN-SS-0.0-0.5 SL-198-SA5DN-SS-0.0-0.5

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P48483AB321813A	6/4/2011 6:13:00 PM	EFH (C30-C40)	1.4 mg/Kg	SL-012-SA5DN-SS-0.0-0.5 SL-013-SA5DN-SS-0.0-0.5 SL-014-SA5DN-SS-0.0-0.5 SL-018-SA5DN-SS-0.0-0.5 SL-186-SA5DN-SS-0.0-0.5 SL-191-SA5DN-SS-0.0-0.5 SL-192-SA5DN-SS-0.0-0.5 SL-197-SA5DN-SS-0.0-0.5 SL-198-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-013-SA5DN-SS-0.0-0.5(REA2)	EFH (C30-C40)	350 mg/Kg	350U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA5DN -SS-0.0-0.5MS SL-012-SA5DN -SS-0.0-0.5MSD (SL-012-SA5DN -SS-0.0-0.5)	DIETHYLENE GLYCOL	58	47	59.00-109.00	21 (20.00)	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN -SS-0.0-0.5MS SL-008-SA5DN -SS-0.0-0.5MSD (SL-008-SA5DN -SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	269 -	357 224	29.00-146.00 39.00-149.00	- -	AROCLOR 1016, 1221, 1232 AROCLOR 1242, 1248, 1254,1260	No Qual, Diluted Out

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-009-SA5DN -SS-0.0-0.5MSD (SL-009-SA5DN -SS-0.0-0.5)	DIELDRIN	-	-	19.00-154.00	96 (50.00)	DIELDRIN	J(all detects)
SL-009-SA5DN -SS-0.0-0.5MS SL-009-SA5DN -SS-0.0-0.5MSD (SL-009-SA5DN -SS-0.0-0.5)	4,4'-DDT BETA-BHC ENDRIN	- 0 0	-34 - -	10.00-176.00 14.00-147.00 11.00-149.00	- 200 (50.00) 200 (50.00)	4,4'-DDT BETA-BHC ENDRIN	J(all detects) R(all non-detects)
SL-009-SA5DN -SS-0.0-0.5MSD (SL-009-SA5DN -SS-0.0-0.5)	4,4'-DDE	-	6	18.00-161.00	74 (50.00)	4,4'-DDE	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA5DN -SS-0.0-0.5MS SL-012-SA5DN -SS-0.0-0.5MSD (SL-012-SA5DN -SS-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	- 391	1202 3019	49.00-123.00 49.00-123.00	34 (20.00) 28 (20.00)	EFH (C21-C30) EFH (C30-C40)	No Qual, Diluted Out
SL-012-SA5DN -SS-0.0-0.5MS SL-012-SA5DN -SS-0.0-0.5MSD (SL-012-SA5DN -SS-0.0-0.5)	EFH (C12-C14) EFH (C15-C20) EFH (C8-C11)	0 0 0	0 0 0	49.00-123.00 49.00-123.00 49.00-123.00	- - -	EFH (C12-C14) EFH (C15-C20) EFH (C8-C11)	No Qual, Diluted Out

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-010-SA5DN -SS-0.0-0.5MSD (SL-010-SA5DN -SS-0.0-0.5)	2,4-D	-	-	17.00-180.00	52 (35.00)	2,4-D	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN -SS-0.0-0.5MS SL-008-SA5DN -SS-0.0-0.5MSD (SL-008-SA5DN -SS-0.0-0.5)	AROCLOR 1260	-5	0	39.00-149.00	-	AROCLOR 1242, 1248, 1254,1260	No Qual Diluted Out

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN -SS-0.0-0.5MS	DIBENZO(A,H)ANTHRACENE	153	-	22.00-133.00	-	DIBENZO(A,H)ANTHRACENE	J(all detects)
(SL-008-SA5DN -SS-0.0-0.5)	INDENO(1,2,3-CD)PYRENE	152	-	21.00-143.00	-	INDENO(1,2,3-CD)PYRENE	

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN -SS-0.0-0.5MS	ALUMINUM	1579	2154	75.00-125.00	-	ALUMINUM	NoQual, >4x
SL-008-SA5DN -SS-0.0-0.5MSD	CALCIUM	351	174	75.00-125.00	-	CALCIUM	
(SL-008-SA5DN -SS-0.0-0.5	IRON	726	1181	75.00-125.00	-	IRON	
SL -009-SA5DN -SS-0.0-0.5	MAGNESIUM	210	233	75.00-125.00	-	MAGNESIUM	
SL -010-SA5DN -SS-0.0-0.5	POTASSIUM	148	155	75.00-125.00	-	POTASSIUM	
SL -011-SA5DN -SS-0.0-0.5							
SL -012-SA5DN -SS-0.0-0.5							
SL -013-SA5DN -SS-0.0-0.5							
SL -014-SA5DN -SS-0.0-0.5							
SL -018-SA5DN -SS-0.0-0.5							
SL -186-SA5DN -SS-0.0-0.5							
SL -187-SA5DN -SS-0.0-0.5							
SL -188-SA5DN -SS-0.0-0.5							
SL -189-SA5DN -SS-0.0-0.5							
SL -191-SA5DN -SS-0.0-0.5							
SL -192-SA5DN -SS-0.0-0.5							
SL -193-SA5DN -SS-0.0-0.5							
SL -194-SA5DN -SS-0.0-0.5							
SL -195-SA5DN -SS-0.0-0.5							
SL -196-SA5DN -SS-0.0-0.5							
SL -197-SA5DN -SS-0.0-0.5							
SL -198-SA5DN -SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SS-0.0-0.5MS (SL-008-SA5DN-SS-0.0-0.5 SL -009-SA5DN-SS-0.0-0.5 SL -010-SA5DN-SS-0.0-0.5 SL -011-SA5DN-SS-0.0-0.5 SL -012-SA5DN-SS-0.0-0.5 SL -013-SA5DN-SS-0.0-0.5 SL -014-SA5DN-SS-0.0-0.5 SL -018-SA5DN-SS-0.0-0.5 SL -186-SA5DN-SS-0.0-0.5 SL -187-SA5DN-SS-0.0-0.5)	FLUORIDE	69	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-188-SA5DN-SS-0.0-0.5MS (SL-188-SA5DN-SS-0.0-0.5 SL -189-SA5DN-SS-0.0-0.5 SL -191-SA5DN-SS-0.0-0.5 SL -192-SA5DN-SS-0.0-0.5 SL -193-SA5DN-SS-0.0-0.5 SL -194-SA5DN-SS-0.0-0.5 SL -195-SA5DN-SS-0.0-0.5 SL -196-SA5DN-SS-0.0-0.5 SL -197-SA5DN-SS-0.0-0.5 SL -198-SA5DN-SS-0.0-0.5)	FLUORIDE	47	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-010-SA5DN-SS-0.0-0.5MS **SL-010-SA5DN-SS-0.0-0.5MSD** (SL-008-SA5DN-SS-0.0-0.5 SL -009-SA5DN-SS-0.0-0.5 SL -010-SA5DN-SS-0.0-0.5 SL -011-SA5DN-SS-0.0-0.5 SL -012-SA5DN-SS-0.0-0.5 SL -013-SA5DN-SS-0.0-0.5 SL -014-SA5DN-SS-0.0-0.5 SL -018-SA5DN-SS-0.0-0.5 SL -186-SA5DN-SS-0.0-0.5 SL -187-SA5DN-SS-0.0-0.5 SL -188-SA5DN-SS-0.0-0.5 SL -189-SA5DN-SS-0.0-0.5 SL -191-SA5DN-SS-0.0-0.5 SL -192-SA5DN-SS-0.0-0.5 SL -193-SA5DN-SS-0.0-0.5 SL -194-SA5DN-SS-0.0-0.5 SL -195-SA5DN-SS-0.0-0.5 SL -196-SA5DN-SS-0.0-0.5 SL -197-SA5DN-SS-0.0-0.5 SL -198-SA5DN-SS-0.0-0.5)	TITANIUM	472	486	75.00-125.00	-	TITANIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SS-0.0-0.5MSD (SL-008-SA5DN-SS-0.0-0.5 SL-009-SA5DN-SS-0.0-0.5 SL-010-SA5DN-SS-0.0-0.5 SL-011-SA5DN-SS-0.0-0.5 SL-012-SA5DN-SS-0.0-0.5 SL-013-SA5DN-SS-0.0-0.5 SL-014-SA5DN-SS-0.0-0.5 SL-018-SA5DN-SS-0.0-0.5 SL-186-SA5DN-SS-0.0-0.5 SL-187-SA5DN-SS-0.0-0.5 SL-188-SA5DN-SS-0.0-0.5 SL-189-SA5DN-SS-0.0-0.5 SL-191-SA5DN-SS-0.0-0.5 SL-192-SA5DN-SS-0.0-0.5 SL-193-SA5DN-SS-0.0-0.5 SL-194-SA5DN-SS-0.0-0.5 SL-195-SA5DN-SS-0.0-0.5 SL-196-SA5DN-SS-0.0-0.5 SL-197-SA5DN-SS-0.0-0.5 SL-198-SA5DN-SS-0.0-0.5)	ARSENIC CHROMIUM VANADIUM	- - -	151 162 223	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ARSENIC CHROMIUM VANADIUM	J(all detects)
SL-008-SA5DN-SS-0.0-0.5MS **SL-008-SA5DN-SS-0.0-0.5MSD** (SL-008-SA5DN-SS-0.0-0.5 SL-009-SA5DN-SS-0.0-0.5 SL-010-SA5DN-SS-0.0-0.5 SL-011-SA5DN-SS-0.0-0.5 SL-012-SA5DN-SS-0.0-0.5 SL-013-SA5DN-SS-0.0-0.5 SL-014-SA5DN-SS-0.0-0.5 SL-018-SA5DN-SS-0.0-0.5 SL-186-SA5DN-SS-0.0-0.5 SL-187-SA5DN-SS-0.0-0.5 SL-188-SA5DN-SS-0.0-0.5 SL-189-SA5DN-SS-0.0-0.5 SL-191-SA5DN-SS-0.0-0.5 SL-192-SA5DN-SS-0.0-0.5 SL-193-SA5DN-SS-0.0-0.5 SL-194-SA5DN-SS-0.0-0.5 SL-195-SA5DN-SS-0.0-0.5 SL-196-SA5DN-SS-0.0-0.5 SL-197-SA5DN-SS-0.0-0.5 SL-198-SA5DN-SS-0.0-0.5)	ANTIMONY BERYLLIUM COBALT COPPER LEAD NICKEL ZINC	30 71 - - - - 45	35 - - 130 180 138 175	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - 25 (20.00) 23 (20.00) 21 (20.00) 21 (20.00) 21 (20.00)	ANTIMONY BERYLLIUM COBALT COPPER LEAD NICKEL ZINC	J(all detects) UJ(all non-detects) Zn No Qual based on %R, >4x
SL-008-SA5DN-SS-0.0-0.5MSD (SL-008-SA5DN-SS-0.0-0.5 SL-009-SA5DN-SS-0.0-0.5 SL-010-SA5DN-SS-0.0-0.5 SL-011-SA5DN-SS-0.0-0.5 SL-012-SA5DN-SS-0.0-0.5 SL-013-SA5DN-SS-0.0-0.5 SL-014-SA5DN-SS-0.0-0.5 SL-018-SA5DN-SS-0.0-0.5 SL-186-SA5DN-SS-0.0-0.5 SL-187-SA5DN-SS-0.0-0.5 SL-188-SA5DN-SS-0.0-0.5 SL-189-SA5DN-SS-0.0-0.5 SL-191-SA5DN-SS-0.0-0.5 SL-192-SA5DN-SS-0.0-0.5 SL-193-SA5DN-SS-0.0-0.5 SL-194-SA5DN-SS-0.0-0.5 SL-195-SA5DN-SS-0.0-0.5 SL-196-SA5DN-SS-0.0-0.5 SL-197-SA5DN-SS-0.0-0.5 SL-198-SA5DN-SS-0.0-0.5)	BARIUM	-	398	75.00-125.00	26 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual based on %R, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-008-SA5DN-SS-0.0-0.5DUP (SL-008-SA5DN-SS-0.0-0.5 SL -009-SA5DN-SS-0.0-0.5 SL -010-SA5DN-SS-0.0-0.5 SL -011-SA5DN-SS-0.0-0.5 SL -012-SA5DN-SS-0.0-0.5 SL -013-SA5DN-SS-0.0-0.5 SL -014-SA5DN-SS-0.0-0.5 SL -018-SA5DN-SS-0.0-0.5 SL -186-SA5DN-SS-0.0-0.5 SL -187-SA5DN-SS-0.0-0.5 SL -188-SA5DN-SS-0.0-0.5 SL -189-SA5DN-SS-0.0-0.5 SL -191-SA5DN-SS-0.0-0.5 SL -192-SA5DN-SS-0.0-0.5 SL -193-SA5DN-SS-0.0-0.5 SL -194-SA5DN-SS-0.0-0.5 SL -195-SA5DN-SS-0.0-0.5 SL -196-SA5DN-SS-0.0-0.5 SL -197-SA5DN-SS-0.0-0.5 SL -198-SA5DN-SS-0.0-0.5)	Zirconium	21	20.00	No Qual, OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-008-SA5DN-SS-0.0-0.5DUP (SL-008-SA5DN-SS-0.0-0.5 SL -009-SA5DN-SS-0.0-0.5 SL -010-SA5DN-SS-0.0-0.5 SL -011-SA5DN-SS-0.0-0.5 SL -012-SA5DN-SS-0.0-0.5 SL -013-SA5DN-SS-0.0-0.5 SL -014-SA5DN-SS-0.0-0.5 SL -018-SA5DN-SS-0.0-0.5 SL -186-SA5DN-SS-0.0-0.5 SL -187-SA5DN-SS-0.0-0.5 SL -188-SA5DN-SS-0.0-0.5 SL -189-SA5DN-SS-0.0-0.5 SL -191-SA5DN-SS-0.0-0.5 SL -192-SA5DN-SS-0.0-0.5 SL -193-SA5DN-SS-0.0-0.5 SL -194-SA5DN-SS-0.0-0.5 SL -195-SA5DN-SS-0.0-0.5 SL -196-SA5DN-SS-0.0-0.5 SL -197-SA5DN-SS-0.0-0.5 SL -198-SA5DN-SS-0.0-0.5)	HEXAVALENT CHROMIUM	74	20.00	No Qual, OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-010-SA5DN-SS-0.0-0.5DUP (SL-008-SA5DN-SS-0.0-0.5 SL -009-SA5DN-SS-0.0-0.5 SL -010-SA5DN-SS-0.0-0.5 SL -011-SA5DN-SS-0.0-0.5 SL -012-SA5DN-SS-0.0-0.5 SL -013-SA5DN-SS-0.0-0.5 SL -014-SA5DN-SS-0.0-0.5 SL -018-SA5DN-SS-0.0-0.5 SL -186-SA5DN-SS-0.0-0.5 SL -187-SA5DN-SS-0.0-0.5 SL -188-SA5DN-SS-0.0-0.5 SL -189-SA5DN-SS-0.0-0.5 SL -191-SA5DN-SS-0.0-0.5 SL -192-SA5DN-SS-0.0-0.5 SL -193-SA5DN-SS-0.0-0.5 SL -194-SA5DN-SS-0.0-0.5 SL -195-SA5DN-SS-0.0-0.5 SL -196-SA5DN-SS-0.0-0.5 SL -197-SA5DN-SS-0.0-0.5 SL -198-SA5DN-SS-0.0-0.5)	TITANIUM	23	20.00	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE160 Laboratory: LL

EDD Filename: DE160_v1 eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11470AQ240232A P11470AY240250A (SL-011-SA5DN-SS-0.0-0.5)	AROCLOR 1016 Aroclor 5442	154 -	- 113	72.00-120.00 36.00-106.00	- -	AROCLOR 1016 Aroclor 5432, Aroclor 5442 Aroclor 5460	J (all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11475AQ241656A (SL-008-SA5DN-SS-0.0-0.5 SL-009-SA5DN-SS-0.0-0.5 SL-010-SA5DN-SS-0.0-0.5 SL-011-SA5DN-SS-0.0-0.5 SL-012-SA5DN-SS-0.0-0.5 SL-013-SA5DN-SS-0.0-0.5 SL-014-SA5DN-SS-0.0-0.5 SL-018-SA5DN-SS-0.0-0.5 SL-186-SA5DN-SS-0.0-0.5 SL-187-SA5DN-SS-0.0-0.5 SL-188-SA5DN-SS-0.0-0.5 SL-189-SA5DN-SS-0.0-0.5 SL-191-SA5DN-SS-0.0-0.5 SL-192-SA5DN-SS-0.0-0.5 SL-193-SA5DN-SS-0.0-0.5 SL-194-SA5DN-SS-0.0-0.5 SL-195-SA5DN-SS-0.0-0.5 SL-196-SA5DN-SS-0.0-0.5 SL-197-SA5DN-SS-0.0-0.5 SL-198-SA5DN-SS-0.0-0.5)	ENDOSULFAN II	57	-	63.00-127.00	-	ENDOSULFAN II	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8LALCSQ262333 (SL-008-SA5DN-SS-0.0-0.5 SL-009-SA5DN-SS-0.0-0.5 SL-010-SA5DN-SS-0.0-0.5 SL-011-SA5DN-SS-0.0-0.5 SL-012-SA5DN-SS-0.0-0.5 SL-013-SA5DN-SS-0.0-0.5 SL-014-SA5DN-SS-0.0-0.5 SL-018-SA5DN-SS-0.0-0.5 SL-186-SA5DN-SS-0.0-0.5 SL-187-SA5DN-SS-0.0-0.5 SL-188-SA5DN-SS-0.0-0.5 SL-189-SA5DN-SS-0.0-0.5 SL-191-SA5DN-SS-0.0-0.5 SL-192-SA5DN-SS-0.0-0.5 SL-193-SA5DN-SS-0.0-0.5 SL-194-SA5DN-SS-0.0-0.5 SL-195-SA5DN-SS-0.0-0.5 SL-196-SA5DN-SS-0.0-0.5 SL-197-SA5DN-SS-0.0-0.5 SL-198-SA5DN-SS-0.0-0.5)	BENZO(B)FLUORANTHENE Di-n-butylphthalate	148 133	- -	63.00-143.00 84.00-132.00	- -	BENZO(B)FLUORANTHENE Di-n-butylphthalate	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P15726AQ221525A (SL-008-SA5DN-SS-0.0-0.5 SL-009-SA5DN-SS-0.0-0.5 SL-010-SA5DN-SS-0.0-0.5 SL-011-SA5DN-SS-0.0-0.5 SL-012-SA5DN-SS-0.0-0.5 SL-013-SA5DN-SS-0.0-0.5 SL-014-SA5DN-SS-0.0-0.5 SL-018-SA5DN-SS-0.0-0.5 SL-186-SA5DN-SS-0.0-0.5 SL-187-SA5DN-SS-0.0-0.5 SL-188-SA5DN-SS-0.0-0.5 SL-189-SA5DN-SS-0.0-0.5 SL-191-SA5DN-SS-0.0-0.5 SL-192-SA5DN-SS-0.0-0.5 SL-193-SA5DN-SS-0.0-0.5 SL-194-SA5DN-SS-0.0-0.5 SL-195-SA5DN-SS-0.0-0.5 SL-196-SA5DN-SS-0.0-0.5 SL-197-SA5DN-SS-0.0-0.5 SL-198-SA5DN-SS-0.0-0.5)	ANTIMONY	72	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-197-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1015	50.00-150.00	All Target Analytes	J(all detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-187-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	279	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-191-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	310	45.00-120.00	All Target Analytes	No Qual, diluted out
SL-197-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-192-SA5DN-SS-0.0-0.5	Nitrobenzene-d5	132	40.00-130.00	No Affected Compounds	J(all detects)

Method: 8315A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-012-SA5DN-SS-0.0-0.5	Butyraldehyde	134	64.00-126.00	All Target Analytes	J (all detects)
SL-013-SA5DN-SS-0.0-0.5	Butyraldehyde	133	64.00-126.00	All Target Analytes	J(all detects)
SL-014-SA5DN-SS-0.0-0.5	Butyraldehyde	128	64.00-126.00	All Target Analytes	J(all detects)
SL-018-SA5DN-SS-0.0-0.5	Butyraldehyde	134	64.00-126.00	All Target Analytes	J(all detects)
SL-186-SA5DN-SS-0.0-0.5	Butyraldehyde	132	64.00-126.00	All Target Analytes	J(all detects)
SL-192-SA5DN-SS-0.0-0.5	Butyraldehyde	128	64.00-126.00	All Target Analytes	J(all detects)
SL-197-SA5DN-SS-0.0-0.5	Butyraldehyde	128	64.00-126.00	All Target Analytes	J(all detects)
SL-198-SA5DN-SS-0.0-0.5	Butyraldehyde	132	64.00-126.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	21.5	37.5	PQL	ng/Kg	J (all detects)
SL-013-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	18.4	34.6	PQL	ng/Kg	J (all detects)
SL-018-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	32.1	36.6	PQL	ng/Kg	J (all detects)
SL-198-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	21.3	36.8	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-009-SA5DN-SS-0.0-0.5	FLUORIDE	J	1.2	1.3	PQL	mg/Kg	J (all detects)
SL-013-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)
SL-014-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.49 3.47	10.4 5.20	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-009-SA5DN-SS-0.0-0.5	SODIUM TIN Zirconium	J J J	111 3.35 2.84	128 12.8 6.38	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-010-SA5DN-SS-0.0-0.5	BORON TIN	J J	3.92 2.21	5.04 10.1	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-011-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.62 3.22	10.9 5.47	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-012-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.89 2.78	10.8 5.40	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-013-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.31 1.71	10.1 5.04	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-014-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.77 4.20	10.6 5.32	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-018-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.99 3.65	10.8 5.39	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-186-SA5DN-SS-0.0-0.5	SODIUM TIN Zirconium	J J J	103 2.96 2.59	113 11.3 5.66	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-187-SA5DN-SS-0.0-0.5	SODIUM TIN Zirconium	J J J	123 3.32 3.18	126 12.6 6.31	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-188-SA5DN-SS-0.0-0.5	SODIUM	J	82.0	111	PQL	mg/Kg	J (all detects)
	TIN	J	3.06	11.1	PQL	mg/Kg	
	Zirconium	J	3.35	5.53	PQL	mg/Kg	
SL-189-SA5DN-SS-0.0-0.5	SODIUM	J	94.9	114	PQL	mg/Kg	J (all detects)
	TIN	J	2.91	11.4	PQL	mg/Kg	
	Zirconium	J	2.88	5.70	PQL	mg/Kg	
SL-191-SA5DN-SS-0.0-0.5	SODIUM	J	86.1	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.93	10.8	PQL	mg/Kg	
	Zirconium	J	1.78	5.40	PQL	mg/Kg	
SL-192-SA5DN-SS-0.0-0.5	SODIUM	J	88.3	118	PQL	mg/Kg	J (all detects)
	TIN	J	3.07	11.8	PQL	mg/Kg	
	Zirconium	J	2.88	5.91	PQL	mg/Kg	
SL-193-SA5DN-SS-0.0-0.5	SODIUM	J	87.7	106	PQL	mg/Kg	J (all detects)
	TIN	J	3.03	10.6	PQL	mg/Kg	
	Zirconium	J	2.08	5.29	PQL	mg/Kg	
SL-194-SA5DN-SS-0.0-0.5	SODIUM	J	74.0	124	PQL	mg/Kg	J (all detects)
	TIN	J	3.19	12.4	PQL	mg/Kg	
	Zirconium	J	3.93	6.21	PQL	mg/Kg	
SL-195-SA5DN-SS-0.0-0.5	SODIUM	J	90.1	123	PQL	mg/Kg	J (all detects)
	TIN	J	3.26	12.3	PQL	mg/Kg	
	Zirconium	J	1.69	6.17	PQL	mg/Kg	
SL-196-SA5DN-SS-0.0-0.5	SODIUM	J	92.1	112	PQL	mg/Kg	J (all detects)
	TIN	J	3.08	11.2	PQL	mg/Kg	
	Zirconium	J	2.41	5.61	PQL	mg/Kg	
SL-197-SA5DN-SS-0.0-0.5	SODIUM	J	81.0	115	PQL	mg/Kg	J (all detects)
	TIN	J	3.17	11.5	PQL	mg/Kg	
	Zirconium	J	3.34	5.77	PQL	mg/Kg	
SL-198-SA5DN-SS-0.0-0.5	TIN	J	3.15	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.34	5.30	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.103	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.178	0.433	PQL	mg/Kg	
	SILVER	J	0.0289	0.108	PQL	mg/Kg	
SL-009-SA5DN-SS-0.0-0.5	SELENIUM	J	0.219	0.505	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0445	0.126	PQL	mg/Kg	
SL-010-SA5DN-SS-0.0-0.5	CADMIUM	J	0.0697	0.0969	PQL	mg/Kg	J (all detects)
SL-011-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.171	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.207	0.442	PQL	mg/Kg	
	SILVER	J	0.0310	0.110	PQL	mg/Kg	
SL-012-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.160	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.148	0.449	PQL	mg/Kg	
	SILVER	J	0.0568	0.112	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-013-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0962	0.205	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0320	0.103	PQL	mg/Kg	
SL-014-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.172	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.426	PQL	mg/Kg	
	SILVER	J	0.0625	0.106	PQL	mg/Kg	
SL-018-SA5DN-SS-0.0-0.5	SELENIUM	J	0.225	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0631	0.108	PQL	mg/Kg	
SL-186-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.208	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.287	0.444	PQL	mg/Kg	
	SILVER	J	0.0583	0.111	PQL	mg/Kg	
SL-187-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.243	0.248	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.324	0.495	PQL	mg/Kg	
	SILVER	J	0.0616	0.124	PQL	mg/Kg	
SL-188-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.133	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.247	0.456	PQL	mg/Kg	
	SILVER	J	0.0410	0.114	PQL	mg/Kg	
SL-189-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.204	0.235	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.360	0.470	PQL	mg/Kg	
	SILVER	J	0.0572	0.118	PQL	mg/Kg	
SL-191-SA5DN-SS-0.0-0.5	SELENIUM	J	0.327	0.424	PQL	mg/Kg	J (all detects)
SL-192-SA5DN-SS-0.0-0.5	SELENIUM	J	0.230	0.473	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0815	0.118	PQL	mg/Kg	
SL-193-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.145	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.200	0.436	PQL	mg/Kg	
SL-194-SA5DN-SS-0.0-0.5	SELENIUM	J	0.302	0.487	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0541	0.122	PQL	mg/Kg	
SL-195-SA5DN-SS-0.0-0.5	SELENIUM	J	0.236	0.488	PQL	mg/Kg	J (all detects)
SL-196-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.195	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.291	0.448	PQL	mg/Kg	
	SILVER	J	0.109	0.112	PQL	mg/Kg	
SL-197-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.180	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.348	0.444	PQL	mg/Kg	
SL-198-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.167	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.133	0.432	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.55	1.1	PQL	mg/Kg	J (all detects)
SL-009-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.65	1.3	PQL	mg/Kg	J (all detects)
SL-011-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.67	1.1	PQL	mg/Kg	J (all detects)
SL-012-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.64	1.1	PQL	mg/Kg	J (all detects)
SL-013-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.0	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.56	1.1	PQL	mg/Kg	J (all detects)
SL-186-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.75	1.1	PQL	mg/Kg	J (all detects)
SL-191-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.69	1.1	PQL	mg/Kg	J (all detects)
SL-192-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.78	1.2	PQL	mg/Kg	J (all detects)
SL-194-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.60	1.3	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-013-SA5DN-SS-0.0-0.5	MERCURY	J	0.0034	0.0985	PQL	mg/Kg	J (all detects)
SL-187-SA5DN-SS-0.0-0.5	MERCURY	J	0.0084	0.126	PQL	mg/Kg	J (all detects)
SL-191-SA5DN-SS-0.0-0.5	MERCURY	J	0.0376	0.106	PQL	mg/Kg	J (all detects)
SL-195-SA5DN-SS-0.0-0.5	MERCURY	J	0.0415	0.122	PQL	mg/Kg	J (all detects)
SL-197-SA5DN-SS-0.0-0.5	MERCURY	J	0.0083	0.111	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-186-SA5DN-SS-0.0-0.5	EFH (C8-C11)	J	0.63	1.4	PQL	mg/Kg	J (all detects)
SL-191-SA5DN-SS-0.0-0.5	EFH (C12-C14)	J	0.98	1.3	PQL	mg/Kg	J (all detects)
SL-197-SA5DN-SS-0.0-0.5	EFH (C8-C11)	J	1.9	2.8	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-009-SA5DN-SS-0.0-0.5	DELTA-BHC	J	0.13	0.22	PQL	ug/Kg	J (all detects)
SL-010-SA5DN-SS-0.0-0.5	ENDRIN KETONE	J	0.087	0.34	PQL	ug/Kg	J (all detects)
SL-011-SA5DN-SS-0.0-0.5	Chlordane DELTA-BHC gamma-BHC (Lindane)	J J J	2.1 0.11 0.13	3.8 0.19 0.19	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-012-SA5DN-SS-0.0-0.5	4,4'-DDT	J	0.17	0.38	PQL	ug/Kg	J (all detects)
SL-014-SA5DN-SS-0.0-0.5	BETA-BHC Chlordane	J J	0.15 1.9	0.18 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5DN-SS-0.0-0.5	Chlordane	J	2.6	3.7	PQL	ug/Kg	J (all detects)
SL-188-SA5DN-SS-0.0-0.5	Chlordane MIREX	J J	1.9 0.22	3.9 0.39	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-189-SA5DN-SS-0.0-0.5	Chlordane	J	1.5	4.0	PQL	ug/Kg	J (all detects)
SL-191-SA5DN-SS-0.0-0.5	4,4'-DDE DELTA-BHC	J J	0.33 0.056	0.37 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-192-SA5DN-SS-0.0-0.5	Chlordane gamma-BHC (Lindane)	J J	3.4 0.080	4.2 0.20	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-193-SA5DN-SS-0.0-0.5	DELTA-BHC HEPTACHLOR EPOXIDE	J J	0.060 0.14	0.18 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-194-SA5DN-SS-0.0-0.5	Chlordane	J	3.8	4.3	PQL	ug/Kg	J (all detects)
SL-196-SA5DN-SS-0.0-0.5	ENDRIN ALDEHYDE gamma-BHC (Lindane) HEPTACHLOR EPOXIDE	J J J	0.32 0.12 0.069	0.39 0.19 0.19	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-197-SA5DN-SS-0.0-0.5	Chlordane DELTA-BHC ENDOSULFAN II gamma-BHC (Lindane) MIREX	J J J J J	2.3 0.059 0.15 0.077 0.18	3.9 0.19 0.39 0.19 0.39	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5DN-SS-0.0-0.5	Aroclor 5460	J	15	36	PQL	ug/Kg	J (all detects)
SL-186-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.1	3.8	PQL	ug/Kg	J (all detects)
SL-187-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.6	4.2	PQL	ug/Kg	J (all detects)
SL-188-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.8 1.7	2.0 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-189-SA5DN-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	7.0 3.6	10 10	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-191-SA5DN-SS-0.0-0.5	Aroclor 5460	J	10	18	PQL	ug/Kg	J (all detects)
SL-192-SA5DN-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.8 1.1 1.4	2.1 2.1 4.1	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-193-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	4.1	9.3	PQL	ug/Kg	J (all detects)
SL-194-SA5DN-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.1 0.66	2.1 2.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-195-SA5DN-SS-0.0-0.5	Aroclor 5460	J	11	21	PQL	ug/Kg	J (all detects)
SL-197-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.6	3.8	PQL	ug/Kg	J (all detects)
SL-198-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	170	190	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-009-SA5DN-SS-0.0-0.5	MCPA	J	200	330	PQL	ug/Kg	J (all detects)
SL-010-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex) MCPA	J J	0.11 200	0.17 250	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-012-SA5DN-SS-0.0-0.5	MCPA	J	160	280	PQL	ug/Kg	J (all detects)
SL-192-SA5DN-SS-0.0-0.5	DICAMBA DICHLOROPROP	J J	0.55 1.3	1.5 2.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-193-SA5DN-SS-0.0-0.5	2,4-D	J	1.8	3.9	PQL	ug/Kg	J (all detects)
SL-194-SA5DN-SS-0.0-0.5	2,4-D	J	2.3	4.5	PQL	ug/Kg	J (all detects)
SL-196-SA5DN-SS-0.0-0.5	2,4-D	J	1.9	4.1	PQL	ug/Kg	J (all detects)
SL-198-SA5DN-SS-0.0-0.5	MCPA	J	100	280	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	360	PQL	ug/Kg	J (all detects)
SL-009-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	61	440	PQL	ug/Kg	J (all detects)
SL-011-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	90	370	PQL	ug/Kg	J (all detects)
SL-012-SA5DN-SS-0.0-0.5	BENZO(G,H,I)PERYLENE BIS(2-ETHYLHEXYL)PHTHALATE CARBAZOLE DIBENZO(A,H)ANTHRACENE INDENO(1,2,3-CD)PYRENE	J J J J J	85 37 26 29 78	190 370 190 190 190	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-013-SA5DN-SS-0.0-0.5	Butylbenzylphthalate	J	78	170	PQL	ug/Kg	J (all detects)
SL-014-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	370	PQL	ug/Kg	J (all detects)
SL-018-SA5DN-SS-0.0-0.5	BENZO(G,H,I)PERYLENE BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	J J J	19 30 19	180 360 180	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-186-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE	J J	55 38	380 190	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-187-SA5DN-SS-0.0-0.5	ACENAPHTHENE ANTHRACENE CARBAZOLE	J J J	49 150 130	210 210 210	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-188-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE FLUORANTHENE PYRENE	J J J	360 22 25	380 190 190	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-189-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	390	PQL	ug/Kg	J (all detects)
SL-191-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	360	PQL	ug/Kg	J (all detects)
SL-192-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	410	PQL	ug/Kg	J (all detects)
SL-194-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	49	410	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-195-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	58	420	PQL	ug/Kg	J (all detects)
SL-196-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	250	380	PQL	ug/Kg	J (all detects)
SL-197-SA5DN-SS-0.0-0.5	ACENAPHTHYLENE	J	45	190	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	110	190	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	87	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	89	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	89	190	PQL	ug/Kg	
	CARBAZOLE	J	130	190	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	30	190	PQL	ug/Kg	
	Di-n-octylphthalate	J	25	190	PQL	ug/Kg	
	FLUORANTHENE	J	75	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	88	190	PQL	ug/Kg	
	PHENANTHRENE	J	21	190	PQL	ug/Kg	
	PYRENE	J	150	190	PQL	ug/Kg	
SL-198-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	29	180	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	25	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	88	370	PQL	ug/Kg	
	CHRYSENE	J	34	180	PQL	ug/Kg	
	FLUORANTHENE	J	19	180	PQL	ug/Kg	
	PYRENE	J	25	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.95	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.95	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-009-SA5DN-SS-0.0-0.5	Di-n-octylphthalate	J	51	120	PQL	ug/Kg	J (all detects)
SL-011-SA5DN-SS-0.0-0.5	ANTHRACENE	J	2.7	9.4	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	3.8	9.4	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	4.1	9.4	PQL	ug/Kg	
SL-013-SA5DN-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	8.4	8.6	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	50	93	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	3.7	8.6	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	7.0	8.6	PQL	ug/Kg	
	PHENANTHRENE	J	4.0	8.6	PQL	ug/Kg	
SL-014-SA5DN-SS-0.0-0.5	INDENO(1,2,3-CD)PYRENE	J	7.8	9.2	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	5.4	9.2	PQL	ug/Kg	
SL-018-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	6.0	9.2	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	8.6	9.2	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.8	9.2	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	3.7	9.2	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.7	9.2	PQL	ug/Kg	
	PHENANTHRENE	J	5.6	9.2	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-186-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
	ACENAPHTHENE	J	0.82	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	11	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	11	21	PQL	ug/Kg	
	FLUORENE	J	1.3	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	1.9	PQL	ug/Kg	
SL-187-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	5.9	11	PQL	ug/Kg	J (all detects)
	FLUORENE	J	7.3	11	PQL	ug/Kg	
SL-188-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.81	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	
	ANTHRACENE	J	0.48	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
SL-189-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	1.2	2.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.41	2.0	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.3	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.99	2.0	PQL	ug/Kg	
	CHRYSENE	J	1.7	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	2.0	PQL	ug/Kg	
SL-191-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.96	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.70	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	1.8	PQL	ug/Kg	
SL-192-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.6	2.1	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.46	2.1	PQL	ug/Kg	
	ANTHRACENE	J	1.1	2.1	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.1	2.1	PQL	ug/Kg	
	FLUORENE	J	2.0	2.1	PQL	ug/Kg	
SL-193-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	4.1	9.1	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	3.7	9.1	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	61	98	PQL	ug/Kg	
	CHRYSENE	J	3.5	9.1	PQL	ug/Kg	
	FLUORANTHENE	J	4.4	9.1	PQL	ug/Kg	
	PYRENE	J	4.8	9.1	PQL	ug/Kg	
SL-194-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	2.1	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.8	2.1	PQL	ug/Kg	
	ANTHRACENE	J	0.87	2.1	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.6	2.1	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.6	23	PQL	ug/Kg	
	FLUORENE	J	1.5	2.1	PQL	ug/Kg	
SL-195-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	4.4	10	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	5.3	10	PQL	ug/Kg	
	CHRYSENE	J	7.3	10	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	5.4	10	PQL	ug/Kg	
	PHENANTHRENE	J	5.0	10	PQL	ug/Kg	
	PYRENE	J	9.0	10	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-196-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.82	1.9	PQL	ug/Kg	
	2-METHYLNAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
	ANTHRACENE	J	1.5	1.9	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	7.6	21	PQL	ug/Kg	
	FLUORENE	J	1.0	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.8	1.9	PQL	ug/Kg	
SL-197-SA5DN-SS-0.0-0.5	NAPHTHALENE	J	6.7	9.7	PQL	ug/Kg	J (all detects)
SL-198-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	8.0	9.2	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	6.3	9.2	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	5.9	9.2	PQL	ug/Kg	

Method: 8330A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-191-SA5DN-SS-0.0-0.5	RDX	J	68	130	PQL	ug/Kg	J (all detects)

Method: 9012B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-192-SA5DN-SS-0.0-0.5	CYANIDE	J	0.23	0.59	PQL	mg/Kg	J (all detects)

LDC #: 26275R4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE160 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MH
2nd Reviewer: CS

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	Ni qual
V.	ICP Interference Check Sample (ICS) Analysis	N	RPD out RPD out
VI.	Matrix Spike Analysis	SW	Al, Ba, Ca, Fe, Mg, K, Zn, Ti >4X, No qual if 2R.
VII.	Duplicate Sample Analysis	SW	Zr <5X, (Ti J/UJ)
VIII.	Laboratory Control Samples (LCS)	N A	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ba, Cr, Co, Cu, Pb, Ni, V
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-008-SA5DN-SS-0.0-0.5	11	SL-188-SA5DN-SS-0.0-0.5	21	#1 MS (ZnPb, [illegible] ICP)	31	
2	SL-009-SA5DN-SS-0.0-0.5	12	SL-189-SA5DN-SS-0.0-0.5	22	↓ Dup ↓	32	
3	SL-010-SA5DN-SS-0.0-0.5	13	SL-191-SA5DN-SS-0.0-0.5	23	↓ Dup ↓	33	
4	SL-011-SA5DN-SS-0.0-0.5	14	SL-192-SA5DN-SS-0.0-0.5	24	#3 MS (ZnPb)	34	
5	SL-012-SA5DN-SS-0.0-0.5	15	SL-193-SA5DN-SS-0.0-0.5	25	↓ MSD #1	35	
6	SL-013-SA5DN-SS-0.0-0.5	16	SL-194-SA5DN-SS-0.0-0.5	26	↓ Dup ↓	36	
7	SL-014-SA5DN-SS-0.0-0.5	17	SL-195-SA5DN-SS-0.0-0.5	27		37	
8	SL-018-SA5DN-SS-0.0-0.5	18	SL-196-SA5DN-SS-0.0-0.5	28		38	
9	SL-186-SA5DN-SS-0.0-0.5	19	SL-197-SA5DN-SS-0.0-0.5	29		39	
10	SL-187-SA5DN-SS-0.0-0.5	20	SL-198-SA5DN-SS-0.0-0.5	30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE160
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6297552BKG Matrix Spike Lab Sample ID: 6297552MS Matrix Spike Duplicate Lab Sample ID: 6297552MSD
% Solids for Sample: 92.4
Batch Id(s): P15108E, P15726A, P15111D

		BKG Sample		MS Sample		MSD Sample		MS Spike	MSD Spike		MS		MSD				Control Limit		
Analyte	Mass	Result	C	Result	C	Result	C	Added	Added	Units	%R	Q	%R	Q	RPD	Q	%R	RPD	M
Aluminum		23169.1923		26486.3994		27831.9805		210.1458	216.4502	MG/KG	1579		2154		5			20	P
Antimony	121	0.1029	B	0.4944		0.5415		1.2987	1.2369	MG/KG	30	N	35	N	9		75 - 125	20	MS
Arsenic	75	4.2554		6.2229		7.3593		2.1645	2.0614	MG/KG	91		151	N	17		75 - 125	20	MS
Barium	137	84.9784		97.4675		125.9946		10.8225	10.3072	MG/KG	115		398		26	*		20	MS
Beryllium	9	0.5102		1.1249		1.1253		0.8658	0.8246	MG/KG	71	N	75		0		75 - 125	20	MS
Boron		12.1264		222.5203		231.7706		210.1458	216.4502	MG/KG	100		101		4		84 - 115	20	P
Cadmium	111	0.2212		1.2433		1.4451		1.0823	1.0307	MG/KG	94		119		15		75 - 125	20	MS
Calcium		37795.7938		39269.1653		38548.5216		420.2917	432.9004	MG/KG	351		174		2			20	P
Chromium	52	21.3463		31.0606		38.0128		10.8225	10.3072	MG/KG	90		162	N	20		75 - 125	20	MS
Cobalt	59	6.9610		53.8528		69.1404		54.1126	51.5358	MG/KG	87		121		25	*	75 - 125	20	MS
Copper	63	10.7900		19.2121		24.2218		10.8225	10.3072	MG/KG	78		130	N	23	*	75 - 125	20	MS
Iron		24105.9160		24868.7503		25384.5087		105.0729	108.2251	MG/KG	726		1181		2			20	P
Lead	208	7.3571		10.4978		12.9169		3.2468	3.0921	MG/KG	97		180	N	21	*	75 - 125	20	MS
Lithium		20.8812		129.1987		133.4329		105.0729	108.2251	MG/KG	103		104		3		82 - 114	20	P
Magnesium		6203.1094		6643.7324		6706.3799		210.1458	216.4502	MG/KG	210		233		1			20	P
Manganese		355.8379		412.9145		412.7814		52.5365	54.1126	MG/KG	109		105		0			20	P
Mercury		0.0032	U	0.1564		0.1548		0.1730	0.1693	MG/KG	90		91		1		65 - 135	20	CV
Molybdenum	98	0.3152		9.7359		11.9522		10.8225	10.3072	MG/KG	87		113		20		75 - 125	20	MS
Nickel	60	13.5649		22.5108		27.7881		10.8225	10.3072	MG/KG	83		138	N	21	*	75 - 125	20	MS
Phosphorus		476.4163		580.0971		595.2121		105.0729	108.2251	MG/KG	99		110		3			20	P
Potassium		4812.0692		6367.9202		6488.6775		1050.7292	1082.2511	MG/KG	148		155		2			20	P
Selenium	78	0.1781	B	2.0827		2.1645		2.1645	2.0614	MG/KG	88		96		4		75 - 125	20	MS
Silver	107	0.0289	B	10.4156		11.2039		10.8225	10.3072	MG/KG	96		108		7		75 - 125	20	MS
Sodium		125.8596		1177.2013		1219.6082		1050.7292	1082.2511	MG/KG	100		101		4		75 - 125	20	P
Strontium		76.9376		182.2626		185.5455		105.0729	108.2251	MG/KG	100		100		2		75 - 115	20	P
Thallium	203	0.2708		0.6883		0.7714		0.4329	0.4123	MG/KG	96		121		11		75 - 125	20	MS
Tin		2.4902	B	368.7650		386.2468		420.2917	432.9004	MG/KG	87		89		5		80 - 110	20	P
Vanadium	51	40.6926		52.4026		63.6570		10.8225	10.3072	MG/KG	108		223	N	19		75 - 125	20	MS
Zinc	66	52.1429		57.0563		70.1711		10.8225	10.3072	MG/KG	45		175		21	*		20	MS
Zirconium		3.4736	B	100.9257		104.9881		105.0729	108.2251	MG/KG	93		94		4		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE160
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6297554BKG Matrix Spike Lab Sample ID: 6297554MS Matrix Spike Duplicate Lab Sample ID: 6297554MSD
% Solids for Sample: 98.3
Batch Id(s): P15408A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Titanium		1527.7701		1994.3940		2022.0122		98.7664	101.7294	MG/KG	472		486		1			20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

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Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE160
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6297552BKG Serial Dilution Lab Sample ID: 6297552L
Batch ID(s): P15108E, P15726A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		222646.6700		215021.5000		3		P
Antimony	121	0.4756	B	1.5000	U	100		MS
Arsenic	75	19.6600		29.0100		48		MS
Barium	137	392.6000		556.5000		42	E	MS
Beryllium	9	2.3570		2.8225		20		MS
Boron		116.5300		141.6500	B	22		P
Cadmium	111	1.0220		2.0675	B	102		MS
Calcium		363202.4600		374003.3000		3		P
Chromium	52	98.6200		152.1500		54	E	MS
Cobalt	59	32.1600		65.3500		103	E	MS
Copper	63	49.8500		74.5000		49	E	MS
Iron		231648.2100		237103.6500		2		P
Lead	208	33.9900		48.1000		42	E	MS
Lithium		200.6600		215.2500		7		P
Magnesium		59609.4000		60585.3000		2		P
Manganese		3419.4600		3635.5000		6		P
Molybdenum	98	1.4560		5.3550		268		MS
Nickel	60	62.6700		89.0500		42	E	MS
Phosphorus		4578.1700		4614.4000		1		P
Potassium		46242.0600		46706.1000		1		P
Selenium	78	0.8227	B	2.0945	B	155		MS
Silver	107	0.1334	B	3.7330		2698		MS
Sodium		1209.4600		1865.0000	U	100		P
Strontium		739.3400		759.7500		3		P
Thallium	203	1.2510		1.6835	B	35		MS
Tin		23.9300	B	50.0000	U	100		P
Vanadium	51	188.0000		280.4000		49	E	MS
Zinc	66	240.9000		334.4500		39		MS
Zirconium		33.3800	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE160 4769
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE161

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-May-2011	EB05-SA5DN-SS-052311	6297649	EB	Gen Prep	8015B	III
23-May-2011	EB05-SA5DN-SS-052311	6297649	EB	Gen Prep	8015M	III
24-May-2011	TB-052411	6297647	TB	5030B	8015M	III
24-May-2011	TB-052411	6297647	TB	5030B	8260B	III
24-May-2011	TB-052411	6297647	TB	5030B	8260B SIM	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	3050B	6010B	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	3050B	6020	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	3060A	7199	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	3550B	8081A	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	3550B	8082	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	3550B	8151A	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	3550B	8270C	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	3550B	8270C SIM	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	METHOD	300.0	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	METHOD	314.0	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5	6297641	N	METHOD	7471A	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5DU	P297641D270858A	DUP	METHOD	314.0	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5DU	P297641D271210A	DUP	METHOD	300.0	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5MS	P297641R270240A	MS	METHOD	314.0	III
24-May-2011	SL-203-SA5DN-SS-0.0-0.5MS	P297641R271225A	MS	METHOD	300.0	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	3050B	6010B	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	3050B	6020	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	3060A	7199	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	3550B	8081A	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	3550B	8082	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	3550B	8270C	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	3550B	8270C SIM	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	METHOD	300.0	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	METHOD	314.0	III
24-May-2011	SL-204-SA5DN-SS-0.0-0.5	6297642	N	METHOD	7471A	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3050B	6010B	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3050B	6020	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3060A	7199	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3546	1625C	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3550B	8015B	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3550B	8015M	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3550B	8082	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3550B	8270C	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	3550B	8270C SIM	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	5035	8015M	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	5035	8260B	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	5035	8260B SIM	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	8330	8330A	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	METHOD	300.0	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	METHOD	314.0	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	METHOD	7471A	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	METHOD	8015B	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	METHOD	8015M	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	METHOD	8315A	III
24-May-2011	SL-139-SA5DN-SB-2.0-3.0	6297643	N	METHOD	9012B	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	3050B	6020	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	3060A	7199	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	3550B	8082	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	3550B	8270C	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	3550B	8270C SIM	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	5035	8260B	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	5035	8260B SIM	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	METHOD	300.0	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	METHOD	314.0	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0	6297644	N	METHOD	7471A	III
24-May-2011	SL-145-SA5DN-SB-2.0-3.0MS	P297644R242345A	MS	3550B	8082	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	3005A	6010B	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	3020A	6020	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	3510C	8081A	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	3510C	8082	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	3510C	8270C	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	3510C	8270C SIM	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	Gen Prep	300.0	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	Gen Prep	314.0	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	Gen Prep	7199	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	METHOD	7470A	III
24-May-2011	EB06-SA5DN-SS-052411	6297648	EB	METHOD	8151A	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	3050B	6010B	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	3050B	6020	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	3060A	7199	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	3550B	8270C	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	3550B	8270C SIM	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	5035	8260B	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	5035	8260B SIM	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	METHOD	300.0	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	METHOD	314.0	III
24-May-2011	SL-146-SA5DN-SB-2.0-3.0	6297645	N	METHOD	7471A	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	3050B	6010B	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	3050B	6020	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	3060A	7199	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	3550B	8082	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	3550B	8270C	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	3550B	8270C SIM	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	5035	8260B	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	5035	8260B SIM	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	METHOD	300.0	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	METHOD	314.0	III
24-May-2011	SL-150-SA5DN-SB-4.0-5.0	6297646	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA5DN -SS-0.0-0.5MS SL-012-SA5DN -SS-0.0-0.5MSD (SL-012-SA5DN -SS-0.0-0.5)	DIETHYLENE GLYCOL	58	47	59.00-109.00	21 (20.00)	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN -SS-0.0-0.5MS SL-008-SA5DN -SS-0.0-0.5MSD (SL-008-SA5DN -SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	269 -	357 224	29.00-146.00 39.00-149.00	- -	AROCLOR 1016, 1221, 1232 AROCLOR 1242, 1248, 1254,1260	J(all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-009-SA5DN -SS-0.0-0.5MSD (SL-009-SA5DN -SS-0.0-0.5)	DIELDRIN	-	-	19.00-154.00	96 (50.00)	DIELDRIN	J(all detects)
SL-009-SA5DN -SS-0.0-0.5MS SL-009-SA5DN -SS-0.0-0.5MSD (SL-009-SA5DN -SS-0.0-0.5)	4,4'-DDT BETA-BHC ENDRIN	- 0 0	-34 - -	10.00-176.00 14.00-147.00 11.00-149.00	- 200 (50.00) 200 (50.00)	4,4'-DDT BETA-BHC ENDRIN	J(all detects) R(all non-detects)
SL-009-SA5DN -SS-0.0-0.5MSD (SL-009-SA5DN -SS-0.0-0.5)	4,4'-DDE	-	6	18.00-161.00	74 (50.00)	4,4'-DDE	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA5DN -SS-0.0-0.5MS SL-012-SA5DN -SS-0.0-0.5MSD (SL-012-SA5DN -SS-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	- 391	1202 3019	49.00-123.00 49.00-123.00	34 (20.00) 28 (20.00)	EFH (C21-C30) EFH (C30-C40)	No Qual, Diluted Out
SL-012-SA5DN -SS-0.0-0.5MS SL-012-SA5DN -SS-0.0-0.5MSD (SL-012-SA5DN -SS-0.0-0.5)	EFH (C12-C14) EFH (C15-C20) EFH (C8-C11)	0 0 0	0 0 0	49.00-123.00 49.00-123.00 49.00-123.00	- - -	EFH (C12-C14) EFH (C15-C20) EFH (C8-C11)	No Qual, Diluted Out

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-010-SA5DN -SS-0.0-0.5MSD (SL-010-SA5DN -SS-0.0-0.5)	2,4-D	-	-	17.00-180.00	52 (35.00)	2,4-D	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE160 **Laboratory: LL**

EDD Filename: DE160_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SS-0.0-0.5MS SL-008-SA5DN-SS-0.0-0.5MSD (SL-008-SA5DN-SS-0.0-0.5)	AROCLOR 1260	-5	0	39.00-149.00	-	AROCLOR 1242, 1248, 1254,1260	J(all detects) R(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SS-0.0-0.5MS	DIBENZO(A,H)ANTHRACENE	153	-	22.00-133.00	-	DIBENZO(A,H)ANTHRACENE	J(all detects)
(SL-008-SA5DN-SS-0.0-0.5)	INDENO(1,2,3-CD)PYRENE	152	-	21.00-143.00	-	INDENO(1,2,3-CD)PYRENE	

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SS-0.0-0.5MS	ALUMINUM	1579	2154	75.00-125.00	-	ALUMINUM	
SL-008-SA5DN-SS-0.0-0.5MSD	CALCIUM	351	174	75.00-125.00	-	CALCIUM	
(SL-008-SA5DN-SS-0.0-0.5	IRON	726	1181	75.00-125.00	-	IRON	
SL-009-SA5DN-SS-0.0-0.5	MAGNESIUM	210	233	75.00-125.00	-	MAGNESIUM	
SL-010-SA5DN-SS-0.0-0.5	POTASSIUM	148	155	75.00-125.00	-	POTASSIUM	
SL-011-SA5DN-SS-0.0-0.5							
SL-012-SA5DN-SS-0.0-0.5							
SL-013-SA5DN-SS-0.0-0.5							
SL-014-SA5DN-SS-0.0-0.5							
SL-018-SA5DN-SS-0.0-0.5							
SL-186-SA5DN-SS-0.0-0.5							
SL-187-SA5DN-SS-0.0-0.5							NoQual, >4x
SL-188-SA5DN-SS-0.0-0.5							
SL-189-SA5DN-SS-0.0-0.5							
SL-191-SA5DN-SS-0.0-0.5							
SL-192-SA5DN-SS-0.0-0.5							
SL-193-SA5DN-SS-0.0-0.5							
SL-194-SA5DN-SS-0.0-0.5							
SL-195-SA5DN-SS-0.0-0.5							
SL-196-SA5DN-SS-0.0-0.5							
SL-197-SA5DN-SS-0.0-0.5							
SL-198-SA5DN-SS-0.0-0.5)							

Data Qualifier Summary

Lab Reporting Batch ID: DE161 Laboratory: LL

EDD Filename: PrepDE161_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-139-SA5DN-SB-2.0-3.0 **Collected:** 5/24/2011 10:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-145-SA5DN-SB-2.0-3.0 **Collected:** 5/24/2011 12:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-146-SA5DN-SB-2.0-3.0 **Collected:** 5/24/2011 2:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-150-SA5DN-SB-4.0-5.0 **Collected:** 5/24/2011 3:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-203-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 8:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-204-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 10:08:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-139-SA5DN-SB-2.0-3.0 **Collected:** 5/24/2011 10:45:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	23200		5.50	MDL	21.9	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory:** LL

EDD Filename: PrepDE161_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3710		6.71	MDL	21.9	PQL	mg/Kg	J	A
MAGNESIUM	6320		2.78	MDL	10.9	PQL	mg/Kg	J	A
MANGANESE	428		0.0853	MDL	0.547	PQL	mg/Kg	J	A
POTASSIUM	2230		19.7	MDL	54.7	PQL	mg/Kg	J	Q
STRONTIUM	26.9		0.0678	MDL	0.547	PQL	mg/Kg	J	A
TIN	2.82	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-145-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 12:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	23200		5.33	MDL	21.2	PQL	mg/Kg	J	A
CALCIUM	3360		6.50	MDL	21.2	PQL	mg/Kg	J	A
MAGNESIUM	6150		2.69	MDL	10.6	PQL	mg/Kg	J	A
MANGANESE	438		0.0827	MDL	0.530	PQL	mg/Kg	J	A
POTASSIUM	2700		19.1	MDL	53.0	PQL	mg/Kg	J	Q
STRONTIUM	24.8		0.0657	MDL	0.530	PQL	mg/Kg	J	A
TIN	2.75	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-146-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 2:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	21200		5.65	MDL	22.5	PQL	mg/Kg	J	A
CALCIUM	5150		6.89	MDL	22.5	PQL	mg/Kg	J	A
MAGNESIUM	7070		2.85	MDL	11.2	PQL	mg/Kg	J	A
MANGANESE	311		0.0876	MDL	0.562	PQL	mg/Kg	J	A
POTASSIUM	2490		20.2	MDL	56.2	PQL	mg/Kg	J	Q
STRONTIUM	28.4		0.0696	MDL	0.562	PQL	mg/Kg	J	A
TIN	2.96	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: SL-150-SA5DN-SB-4.0-5.0 *Collected:* 5/24/2011 3:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19700		5.24	MDL	20.8	PQL	mg/Kg	J	A
CALCIUM	4130		6.39	MDL	20.8	PQL	mg/Kg	J	A
MAGNESIUM	6940		2.65	MDL	10.4	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-150-SA5DN-SB-4.0-5.0 *Collected:* 5/24/2011 3:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	356		0.0813	MDL	0.521	PQL	mg/Kg	J	A
POTASSIUM	4150		18.8	MDL	52.1	PQL	mg/Kg	J	Q
STRONTIUM	25.5		0.0646	MDL	0.521	PQL	mg/Kg	J	A
TIN	2.89	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: SL-203-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:50:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	27500		5.80	MDL	23.1	PQL	mg/Kg	J	A
CALCIUM	6760		7.07	MDL	23.1	PQL	mg/Kg	J	A
MAGNESIUM	6380		2.93	MDL	11.5	PQL	mg/Kg	J	A
MANGANESE	468		0.0900	MDL	0.577	PQL	mg/Kg	J	A
POTASSIUM	7390		20.8	MDL	57.7	PQL	mg/Kg	J	Q
SODIUM	79.5	J	43.0	MDL	115	PQL	mg/Kg	J	Z
STRONTIUM	33.4		0.0715	MDL	0.577	PQL	mg/Kg	J	A
TIN	2.70	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	34700		5.90	MDL	23.4	PQL	mg/Kg	J	A
CALCIUM	13100		7.19	MDL	23.4	PQL	mg/Kg	J	A
MAGNESIUM	7950		2.98	MDL	11.7	PQL	mg/Kg	J	A
MANGANESE	513		0.0914	MDL	0.586	PQL	mg/Kg	J	A
POTASSIUM	6760		21.1	MDL	58.6	PQL	mg/Kg	J	Q
SODIUM	103	J	43.7	MDL	117	PQL	mg/Kg	J	Z
STRONTIUM	40.3		0.0727	MDL	0.586	PQL	mg/Kg	J	A
TIN	2.85	J	1.17	MDL	11.7	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: AQ**

Sample ID: EB06-SA5DN-SS-052411 *Collected:* 5/24/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.00017	J	0.000052	MDL	0.0010	PQL	mg/L	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0795	J	0.0670	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	12.3		0.0893	MDL	0.446	PQL	mg/Kg	J	E, A
BERYLLIUM	0.881		0.0179	MDL	0.112	PQL	mg/Kg	J	Q, E
CADMIUM	0.105	J	0.0446	MDL	0.112	PQL	mg/Kg	J	Z
CHROMIUM	28.8		0.134	MDL	0.446	PQL	mg/Kg	J	Q, E, A
COBALT	7.94		0.0223	MDL	0.112	PQL	mg/Kg	J	E, E, A
COPPER	9.94		0.0737	MDL	0.446	PQL	mg/Kg	J	Q, E, A
LEAD	8.13		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E, A
NICKEL	18.9		0.112	MDL	0.446	PQL	mg/Kg	J	Q, E, A
SILVER	0.0829	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	48.6		0.0246	MDL	0.112	PQL	mg/Kg	J	E, A
ZINC	52.2		0.625	MDL	3.35	PQL	mg/Kg	J	A

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	115		0.121	MDL	0.446	PQL	mg/Kg	J	A, E

Sample ID: SL-145-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 12:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0743	J	0.0636	MDL	0.212	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory:** LL

EDD Filename: PrepDE161_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-145-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 12:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	10.6		0.0848	MDL	0.424	PQL	mg/Kg	J	E, A
BERYLLIUM	0.674		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CHROMIUM	24.6		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E, A
COBALT	7.60		0.0212	MDL	0.106	PQL	mg/Kg	J	E, E, A
COPPER	9.77		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E, A
LEAD	6.42		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E, A
NICKEL	17.3		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E, A
SILVER	0.0523	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	46.0		0.0233	MDL	0.106	PQL	mg/Kg	J	E, A
ZINC	55.0		0.594	MDL	3.18	PQL	mg/Kg	J	A

Sample ID: SL-145-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 12:20:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-145-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 12:20:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.115	MDL	0.424	PQL	mg/Kg	J	A, E

Sample ID: SL-146-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 2:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0701	U	0.0701	MDL	0.234	PQL	mg/Kg	UJ	Q
ARSENIC	15.1		0.0935	MDL	0.467	PQL	mg/Kg	J	E, A
BERYLLIUM	0.998		0.0187	MDL	0.117	PQL	mg/Kg	J	Q, E
CADMIUM	0.0604	J	0.0467	MDL	0.117	PQL	mg/Kg	J	Z
CHROMIUM	47.5		0.140	MDL	0.467	PQL	mg/Kg	J	Q, E, A
COBALT	10.0		0.0234	MDL	0.117	PQL	mg/Kg	J	E, E, A
COPPER	20.1		0.0771	MDL	0.467	PQL	mg/Kg	J	Q, E, A
LEAD	7.90		0.0121	MDL	0.234	PQL	mg/Kg	J	Q, E, A
NICKEL	24.3		0.117	MDL	0.467	PQL	mg/Kg	J	Q, E, A
VANADIUM	51.9		0.0257	MDL	0.117	PQL	mg/Kg	J	E, A
ZINC	74.5		0.654	MDL	3.50	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory:** LL

EDD Filename: PrepDE161_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-146-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 2:40:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0909	J	0.0467	MDL	0.467	PQL	mg/Kg	J	Z

Sample ID: SL-146-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 2:40:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.103	J	0.0584	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-146-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 2:40:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	170		0.126	MDL	0.467	PQL	mg/Kg	J	A, E

Sample ID: SL-150-SA5DN-SB-4.0-5.0 *Collected:* 5/24/2011 3:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0631	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	7.91		0.0841	MDL	0.421	PQL	mg/Kg	J	E, A
BERYLLIUM	0.503		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.0932	J	0.0421	MDL	0.105	PQL	mg/Kg	J	Z
CHROMIUM	28.6		0.126	MDL	0.421	PQL	mg/Kg	J	Q, E, A
COBALT	9.22		0.0210	MDL	0.105	PQL	mg/Kg	J	E, E, A
COPPER	15.8		0.0694	MDL	0.421	PQL	mg/Kg	J	Q, E, A
LEAD	5.23		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, E, A
NICKEL	22.5		0.105	MDL	0.421	PQL	mg/Kg	J	Q, E, A
VANADIUM	37.8		0.0231	MDL	0.105	PQL	mg/Kg	J	E, A
ZINC	63.8		0.589	MDL	3.16	PQL	mg/Kg	J	A

Sample ID: SL-150-SA5DN-SB-4.0-5.0 *Collected:* 5/24/2011 3:35:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-150-SA5DN-SB-4.0-5.0** ***Collected:*** **5/24/2011 3:35:00** ***Analysis Type:*** **REA8** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.114	MDL	0.421	PQL	mg/Kg	J	A, E

Sample ID: **SL-203-SA5DN-SS-0.0-0.5** ***Collected:*** **5/24/2011 8:50:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.254		0.0692	MDL	0.231	PQL	mg/Kg	J	Q
ARSENIC	3.97		0.0923	MDL	0.461	PQL	mg/Kg	J	E, A
BERYLLIUM	0.546		0.0185	MDL	0.115	PQL	mg/Kg	J	Q, E
CHROMIUM	21.8		0.138	MDL	0.461	PQL	mg/Kg	J	Q, E, A
COBALT	7.63		0.0231	MDL	0.115	PQL	mg/Kg	J	E, E, A
COPPER	13.7		0.0761	MDL	0.461	PQL	mg/Kg	J	Q, E, A
LEAD	10.3		0.0120	MDL	0.231	PQL	mg/Kg	J	Q, E, A
NICKEL	14.9		0.115	MDL	0.461	PQL	mg/Kg	J	Q, E, A
SILVER	0.0372	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	41.2		0.0254	MDL	0.115	PQL	mg/Kg	J	E, A
ZINC	59.3		0.646	MDL	3.46	PQL	mg/Kg	J	A

Sample ID: **SL-203-SA5DN-SS-0.0-0.5** ***Collected:*** **5/24/2011 8:50:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.168	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: **SL-203-SA5DN-SS-0.0-0.5** ***Collected:*** **5/24/2011 8:50:00** ***Analysis Type:*** **REA8** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.5		0.125	MDL	0.461	PQL	mg/Kg	J	A, E

Sample ID: **SL-204-SA5DN-SS-0.0-0.5** ***Collected:*** **5/24/2011 10:08:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.143	J	0.0696	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	6.36		0.0929	MDL	0.464	PQL	mg/Kg	J	E, A
BERYLLIUM	0.834		0.0186	MDL	0.116	PQL	mg/Kg	J	Q, E
CHROMIUM	34.0		0.139	MDL	0.464	PQL	mg/Kg	J	Q, E, A
COBALT	11.3		0.0232	MDL	0.116	PQL	mg/Kg	J	E, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	18.1		0.0766	MDL	0.464	PQL	mg/Kg	J	Q, E, A
LEAD	10.9		0.0121	MDL	0.232	PQL	mg/Kg	J	Q, E, A
NICKEL	22.6		0.116	MDL	0.464	PQL	mg/Kg	J	Q, E, A
SILVER	0.0635	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	64.0		0.0255	MDL	0.116	PQL	mg/Kg	J	E, A
ZINC	79.4		0.650	MDL	3.48	PQL	mg/Kg	J	A

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.173	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	152		0.125	MDL	0.464	PQL	mg/Kg	J	A, E

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.93	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-145-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 12:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.69	J	0.21	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-146-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.23	MDL	1.2	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-150-SA5DN-SB-4.0-5.0 *Collected:* 5/24/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-203-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.86	J	0.24	MDL	1.2	PQL	mg/Kg	U	B

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.69	J	0.23	MDL	1.2	PQL	mg/Kg	U	B

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0072	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-146-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0051	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0114	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.49	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C21-C30)	0.70	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	1.3	J	0.45	MDL	1.3	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-203-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.15	J	0.040	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.31	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
4,4'-DDT	0.17	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.78	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-203-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.94	U	0.94	MDL	2.8	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB06-SA5DN-SS-052411 *Collected:* 5/24/2011 12:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-203-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	53	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	58	J	20	MDL	390	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB06-SA5DN-SS-052411 *Collected:* 5/24/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.019	J	0.010	MDL	0.052	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB06-SA5DN-SS-052411 *Collected:* 5/24/2011 12:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.019	J	0.010	MDL	0.052	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.20	J	0.052	MDL	1.0	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: SL-203-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	77		0.78	MDL	2.0	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	49		0.78	MDL	2.0	PQL	ug/Kg	J	L

Sample ID: SL-204-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 10:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	4.2		0.78	MDL	2.0	PQL	ug/Kg	J	L
CHRYSENE	0.89	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.0	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-139-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.58	U	0.58	MDL	5.8	PQL	ug/Kg	UJ	L
ACETONE	11		7.8	MDL	9.3	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.28	MDL	4.7	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-145-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 12:20:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	L
ACETONE	7.8	J	6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.0	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-146-SA5DN-SB-2.0-3.0 *Collected:* 5/24/2011 2:40:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.55	U	0.55	MDL	5.5	PQL	ug/Kg	UJ	L
ACETONE	8.5	J	7.4	MDL	8.8	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.2	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-150-SA5DN-SB-4.0-5.0 *Collected:* 5/24/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1.05

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.57	U	0.57	MDL	5.7	PQL	ug/Kg	UJ	L
ACETONE	9.1		7.6	MDL	9.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.0	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: PrepDE161_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE161

Method Blank Outlier Report

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14748CB222255	5/31/2011 10:55:00 PM	MAGNESIUM	0.0211 mg/L	EB06-SA5DN-SS-052411

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15208AB220406	6/2/2011 4:06:00 AM	ALUMINUM	6.00 mg/Kg	SL-139-SA5DN-SB-2.0-3.0
		CALCIUM	8.24 mg/Kg	SL-145-SA5DN-SB-2.0-3.0
		PHOSPHORUS	0.998 mg/Kg	SL-146-SA5DN-SB-2.0-3.0
		TIN	1.17 mg/Kg	SL-150-SA5DN-SB-4.0-5.0
				SL-203-SA5DN-SS-0.0-0.5
				SL-204-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-139-SA5DN-SB-2.0-3.0(REA)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-145-SA5DN-SB-2.0-3.0(REA)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-146-SA5DN-SB-2.0-3.0(REA)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-150-SA5DN-SB-4.0-5.0(REA)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-203-SA5DN-SS-0.0-0.5(REA)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-204-SA5DN-SS-0.0-0.5(REA)	TIN	2.85 mg/Kg	2.85U mg/Kg

Method: **6020**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14750CB220953A	6/1/2011 9:53:00 AM	LEAD	0.000055 mg/L	EB06-SA5DN-SS-052411

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB06-SA5DN-SS-052411(RES)	LEAD	0.00017 mg/L	0.00017U mg/L

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15726BB221044A	6/7/2011 10:44:00 AM	COPPER	0.107 mg/Kg	SL-139-SA5DN-SB-2.0-3.0 SL-145-SA5DN-SB-2.0-3.0 SL-146-SA5DN-SB-2.0-3.0 SL-150-SA5DN-SB-4.0-5.0 SL-203-SA5DN-SS-0.0-0.5 SL-204-SA5DN-SS-0.0-0.5

Method: **7199**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14843AB271310A	6/1/2011 1:10:00 PM	HEXAVALENT CHROMIUM	0.26 mg/Kg	SL-139-SA5DN-SB-2.0-3.0 SL-145-SA5DN-SB-2.0-3.0 SL-146-SA5DN-SB-2.0-3.0 SL-150-SA5DN-SB-4.0-5.0 SL-203-SA5DN-SS-0.0-0.5 SL-204-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-139-SA5DN-SB-2.0-3.0(RES)	HEXAVALENT CHROMIUM	0.93 mg/Kg	0.93U mg/Kg
SL-145-SA5DN-SB-2.0-3.0(RES)	HEXAVALENT CHROMIUM	0.69 mg/Kg	0.69U mg/Kg
SL-146-SA5DN-SB-2.0-3.0(RES)	HEXAVALENT CHROMIUM	0.62 mg/Kg	0.62U mg/Kg
SL-150-SA5DN-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.54 mg/Kg	0.54U mg/Kg
SL-203-SA5DN-SS-0.0-0.5(RES)	HEXAVALENT CHROMIUM	0.86 mg/Kg	0.86U mg/Kg
SL-204-SA5DN-SS-0.0-0.5(RES)	HEXAVALENT CHROMIUM	0.69 mg/Kg	0.69U mg/Kg

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P48483AB321813A	6/4/2011 6:13:00 PM	EFH (C30-C40)	1.4 mg/Kg	SL-139-SA5DN-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-139-SA5DN-SB-2.0-3.0(REA2)	EFH (C30-C40)	1.3 mg/Kg	1.3U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P46460AB240550A	6/3/2011 5:50:00 AM	ENDOSULFAN II	0.59 ug/L	EB06-SA5DN-SS-052411

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB67B211316A	5/27/2011 1:16:00 PM	ACETONE METHYLENE CHLORIDE	9.6 ug/Kg 1.1 ug/Kg	SL-139-SA5DN-SB-2.0-3.0 SL-145-SA5DN-SB-2.0-3.0 SL-146-SA5DN-SB-2.0-3.0 SL-150-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-139-SA5DN-SB-2.0-3.0(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-139-SA5DN-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.7U ug/Kg
SL-145-SA5DN-SB-2.0-3.0(RES)	ACETONE	7.8 ug/Kg	8.2U ug/Kg
SL-145-SA5DN-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.1U ug/Kg
SL-146-SA5DN-SB-2.0-3.0(RES)	ACETONE	8.5 ug/Kg	8.8U ug/Kg
SL-146-SA5DN-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.4U ug/Kg
SL-150-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.1 ug/Kg	9.1U ug/Kg
SL-150-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.5U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-203-SA5DN-SS-0.0-0.5MS (SL-139-SA5DN-SB-2.0-3.0 SL-145-SA5DN-SB-2.0-3.0 SL-146-SA5DN-SB-2.0-3.0 SL-150-SA5DN-SB-4.0-5.0 SL-203-SA5DN-SS-0.0-0.5 SL-204-SA5DN-SS-0.0-0.5)	FLUORIDE	52	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-203-SA5DN-SS-0.0-0.5DUP (SL-139-SA5DN-SB-2.0-3.0 SL -145-SA5DN-SB-2.0-3.0 SL -146-SA5DN-SB-2.0-3.0 SL -150-SA5DN-SB-4.0-5.0 SL -203-SA5DN-SS-0.0-0.5 SL -204-SA5DN-SS-0.0-0.5)	Nitrate-NO3	25	20.00	No Qual, OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11460AY240614A (EB06-SA5DN-SS-052411)	HEPTACHLOR	-	130	57.00-126.00	-	HEPTACHLOR	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6WDLCSY262341 (EB06-SA5DN-SS-052411)	BENZOIC ACID	-	-	10.00-69.00	51 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11450AQ240729A (SL-203-SA5DN-SS-0.0-0.5 SL-204-SA5DN-SS-0.0-0.5)	DINOSEB	8	-	10.00-36.00	-	DINOSEB	J (all detects) R (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11463AQ241713A (SL-203-SA5DN-SS-0.0-0.5 SL-204-SA5DN-SS-0.0-0.5)	METHOXYCHLOR	135	-	59.00-125.00	-	METHOXYCHLOR	J(all detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6LBLCSQ260724 (SL-139-SA5DN-SB-2.0-3.0 SL-145-SA5DN-SB-2.0-3.0 SL-146-SA5DN-SB-2.0-3.0 SL-150-SA5DN-SB-4.0-5.0 SL-203-SA5DN-SS-0.0-0.5 SL-204-SA5DN-SS-0.0-0.5)	BENZO(A)PYRENE BENZO(K)FLUORANTHENE	131 141	- -	58.00-129.00 66.00-137.00	- -	BENZO(A)PYRENE BENZO(K)FLUORANTHENE	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
LCS1B67Q211231A LCS1B67Y211254A (SL-139-SA5DN-SB-2.0-3.0 SL-145-SA5DN-SB-2.0-3.0 SL-146-SA5DN-SB-2.0-3.0 SL-150-SA5DN-SB-4.0-5.0)	2-Chloro-1,1,1-trifluoroethane	77	77	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA5DN-SS-052411	LEAD	J	0.00017	0.0010	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA5DN-SS-052411	1-METHYLNAPHTHALENE	J	0.019	0.052	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.019	0.052	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.20	1.0	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	TIN	J	2.82	10.9	PQL	mg/Kg	J (all detects)
SL-145-SA5DN-SB-2.0-3.0	TIN	J	2.75	10.6	PQL	mg/Kg	J (all detects)
SL-146-SA5DN-SB-2.0-3.0	TIN	J	2.96	11.2	PQL	mg/Kg	J (all detects)
SL-150-SA5DN-SB-4.0-5.0	TIN	J	2.89	10.4	PQL	mg/Kg	J (all detects)
SL-203-SA5DN-SS-0.0-0.5	SODIUM	J	79.5	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.70	11.5	PQL	mg/Kg	
SL-204-SA5DN-SS-0.0-0.5	SODIUM	J	103	117	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	11.7	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	ANTIMONY	J	0.0795	0.223	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.105	0.112	PQL	mg/Kg	
	SELENIUM	J	0.127	0.446	PQL	mg/Kg	
	SILVER	J	0.0829	0.112	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-145-SA5DN-SB-2.0-3.0	ANTIMONY	J	0.0743	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.135	0.424	PQL	mg/Kg	
	SILVER	J	0.0523	0.106	PQL	mg/Kg	
SL-146-SA5DN-SB-2.0-3.0	CADMIUM	J	0.0604	0.117	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.103	0.117	PQL	mg/Kg	
	SELENIUM	J	0.0909	0.467	PQL	mg/Kg	
SL-150-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.103	0.210	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0932	0.105	PQL	mg/Kg	
	SELENIUM	J	0.126	0.421	PQL	mg/Kg	
SL-203-SA5DN-SS-0.0-0.5	SELENIUM	J	0.168	0.461	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0372	0.115	PQL	mg/Kg	
SL-204-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.143	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.173	0.464	PQL	mg/Kg	
	SILVER	J	0.0635	0.116	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.93	1.1	PQL	mg/Kg	J (all detects)
SL-145-SA5DN-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.69	1.1	PQL	mg/Kg	J (all detects)
SL-146-SA5DN-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-150-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-203-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.86	1.2	PQL	mg/Kg	J (all detects)
SL-204-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.69	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	MERCURY	J	0.0072	0.110	PQL	mg/Kg	J (all detects)
SL-146-SA5DN-SB-2.0-3.0	MERCURY	J	0.0051	0.110	PQL	mg/Kg	J (all detects)
SL-203-SA5DN-SS-0.0-0.5	MERCURY	J	0.0114	0.116	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	EFH (C15-C20)	J	0.49	1.3	PQL	mg/Kg	J (all detects)
	EFH (C21-C30)	J	0.70	1.3	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-203-SA5DN-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.15	0.19	PQL	ug/Kg	J (all detects)
SL-204-SA5DN-SS-0.0-0.5	4,4'-DDE 4,4'-DDT	J J	0.31 0.17	0.40 0.40	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	AROCLOR 1254	J	0.78	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	METHYLENE CHLORIDE	J	1.3	4.7	PQL	ug/Kg	J (all detects)
SL-145-SA5DN-SB-2.0-3.0	ACETONE METHYLENE CHLORIDE	J J	7.8 1.0	8.2 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-146-SA5DN-SB-2.0-3.0	ACETONE METHYLENE CHLORIDE	J J	8.5 1.2	8.8 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-150-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.5	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5DN-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)
SL-203-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	53	390	PQL	ug/Kg	J (all detects)
SL-204-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	58	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-203-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE	J J	1.1 1.3	2.0 2.0	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE161 **Laboratory: LL**

EDD Filename: DE161_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-204-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.2	2.0	PQL	ug/Kg	
	CHRYSENE	J	0.89	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	2.0	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.1	2.0	PQL	ug/Kg	
	PYRENE	J	1.0	2.0	PQL	ug/Kg	

LDC #: 26275S4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE161 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
2nd Reviewer: OR

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	3075/62
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	Ca
XI.	ICP Serial Dilution	SW	Al, As, Ba, ~~Ca~~, Cr Co, Cu, Pb, Mg, Mn, Ni, Sr, V Zn
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	SW	EB=7 (No qual. >5X)

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

Validated Samples:

1	SL-203-SA5DN-SS-0.0-0.5	11		21		31	
2	SL-204-SA5DN-SS-0.0-0.5	12		22		32	
3	SL-139-SA5DN-SS-2.0-3.0	13		23		33	
4	SL-145-SA5DN-SS-2.0-3.0	14		24		34	
5	SL-146-SA5DN-SS-2.0-3.0	15		25		35	
6	SL-150-SA5DN-SS-4.0-5.0	16		26		36	
7	EB06-SA5DN-SS-052411	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

SAMPLE DELIVERY GROUP

DE162

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	TB-052511	6298878	TB	5030B	8015M	III
25-May-2011	TB-052511	6298878	TB	5030B	8260B	III
25-May-2011	TB-052511	6298878	TB	5030B	8260B SIM	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	3050B	6010B	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	3050B	6020	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	3060A	7199	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	3550B	8082	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	3550B	8270C	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	3550B	8270C SIM	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	5035	8260B	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	5035	8260B SIM	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	METHOD	300.0	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	METHOD	314.0	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0	6298873	N	METHOD	7471A	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	3050B	6010B	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	3050B	6020	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	3060A	7199	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	3550B	8082	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	3550B	8270C	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	3550B	8270C SIM	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	5035	8260B	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	5035	8260B SIM	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	METHOD	300.0	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	METHOD	314.0	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0MS	6298874	MS	METHOD	7471A	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0DU	6298876	DUP	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-144-SA5DN-SB-2.0-3.0DU	6298876	DUP	3050B	6020	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0DU	6298876	DUP	3060A	7199	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0DU	6298876	DUP	METHOD	300.0	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0DU	6298876	DUP	METHOD	314.0	III
25-May-2011	SL-144-SA5DN-SB-2.0-3.0DU	6298876	DUP	METHOD	7471A	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	3050B	6010B	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	3050B	6020	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	3060A	7199	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	3550B	8082	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	3550B	8270C	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	3550B	8270C SIM	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	5035	8260B	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	5035	8260B SIM	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	METHOD	300.0	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	METHOD	314.0	III
25-May-2011	DUP07-SA5DN-QC-052511	6298877	FD	METHOD	7471A	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	3050B	6010B	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	3050B	6020	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	3060A	7199	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	3550B	8082	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	3550B	8270C	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	3550B	8270C SIM	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	5035	8260B	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	5035	8260B SIM	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	METHOD	300.0	III
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-142-SA5DN-SB-2.0-3.0	6298872	N	METHOD	7471A	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3050B	6010B	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3050B	6020	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3060A	7199	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3546	1625C	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3550B	8015B	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3550B	8015M	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3550B	8082	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3550B	8270C	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	3550B	8270C SIM	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	5035	8015M	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	5035	8260B	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	5035	8260B SIM	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	8330	8330A	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	METHOD	300.0	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	METHOD	314.0	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	METHOD	7471A	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	METHOD	8015B	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	METHOD	8015M	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	METHOD	8315A	III
25-May-2011	SL-140-SA5DN-SB-2.0-3.0	6298871	N	METHOD	9012B	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3050B	6010B	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3050B	6020	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3060A	7199	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3546	1625C	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3550B	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3550B	8015M	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3550B	8082	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3550B	8270C	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	3550B	8270C SIM	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	5035	8015M	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	5035	8260B	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	5035	8260B SIM	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	8330	8330A	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	METHOD	300.0	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	METHOD	314.0	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	METHOD	7471A	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	METHOD	8015B	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	METHOD	8015M	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	METHOD	8315A	III
25-May-2011	SL-133-SA5DN-SB-4.0-5.0	6298870	N	METHOD	9012B	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	3050B	6010B	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	3050B	6020	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	3060A	7199	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	3550B	8082	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	3550B	8270C	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	3550B	8270C SIM	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	5035	8260B	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	5035	8260B SIM	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	METHOD	300.0	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	METHOD	314.0	III
25-May-2011	SL-130-SA5DN-SB-4.0-5.0	6298869	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.86	MDL	1.1	PQL	mg/Kg	J	FD

Sample ID: SL-140-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.85	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.3		0.88	MDL	1.1	PQL	mg/Kg	J	FD

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18800		5.22	MDL	20.8	PQL	mg/Kg	J	A
CALCIUM	3950		6.37	MDL	20.8	PQL	mg/Kg	J	A
MAGNESIUM	6270		2.64	MDL	10.4	PQL	mg/Kg	J	A
MANGANESE	277		0.0810	MDL	0.519	PQL	mg/Kg	J	A
POTASSIUM	2410		18.7	MDL	51.9	PQL	mg/Kg	J	Q
SODIUM	216		38.7	MDL	104	PQL	mg/Kg	J	FD
STRONTIUM	27.3		0.0644	MDL	0.519	PQL	mg/Kg	J	A
TIN	2.88	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: SL-130-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 4:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20300		5.49	MDL	21.8	PQL	mg/Kg	J	A
CALCIUM	3390		6.69	MDL	21.8	PQL	mg/Kg	J	A
MAGNESIUM	5640		2.77	MDL	10.9	PQL	mg/Kg	J	A
MANGANESE	369		0.0851	MDL	0.546	PQL	mg/Kg	J	A
POTASSIUM	1950		19.6	MDL	54.6	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory:** LL

EDD Filename: DE162_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-130-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 4:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	23.9		0.0677	MDL	0.546	PQL	mg/Kg	J	A
TIN	2.79	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	4.74	J	0.917	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	24300		5.42	MDL	21.5	PQL	mg/Kg	J	A
CALCIUM	3420		6.60	MDL	21.5	PQL	mg/Kg	J	A
MAGNESIUM	5420		2.74	MDL	10.8	PQL	mg/Kg	J	A
MANGANESE	276		0.0840	MDL	0.539	PQL	mg/Kg	J	A
POTASSIUM	1870		19.4	MDL	53.9	PQL	mg/Kg	J	Q
STRONTIUM	28.0		0.0668	MDL	0.539	PQL	mg/Kg	J	A
TIN	2.72	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-140-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	23500		5.17	MDL	20.5	PQL	mg/Kg	J	A
CALCIUM	3160		6.30	MDL	20.5	PQL	mg/Kg	J	A
MAGNESIUM	5170		2.61	MDL	10.3	PQL	mg/Kg	J	A
MANGANESE	246		0.0801	MDL	0.514	PQL	mg/Kg	J	A
POTASSIUM	1940		18.5	MDL	51.4	PQL	mg/Kg	J	Q
STRONTIUM	27.3		0.0637	MDL	0.514	PQL	mg/Kg	J	A
TIN	2.91	J	1.03	MDL	10.3	PQL	mg/Kg	U	B

Sample ID: SL-142-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20500		5.36	MDL	21.3	PQL	mg/Kg	J	A
CALCIUM	5070		6.53	MDL	21.3	PQL	mg/Kg	J	A
MAGNESIUM	6760		2.71	MDL	10.7	PQL	mg/Kg	J	A
MANGANESE	323		0.0831	MDL	0.533	PQL	mg/Kg	J	A
POTASSIUM	2530		19.2	MDL	53.3	PQL	mg/Kg	J	Q
STRONTIUM	128		0.0661	MDL	0.533	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory:** LL

EDD Filename: DE162_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-142-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.81	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19900		5.38	MDL	21.4	PQL	mg/Kg	J	A
CALCIUM	5500		6.56	MDL	21.4	PQL	mg/Kg	J	A
MAGNESIUM	7180		2.72	MDL	10.7	PQL	mg/Kg	J	A
MANGANESE	443		0.0835	MDL	0.535	PQL	mg/Kg	J	A
POTASSIUM	3420		19.3	MDL	53.5	PQL	mg/Kg	J	Q
SODIUM	400		39.9	MDL	107	PQL	mg/Kg	J	FD
STRONTIUM	33.9		0.0664	MDL	0.535	PQL	mg/Kg	J	A
TIN	4.03	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.145	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.113	MDL	0.419	PQL	mg/Kg	J	E, A

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.105	J	0.0629	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	10.6		0.0839	MDL	0.419	PQL	mg/Kg	J	E, A
BERYLLIUM	0.602		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.0534	J	0.0419	MDL	0.105	PQL	mg/Kg	J	Z
CHROMIUM	24.2		0.126	MDL	0.419	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE162 Laboratory: LL

EDD Filename: DE162_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.60		0.0210	MDL	0.105	PQL	mg/Kg	J	E, E, FD, A
COPPER	13.9		0.0692	MDL	0.419	PQL	mg/Kg	J	Q, E, A
LEAD	7.73		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, E, A
NICKEL	16.1		0.105	MDL	0.419	PQL	mg/Kg	J	Q, E, A
SILVER	0.0155	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, FD
VANADIUM	45.3		0.0231	MDL	0.105	PQL	mg/Kg	J	E, A
ZINC	60.2		0.587	MDL	3.15	PQL	mg/Kg	J	A

Sample ID: SL-130-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 4:15:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.256	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-130-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 4:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.123	MDL	0.454	PQL	mg/Kg	J	E, A

Sample ID: SL-130-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 4:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	20.1		0.0908	MDL	0.454	PQL	mg/Kg	J	E, A
BERYLLIUM	0.863		0.0182	MDL	0.114	PQL	mg/Kg	J	Q, E
CADMIUM	0.0612	J	0.0454	MDL	0.114	PQL	mg/Kg	J	Z
CHROMIUM	35.9		0.136	MDL	0.454	PQL	mg/Kg	J	Q, E, A
COBALT	11.1		0.0227	MDL	0.114	PQL	mg/Kg	J	E, E, A
COPPER	11.0		0.0749	MDL	0.454	PQL	mg/Kg	J	Q, E, A
LEAD	9.39		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E, A
NICKEL	22.6		0.114	MDL	0.454	PQL	mg/Kg	J	Q, E, A
SILVER	0.0609	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	54.4		0.0250	MDL	0.114	PQL	mg/Kg	J	E, A
ZINC	55.9		0.636	MDL	3.41	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory:** LL

EDD Filename: DE162_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-133-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 12:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0545	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 12:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.122	MDL	0.452	PQL	mg/Kg	J	E, A

Sample ID: SL-133-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 12:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0679	U	0.0679	MDL	0.226	PQL	mg/Kg	UJ	Q
ARSENIC	14.8		0.0905	MDL	0.452	PQL	mg/Kg	J	E, A
BERYLLIUM	0.785		0.0181	MDL	0.113	PQL	mg/Kg	J	Q, E
CHROMIUM	25.5		0.136	MDL	0.452	PQL	mg/Kg	J	Q, E, A
COBALT	6.96		0.0226	MDL	0.113	PQL	mg/Kg	J	E, E, A
COPPER	9.83		0.0747	MDL	0.452	PQL	mg/Kg	J	Q, E, A
LEAD	7.02		0.0118	MDL	0.226	PQL	mg/Kg	J	Q, E, A
NICKEL	18.5		0.113	MDL	0.452	PQL	mg/Kg	J	Q, E, A
SILVER	0.0901	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	44.2		0.0249	MDL	0.113	PQL	mg/Kg	J	E, A
ZINC	51.4		0.633	MDL	3.39	PQL	mg/Kg	J	A

Sample ID: SL-140-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0639	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.114	MDL	0.423	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE162 Laboratory: LL

EDD Filename: DE162_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-140-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0981	J	0.0635	MDL	0.212	PQL	mg/Kg	J	Z, Q
ARSENIC	14.9		0.0846	MDL	0.423	PQL	mg/Kg	J	E, A
BERYLLIUM	0.892		0.0169	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.0729	J	0.0423	MDL	0.106	PQL	mg/Kg	J	Z
CHROMIUM	27.4		0.127	MDL	0.423	PQL	mg/Kg	J	Q, E, A
COBALT	11.8		0.0212	MDL	0.106	PQL	mg/Kg	J	E, E, A
COPPER	11.2		0.0698	MDL	0.423	PQL	mg/Kg	J	Q, E, A
LEAD	9.33		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E, A
NICKEL	16.4		0.106	MDL	0.423	PQL	mg/Kg	J	Q, E, A
SILVER	0.0843	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	52.4		0.0233	MDL	0.106	PQL	mg/Kg	J	E, A
ZINC	47.7		0.592	MDL	3.17	PQL	mg/Kg	J	A

Sample ID: SL-142-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 9:50:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.319	J	0.0430	MDL	0.430	PQL	mg/Kg	J	Z

Sample ID: SL-142-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 9:50:00 *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	256		0.291	MDL	1.08	PQL	mg/Kg	J	E, A

Sample ID: SL-142-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 9:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.247		0.0646	MDL	0.215	PQL	mg/Kg	J	Q
ARSENIC	20.8		0.0861	MDL	0.430	PQL	mg/Kg	J	E, A
BERYLLIUM	1.17		0.0172	MDL	0.108	PQL	mg/Kg	J	Q, E
CHROMIUM	37.3		0.129	MDL	0.430	PQL	mg/Kg	J	Q, E, A
COBALT	19.8		0.0215	MDL	0.108	PQL	mg/Kg	J	E, E, A
COPPER	27.2		0.0710	MDL	0.430	PQL	mg/Kg	J	Q, E, A
LEAD	13.5		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, E, A
NICKEL	33.6		0.108	MDL	0.430	PQL	mg/Kg	J	Q, E, A
SILVER	0.0496	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory:** LL

EDD Filename: DE162_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-142-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 9:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	66.9		0.0237	MDL	0.108	PQL	mg/Kg	J	E, A
ZINC	114		0.603	MDL	3.23	PQL	mg/Kg	J	A

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	165		0.118	MDL	0.437	PQL	mg/Kg	J	E, A

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.117	J	0.0655	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	12.1		0.0873	MDL	0.437	PQL	mg/Kg	J	E, A
BERYLLIUM	0.842		0.0175	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.0830	J	0.0437	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	23.1		0.131	MDL	0.437	PQL	mg/Kg	J	Q, E, A
COBALT	13.9		0.0218	MDL	0.109	PQL	mg/Kg	J	E, E, FD, A
COPPER	18.7		0.0720	MDL	0.437	PQL	mg/Kg	J	Q, E, A
LEAD	9.30		0.0114	MDL	0.218	PQL	mg/Kg	J	Q, E, A
NICKEL	17.3		0.109	MDL	0.437	PQL	mg/Kg	J	Q, E, A
SILVER	0.0284	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, FD
VANADIUM	45.7		0.0240	MDL	0.109	PQL	mg/Kg	J	E, A
ZINC	98.9		0.611	MDL	3.27	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory:** LL

EDD Filename: DE162_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.21	U	0.21	MDL	1.1	PQL	mg/Kg	UJ	FD

Sample ID: SL-133-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.69	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1	J	0.22	MDL	1.1	PQL	mg/Kg	UJ	B, FD

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0030	U	0.0030	MDL	0.106	PQL	mg/Kg	UJ	FD

Sample ID: SL-130-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 4:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0140	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0042	J	0.0029	MDL	0.100	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0041	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE162 Laboratory: LL

EDD Filename: DE162_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Sample ID: SL-133-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 12:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.2	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z, L

Sample ID: SL-140-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.5		0.43	MDL	1.3	PQL	mg/Kg	J	L

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	Q
N-NITROSODIPHENYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q

Method Category: VOA **Method:** 8260B **Matrix:** SO

Sample ID: DUP07-SA5DN-QC-052511 *Collected:* 5/25/2011 9:00:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	14		7.0	MDL	8.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.4	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-130-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 4:15:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.2		6.4	MDL	7.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE162 Laboratory: LL

EDD Filename: DE162_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-130-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 4:15:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.2		6.4	MDL	7.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-133-SA5DN-SB-4.0-5.0 *Collected:* 5/25/2011 12:00:00 *Analysis Type:* RES *Dilution:* 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.0		6.1	MDL	7.3	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.1	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-140-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.8		6.3	MDL	7.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-142-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 9:50:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.9		7.1	MDL	8.5	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.1	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-144-SA5DN-SB-2.0-3.0 *Collected:* 5/25/2011 8:55:00 *Analysis Type:* RES *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.4		7.0	MDL	8.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE162

Method Blank Outlier Report

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15208AB220406	6/2/2011 4:06:00 AM	ALUMINUM CALCIUM PHOSPHORUS TIN	6.00 mg/Kg 8.24 mg/Kg 0.998 mg/Kg 1.17 mg/Kg	DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP07-SA5DN-QC-052511(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-130-SA5DN-SB-4.0-5.0(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-133-SA5DN-SB-4.0-5.0(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-140-SA5DN-SB-2.0-3.0(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-142-SA5DN-SB-2.0-3.0(RES)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-144-SA5DN-SB-2.0-3.0(RES)	TIN	4.03 mg/Kg	4.03U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15726BB221044A	6/7/2011 10:44:00 AM	COPPER	0.107 mg/Kg	DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0

Method: **7199**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14843AB271310A	6/1/2011 1:10:00 PM	HEXAVALENT CHROMIUM	0.26 mg/Kg	DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-133-SA5DN-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.69 mg/Kg	0.69U mg/Kg
SL-144-SA5DN-SB-2.0-3.0(RES)	HEXAVALENT CHROMIUM	1.1 mg/Kg	1.1U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB72B211210A	6/1/2011 12:10:00 PM	ACETONE METHYLENE CHLORIDE	8.6 ug/Kg 1.4 ug/Kg	DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP07-SA5DN-QC-052511(RES)	ACETONE	14 ug/Kg	14U ug/Kg
DUP07-SA5DN-QC-052511(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.2U ug/Kg
SL-130-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.2 ug/Kg	8.2U ug/Kg
SL-130-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.9U ug/Kg
SL-133-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.0 ug/Kg	8.0U ug/Kg
SL-133-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	3.7U ug/Kg
SL-140-SA5DN-SB-2.0-3.0(RES)	ACETONE	8.8 ug/Kg	8.8U ug/Kg
SL-140-SA5DN-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.8U ug/Kg
SL-142-SA5DN-SB-2.0-3.0(RES)	ACETONE	8.9 ug/Kg	8.9U ug/Kg
SL-142-SA5DN-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.3U ug/Kg
SL-144-SA5DN-SB-2.0-3.0(RES)	ACETONE	9.4 ug/Kg	9.4U ug/Kg
SL-144-SA5DN-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.2U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE162 Laboratory: LL

EDD Filename: DE162_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-144-SA5DN-SB-2.0-3.0MS (SL-144-SA5DN-SB-2.0-3.0)	BENZO(B)FLUORANTHENE	160	-	43.00-155.00	-	BENZO(B)FLUORANTHENE	J (all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-144-SA5DN-SB-2.0-3.0MSD (SL-144-SA5DN-SB-2.0-3.0)	2,4-DINITROPHENOL BENZOIC ACID	- -	- -	20.00-143.00 10.00-173.00	52 (30.00) 45 (30.00)	2,4-DINITROPHENOL BENZOIC ACID	J(all detects)
SL-144-SA5DN-SB-2.0-3.0MS SL-144-SA5DN-SB-2.0-3.0MSD (SL-144-SA5DN-SB-2.0-3.0)	1,4-DICHLOROBENZENE BENZIDINE N-NITROSODIPHENYLAMINE	69 19 81	- 31 -	70.00-100.00 35.00-141.00 86.00-145.00	- 50 (30.00) -	1,4-DICHLOROBENZENE BENZIDINE N-NITROSODIPHENYLAMINE	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-144-SA5DN-SB-2.0-3.0MS SL-144-SA5DN-SB-2.0-3.0MSD (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	ALUMINUM MAGNESIUM	5295 450	7388 274	75.00-125.00 75.00-125.00	- -	ALUMINUM MAGNESIUM	No Qual, >4x
SL-144-SA5DN-SB-2.0-3.0MS SL-144-SA5DN-SB-2.0-3.0MSD (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	CALCIUM IRON MANGANESE PHOSPHORUS TITANIUM	-76 -5356 -257 -220 -31	29 -747 -256 -292 -94	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	CALCIUM IRON MANGANESE PHOSPHORUS TITANIUM	No Qual, >4x
SL-144-SA5DN-SB-2.0-3.0MSD (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	POTASSIUM	-	40	75.00-125.00	-	POTASSIUM	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 6020**
***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-144-SA5DN-SB-2.0-3.0MS SL-144-SA5DN-SB-2.0-3.0MSD (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	ZINC	-47	-7	75.00-125.00	-	ZINC	No Qual, >4x
SL-144-SA5DN-SB-2.0-3.0MS SL-144-SA5DN-SB-2.0-3.0MSD (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	ANTIMONY ARSENIC BERYLLIUM CHROMIUM COBALT COPPER LEAD NICKEL VANADIUM	34 267 - 201 - - 291 162 258	44 - 67 - - 67 - - -	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- 24 (20.00) 28 (20.00) 28 (20.00) 24 (20.00) 21 (20.00) 46 (20.00) 21 (20.00) 28 (20.00)	ANTIMONY ARSENIC BERYLLIUM CHROMIUM COBALT COPPER LEAD NICKEL VANADIUM	J(all detects) UJ(all non-detects) As, V No Qual based on %R, >4x
SL-144-SA5DN-SB-2.0-3.0MS SL-144-SA5DN-SB-2.0-3.0MSD (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	BARIUM	373	-28	75.00-125.00	24 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual based on %R, >4x

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-144-SA5DN-SB-2.0-3.0DUP (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	COBALT	41	20.00	J (all detects) UJ (all non-detects) Ag NoQual, OK by difference
	SILVER	122	20.00	

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-144-SA5DN-SB-2.0-3.0DUP (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	HEXAVALENT CHROMIUM	60	20.00	No Qual, OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-144-SA5DN-SB-2.0-3.0DUP (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	MERCURY	113	20.00	No Qual, OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11587AQ320825A (SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0)	EFH (C15-C20) EFH (C30-C40)	115 114	- -	66.00-113.00 66.00-113.00	- -	EFH (C15-C20) EFH (C30-C40)	J (all detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6LBLCSQ260724 (DUP07-SA5DN-QC-052511 SL-130-SA5DN-SB-4.0-5.0 SL-133-SA5DN-SB-4.0-5.0 SL-140-SA5DN-SB-2.0-3.0 SL-142-SA5DN-SB-2.0-3.0 SL-144-SA5DN-SB-2.0-3.0)	BENZO(A)PYRENE BENZO(K)FLUORANTHENE	131 141	- -	58.00-129.00 66.00-137.00	- -	BENZO(A)PYRENE BENZO(K)FLUORANTHENE	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-144-SA5DN-SB-2.0-3.0	DUP07-SA5DN-QC-052511			
MOISTURE	9.3	6.5	35		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-144-SA5DN-SB-2.0-3.0	DUP07-SA5DN-QC-052511			
FLUORIDE	8.3	3.4	84	50.00	J(all detects)

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-144-SA5DN-SB-2.0-3.0	DUP07-SA5DN-QC-052511			
ALUMINUM	19900	18800	6	50.00	No Qualifiers Applied
CALCIUM	5500	3950	33	50.00	
IRON	41200	28300	37	50.00	
LITHIUM	44.1	32.7	30	50.00	
MAGNESIUM	7180	6270	14	50.00	
MANGANESE	443	277	46	50.00	
PHOSPHORUS	706	446	45	50.00	
POTASSIUM	3420	2410	35	50.00	
STRONTIUM	33.9	27.3	22	50.00	
TIN	4.03	2.88	33	50.00	
TITANIUM	1830	1330	32	50.00	
Zirconium	6.83	6.00	13	50.00	
SODIUM	400	216	60	50.00	J(all detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-144-SA5DN-SB-2.0-3.0	DUP07-SA5DN-QC-052511			
ANTIMONY	0.117	0.105	11	50.00	No Qualifiers Applied
ARSENIC	12.1	10.6	13	50.00	
BARIUM	165	113	37	50.00	
BERYLLIUM	0.842	0.602	33	50.00	
CADMIUM	0.0830	0.0534	43	50.00	
CHROMIUM	23.1	24.2	5	50.00	
COPPER	18.7	13.9	29	50.00	
LEAD	9.30	7.73	18	50.00	
MOLYBDENUM	0.475	0.427	11	50.00	
NICKEL	17.3	16.1	7	50.00	
SELENIUM	0.104	0.145	33	50.00	
THALLIUM	0.394	0.267	38	50.00	
VANADIUM	45.7	45.3	1	50.00	
ZINC	98.9	60.2	49	50.00	
COBALT	13.9	6.60	71	50.00	J(all detects)
SILVER	0.0284	0.0155	59	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-144-SA5DN-SB-2.0-3.0	DUP07-SA5DN-QC-052511			
HEXAVALENT CHROMIUM	1.1	1.1 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-144-SA5DN-SB-2.0-3.0	DUP07-SA5DN-QC-052511			
MERCURY	0.0041	0.106 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-144-SA5DN-SB-2.0-3.0	DUP07-SA5DN-QC-052511			
ACETONE	9.4	14	39	50.00	No Qualifiers Applied
METHYLENE CHLORIDE	1.6	1.4	13	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-144-SA5DN-SB-2.0-3.0	DUP07-SA5DN-QC-052511			
PH	7.89	6.64	17	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-140-SA5DN-SB-2.0-3.0	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP07-SA5DN-QC-052511	TIN	J	2.88	10.4	PQL	mg/Kg	J (all detects)
SL-130-SA5DN-SB-4.0-5.0	TIN	J	2.79	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.74	5.46	PQL	mg/Kg	
SL-133-SA5DN-SB-4.0-5.0	TIN	J	2.72	10.8	PQL	mg/Kg	J (all detects)
SL-140-SA5DN-SB-2.0-3.0	TIN	J	2.91	10.3	PQL	mg/Kg	J (all detects)
SL-142-SA5DN-SB-2.0-3.0	TIN	J	2.81	10.7	PQL	mg/Kg	J (all detects)
SL-144-SA5DN-SB-2.0-3.0	TIN	J	4.03	10.7	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP07-SA5DN-QC-052511	ANTIMONY	J	0.105	0.210	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0534	0.105	PQL	mg/Kg	
	SELENIUM	J	0.145	0.419	PQL	mg/Kg	
	SILVER	J	0.0155	0.105	PQL	mg/Kg	
SL-130-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.139	0.227	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0612	0.114	PQL	mg/Kg	
	SELENIUM	J	0.256	0.454	PQL	mg/Kg	
	SILVER	J	0.0609	0.114	PQL	mg/Kg	
SL-133-SA5DN-SB-4.0-5.0	SELENIUM	J	0.0545	0.452	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0901	0.113	PQL	mg/Kg	
SL-140-SA5DN-SB-2.0-3.0	ANTIMONY	J	0.0981	0.212	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0729	0.106	PQL	mg/Kg	
	SELENIUM	J	0.0639	0.423	PQL	mg/Kg	
	SILVER	J	0.0843	0.106	PQL	mg/Kg	
SL-142-SA5DN-SB-2.0-3.0	SELENIUM	J	0.319	0.430	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0496	0.108	PQL	mg/Kg	
SL-144-SA5DN-SB-2.0-3.0	ANTIMONY	J	0.117	0.218	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0830	0.109	PQL	mg/Kg	
	SELENIUM	J	0.104	0.437	PQL	mg/Kg	
	SILVER	J	0.0284	0.109	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE162 **Laboratory: LL**

EDD Filename: DE162_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.69	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-130-SA5DN-SB-4.0-5.0	MERCURY	J	0.0140	0.106	PQL	mg/Kg	J (all detects)
SL-140-SA5DN-SB-2.0-3.0	MERCURY	J	0.0042	0.100	PQL	mg/Kg	J (all detects)
SL-144-SA5DN-SB-2.0-3.0	MERCURY	J	0.0041	0.108	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	1.2	1.3	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP07-SA5DN-QC-052511	METHYLENE CHLORIDE	J	1.4	4.2	PQL	ug/Kg	J (all detects)
SL-130-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.3	3.9	PQL	ug/Kg	J (all detects)
SL-133-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.1	3.7	PQL	ug/Kg	J (all detects)
SL-140-SA5DN-SB-2.0-3.0	METHYLENE CHLORIDE	J	1.3	3.8	PQL	ug/Kg	J (all detects)
SL-142-SA5DN-SB-2.0-3.0	METHYLENE CHLORIDE	J	1.1	4.3	PQL	ug/Kg	J (all detects)
SL-144-SA5DN-SB-2.0-3.0	METHYLENE CHLORIDE	J	1.6	4.2	PQL	ug/Kg	J (all detects)

LDC #: 26275T4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE162 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
2nd Reviewer: CR

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual
V.	ICP Interference Check Sample (ICS) Analysis	N	RPD out RPD
VI.	Matrix Spike Analysis	SW	Al, As, Ba, Ca, Fe, Mg, Mn, P, Ti, V, Zn 75% No qual; A, SD R
VII.	Duplicate Sample Analysis	SW	Hg, Ag <5X
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Al, As, Ba, Ca, Cr, Co, Cu, Pb, Mg, Mn, Ni, Sr, V, Zn
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	-	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-130-SA5DN-SS-4.0-5.0	11		21		31	
2	SL-133-SA5DN-SS-4.0-5.0	12		22		32	
3	SL-140-SA5DN-SS-2.0-3.0	13		23		33	
4	SL-142-SA5DN-SS-2.0-3.0	14		24		34	
5	SL-144-SA5DN-SS-2.0-3.0	15		25		35	
6	DUP07-SA5DN-QC-052511	16		26		36	
7	SL-144-SA5DN-SS-2.0-3.0MS	17		27		37	
8	SL-144-SA5DN-SS-2.0-3.0MSD	18		28		38	
9	SL-144-SA5DN-SS-2.0-3.0DUP	19		29		39	
10		20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE162
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298873BKG Matrix Spike Lab Sample ID: 6298874MS Matrix Spike Duplicate Lab Sample ID: 6298875MSD
% Solids for Sample: 90.7
Batch Id(s): P15208A, P15726B, P15211A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		19868.4129		31544.8104		35532.4464		220.5072	212.0261	MG/KG	5295		7388		12			20	P
Antimony	121	0.1168	B	0.5608		0.6771		1.2971	1.2600	MG/KG	34	N	44	N	19		75 - 125	20	MS
Arsenic	75	12.1235		17.8870		13.9844		2.1618	2.1001	MG/KG	267		89		24	*		20	MS
Barium	137	164.7691		205.0500		161.8103		10.8092	10.5003	MG/KG	373		-28		24	*		20	MS
Beryllium	9	0.8416		1.8644		1.4041		0.8647	0.8400	MG/KG	118		67	N	28	*	75 - 125	20	MS
Boron		4.7634	U	205.8710		199.2250		220.5072	212.0261	MG/KG	93		94		3		84 - 115	20	P
Cadmium	111	0.0830	B	1.1791		1.2101		1.0809	1.0500	MG/KG	101		107		3		75 - 125	20	MS
Calcium		5497.8452		5163.3925		5621.0659		441.0143	424.0522	MG/KG	-76		29		8			20	P
Chromium	52	23.0768		44.7716		33.7061		10.8092	10.5003	MG/KG	201	N	101		28	*	75 - 125	20	MS
Cobalt	59	13.9138		81.5228		63.8211		54.0459	52.5017	MG/KG	125		95		24	*	75 - 125	20	MS
Copper	63	18.6863		31.7141		25.7048		10.8092	10.5003	MG/KG	121		67	N	21	*	75 - 125	20	MS
Iron		41179.1193		35273.5998		40387.5838		110.2536	106.0131	MG/KG	-5356		-747		14			20	P
Lead	208	9.3006		18.7496		11.7289		3.2428	3.1501	MG/KG	291	N	77		46	*	75 - 125	20	MS
Lithium		44.0640		152.4024		155.3441		110.2536	106.0131	MG/KG	98		105		2		82 - 114	20	P
Magnesium		7178.5733		8171.4686		7759.8751		220.5072	212.0261	MG/KG	450		274		5			20	P
Manganese		442.6061		301.0011		306.8453		55.1268	53.0065	MG/KG	-257		-256		2			20	P
Mercury		0.0041	B	0.1838		0.1648		0.1750	0.1704	MG/KG	103		94		11		65 - 135	20	CV
Molybdenum	98	0.4749		10.6189		11.0737		10.8092	10.5003	MG/KG	94		101		4		75 - 125	20	MS
Nickel	60	17.2520		34.7839		28.2039		10.8092	10.5003	MG/KG	162	N	104		21	*	75 - 125	20	MS
Phosphorus		705.8359		463.0397		396.3797		110.2536	106.0131	MG/KG	-220		-292		16			20	P
Potassium		3423.6317		4317.7563		3844.0781		1102.5358	1060.1306	MG/KG	81		40	N	12		75 - 125	20	P
Selenium	78	0.1038	B	2.3629		2.2849		2.1618	2.1001	MG/KG	105		104		3		75 - 125	20	MS
Silver	107	0.0284	B	11.0405		10.9561		10.8092	10.5003	MG/KG	102		104		1		75 - 125	20	MS
Sodium		400.2023		1305.5843		1342.2632		1102.5358	1060.1306	MG/KG	82		89		3		75 - 125	20	P
Strontium		33.8810		150.5369		145.5305		110.2536	106.0131	MG/KG	106		105		3		75 - 115	20	P
Thallium	203	0.3939		0.7986		0.9135		0.4324	0.4200	MG/KG	94		124		13		75 - 125	20	MS
Tin		4.0334	B	375.4939		362.6071		441.0143	424.0522	MG/KG	84		85		3		80 - 110	20	P
Titanium		1830.0361		1795.5810		1730.2837		110.2536	106.0131	MG/KG	-31		-94		4			20	P
Vanadium	51	45.6952		73.5456		55.4838		10.8092	10.5003	MG/KG	258		93		28	*		20	MS
Zinc	66	98.8571		93.7804		98.1572		10.8092	10.5003	MG/KG	-47		-7		5			20	MS
Zirconium		6.8261		111.3539		108.8966		110.2536	106.0131	MG/KG	95		96		2		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE162
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298873BKG
% Solids for Duplicate: 91.5
Batch ID(s): P15208A, P15726B, P15211A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6298876DUP
% Solids for Sample: 90.7

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			19868.4129		21261.8112		7		P
Antimony	121		0.1168	B	0.1205	B	3		MS
Arsenic	75		12.1235		12.7784		5		MS
Barium	137		164.7691		187.6957		13		MS
Beryllium	9		0.8416		0.8692		3		MS
Boron			4.7634	U	4.8101	U			P
Cadmium	111		0.0830	B	0.0936	B	12		MS
Calcium			5497.8452		5482.4686		0		P
Chromium	52		23.0768		23.7707		3		MS
Cobalt	59		13.9138		9.1797		41	*	MS
Copper	63		18.6863		17.9316		4		MS
Iron			41179.1193		40992.2552		0		P
Lead	208		9.3006		8.7718		6		MS
Lithium			44.0640		45.1229		2		P
Magnesium			7178.5733		7278.7113		1		P
Manganese			442.6061		392.4552		12		P
Mercury			0.0041	B	0.0148	B	113		CV
Molybdenum	98	0.1	0.4749		0.4487		6		MS
Nickel	60		17.2520		17.8545		3		MS
Phosphorus			705.8359		634.3916		11		P
Potassium			3423.6317		3255.6305		5		P
Selenium	78		0.1038	B	0.1006	B	3		MS
Silver	107	0.1	0.0284	B	0.1174		122		MS
Sodium		107.0	400.2023		439.1573		9		P
Strontium			33.8810		37.7943		11		P
Thallium	203	0.1	0.3939		0.3998		1		MS
Tin			4.0334	B	3.8437	B	5		P
Titanium			1830.0361		1821.1795		0		P
Vanadium	51		45.6952		45.7332		0		MS
Zinc	66		98.8571		96.9350		2		MS
Zirconium		5.4	6.8261		7.8475		14		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE162
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298873BKG Serial Dilution Lab Sample ID: 6298873L
Batch ID(s): P15208A, P15726B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		185612.7000		209237.4000		13	E	P
Antimony	121	0.5352	B	1.5000	U	100		MS
Arsenic	75	55.5300		61.9000		11	E	MS
Barium	137	754.7000		854.5000		13	E	MS
Beryllium	9	3.8550		4.9835		29		MS
Boron		8.9000	U	44.5000	U			P
Cadmium	111	0.3800	B	1.0000	U	100		MS
Calcium		51361.4200		58353.2500		14	E	P
Chromium	52	105.7000		139.7500		32	E	MS
Cobalt	59	63.7300		72.5500		14	E	MS
Copper	63	85.5900		98.6000		15	E	MS
Iron		76939.8900		79889.0000		4		P
Lead	208	42.6000		49.9750		17	E	MS
Lithium		411.6500		429.6500		4		P
Magnesium		67062.9500		74547.4000		11	E	P
Manganese		4134.8700		4603.2500		11	E	P
Molybdenum	98	2.1750		2.5100		15		MS
Nickel	60	79.0200		91.6000		16	E	MS
Phosphorus		6593.9900		6950.6500		5		P
Potassium		31983.9100		35134.0500		10		P
Selenium	78	0.4753	B	1.0000	U	100		MS
Silver	107	0.1300	B	0.3000	U	100		MS
Sodium		3738.7300		4085.6500	B	9		P
Strontium		316.5200		352.5500		11	E	P
Thallium	203	1.8040		2.4915	B	38		MS
Tin		37.6800	B	50.0000	U	100		P
Titanium		17096.3800		18538.6500		8		P
Vanadium	51	209.3000		274.7500		31	E	MS
Zinc	66	452.8000		519.0000		15	E	MS
Zirconium		63.7700		80.9000	B	27		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE162 2911

SAMPLE DELIVERY GROUP

DE163

SAMPLE DELIVERY GROUP

DE163

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	3050B	6010B	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	3050B	6020	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	3060A	7199	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	3550B	8081A	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	3550B	8082	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	3550B	8151A	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	3550B	8270C	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	3550B	8270C SIM	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	METHOD	300.0	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	METHOD	314.0	III
24-May-2011	SL-185-SA5DN-SS-0.0-0.5	6298892	N	METHOD	7471A	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	3050B	6010B	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	3050B	6020	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	3060A	7199	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	3550B	8081A	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	3550B	8082	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	3550B	8151A	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	3550B	8270C	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	3550B	8270C SIM	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	METHOD	300.0	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	METHOD	314.0	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5	6298888	N	METHOD	7471A	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	3050B	6010B	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	3050B	6020	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	3060A	7199	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	3550B	8082	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	3550B	8151A	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	3550B	8270C	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	3550B	8270C SIM	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	METHOD	300.0	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	METHOD	314.0	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5MS	6298889	MS	METHOD	7471A	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5DU	6298891	DUP	3050B	6010B	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5DU	6298891	DUP	3050B	6020	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5DU	6298891	DUP	3060A	7199	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5DU	6298891	DUP	METHOD	300.0	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5DU	6298891	DUP	METHOD	314.0	III
24-May-2011	SL-057-SA5DN-SS-0.0-0.5DU	6298891	DUP	METHOD	7471A	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	3050B	6010B	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	3050B	6020	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	3060A	7199	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	3550B	8081A	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	3550B	8082	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	3550B	8151A	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	3550B	8270C	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	3550B	8270C SIM	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	METHOD	300.0	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	METHOD	314.0	III
24-May-2011	DUP06-SA5DN-QC-052411	6298893	FD	METHOD	7471A	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	3050B	6010B	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	3060A	7199	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	3550B	8081A	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	3550B	8082	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	3550B	8151A	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	3550B	8270C	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	3550B	8270C SIM	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	METHOD	300.0	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	METHOD	314.0	III
25-May-2011	SL-006-SA5DN-SS-0.0-0.5	6298898	N	METHOD	7471A	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	3050B	6010B	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	3050B	6020	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	3060A	7199	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	3550B	8081A	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	3550B	8082	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	3550B	8151A	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	3550B	8270C	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	3550B	8270C SIM	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	METHOD	300.0	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	METHOD	314.0	III
25-May-2011	SL-002-SA5DN-SS-0.0-0.5	6298895	N	METHOD	7471A	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	3050B	6010B	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	3050B	6020	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	3060A	7199	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	3550B	8081A	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	3550B	8082	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	3550B	8270C	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	3550B	8270C SIM	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	METHOD	300.0	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	METHOD	314.0	III
25-May-2011	SL-001-SA5DN-SS-0.0-0.5	6298894	N	METHOD	7471A	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	3050B	6010B	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	3050B	6020	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	3060A	7199	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	3550B	8081A	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	3550B	8082	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	3550B	8151A	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	3550B	8270C	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	3550B	8270C SIM	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	METHOD	300.0	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	METHOD	314.0	III
25-May-2011	SL-005-SA5DN-SS-0.0-0.5	6298897	N	METHOD	7471A	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	3050B	6010B	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	3050B	6020	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	3060A	7199	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	3550B	8081A	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	3550B	8082	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	3550B	8151A	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	3550B	8270C	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	3550B	8270C SIM	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	METHOD	300.0	III
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-004-SA5DN-SS-0.0-0.5	6298896	N	METHOD	7471A	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	3050B	6010B	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	3050B	6020	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	3060A	7199	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	3550B	8081A	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	3550B	8082	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	3550B	8151A	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	3550B	8270C	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	3550B	8270C SIM	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	METHOD	300.0	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	METHOD	314.0	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5	6298901	N	METHOD	7471A	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5DU	P298901D272036B	DUP	METHOD	300.0	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5DU	P298901D272203B	DUP	METHOD	314.0	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5MS	P298901R272050B	MS	METHOD	300.0	III
25-May-2011	SL-199-SA5DN-SS-0.0-0.5MS	P298901R272227B	MS	METHOD	314.0	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	3050B	6010B	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	3050B	6020	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	3060A	7199	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	3550B	8081A	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	3550B	8082	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	3550B	8151A	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	3550B	8270C	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	3550B	8270C SIM	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	METHOD	300.0	III
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-190-SA5DN-SS-0.0-0.5	6298900	N	METHOD	7471A	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	3050B	6010B	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	3050B	6020	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	3060A	7199	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	3550B	8081A	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	3550B	8082	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	3550B	8151A	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	3550B	8270C	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	3550B	8270C SIM	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	METHOD	300.0	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	METHOD	314.0	III
25-May-2011	SL-060-SA5DN-SS-0.0-0.5	6298899	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-001-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-002-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.84	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.7		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-005-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-006-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.96	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-057-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-060-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.86	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-185-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:27:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-190-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2	J	0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-199-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

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

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6710		7.13	MDL	23.3	PQL	mg/Kg	J	E
PHOSPHORUS	447		0.651	MDL	11.6	PQL	mg/Kg	J	E
SODIUM	98.5	J	43.4	MDL	116	PQL	mg/Kg	J	Z
STRONTIUM	37.2		0.0721	MDL	0.581	PQL	mg/Kg	J	E
TIN	2.84	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	4.13	J	0.977	MDL	5.81	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6900		6.73	MDL	22.0	PQL	mg/Kg	J	E
PHOSPHORUS	328		0.615	MDL	11.0	PQL	mg/Kg	J	E
SODIUM	87.6	J	40.9	MDL	110	PQL	mg/Kg	J	Z
STRONTIUM	34.8		0.0681	MDL	0.549	PQL	mg/Kg	J	E
TIN	2.79	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	4.32	J	0.922	MDL	5.49	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-002-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.17	J	0.891	MDL	5.01	PQL	mg/Kg	J	Z
CALCIUM	12600		6.14	MDL	20.0	PQL	mg/Kg	J	E
PHOSPHORUS	436		0.561	MDL	10.0	PQL	mg/Kg	J	E
STRONTIUM	36.2		0.0621	MDL	0.501	PQL	mg/Kg	J	E
TIN	2.03	J	1.00	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	3.15	J	0.841	MDL	5.01	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3680		6.56	MDL	21.4	PQL	mg/Kg	J	E
PHOSPHORUS	444		0.599	MDL	10.7	PQL	mg/Kg	J	E
STRONTIUM	23.1		0.0664	MDL	0.535	PQL	mg/Kg	J	E
TIN	2.31	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.68	J	0.899	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6950		6.81	MDL	22.2	PQL	mg/Kg	J	E
PHOSPHORUS	461		0.622	MDL	11.1	PQL	mg/Kg	J	E
SODIUM	86.7	J	41.4	MDL	111	PQL	mg/Kg	J	Z
STRONTIUM	35.5		0.0688	MDL	0.555	PQL	mg/Kg	J	E
TIN	2.68	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	4.74	J	0.933	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.64	J	1.02	MDL	5.76	PQL	mg/Kg	J	Z
CALCIUM	5700		7.06	MDL	23.0	PQL	mg/Kg	J	E
PHOSPHORUS	357		0.645	MDL	11.5	PQL	mg/Kg	J	E
SODIUM	105	J	43.0	MDL	115	PQL	mg/Kg	J	Z
STRONTIUM	35.6		0.0714	MDL	0.576	PQL	mg/Kg	J	E
TIN	3.06	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-006-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 8:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.69	J	0.967	MDL	5.76	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6930		6.94	MDL	22.6	PQL	mg/Kg	J	E
PHOSPHORUS	523		0.634	MDL	11.3	PQL	mg/Kg	J	E
SODIUM	104	J	42.2	MDL	113	PQL	mg/Kg	J	Z
STRONTIUM	36.3		0.0702	MDL	0.566	PQL	mg/Kg	J	E
TIN	2.73	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	4.02	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 3:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5970		6.43	MDL	21.0	PQL	mg/Kg	J	E
PHOSPHORUS	613		0.587	MDL	10.5	PQL	mg/Kg	J	E
STRONTIUM	33.4		0.0650	MDL	0.524	PQL	mg/Kg	J	E
TIN	2.47	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	3.13	J	0.881	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: SL-185-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:27:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.78	J	0.987	MDL	5.54	PQL	mg/Kg	J	Z
CALCIUM	17100		6.80	MDL	22.2	PQL	mg/Kg	J	E
PHOSPHORUS	449		0.621	MDL	11.1	PQL	mg/Kg	J	E
SODIUM	94.1	J	41.4	MDL	111	PQL	mg/Kg	J	Z
STRONTIUM	32.2		0.0687	MDL	0.554	PQL	mg/Kg	J	E
TIN	2.46	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.21	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-190-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	40400		6.91	MDL	22.5	PQL	mg/Kg	J	E
PHOSPHORUS	709		0.631	MDL	11.3	PQL	mg/Kg	J	E
SODIUM	96.6	J	42.0	MDL	113	PQL	mg/Kg	J	Z
STRONTIUM	77.1		0.0699	MDL	0.564	PQL	mg/Kg	J	E
TIN	2.58	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.82	J	0.947	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.28	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
CALCIUM	3790		6.67	MDL	21.8	PQL	mg/Kg	J	E
PHOSPHORUS	523		0.609	MDL	10.9	PQL	mg/Kg	J	E
SODIUM	67.2	J	40.6	MDL	109	PQL	mg/Kg	J	Z
STRONTIUM	25.5		0.0675	MDL	0.544	PQL	mg/Kg	J	E
TIN	2.55	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.47	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0470	MDL	0.470	PQL	mg/Kg	J	Z

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.106	J	0.0705	MDL	0.235	PQL	mg/Kg	J	Z, Q
ARSENIC	6.49		0.0940	MDL	0.470	PQL	mg/Kg	J	Q
CHROMIUM	31.7		0.141	MDL	0.470	PQL	mg/Kg	J	A
COPPER	18.7		0.0775	MDL	0.470	PQL	mg/Kg	J	Q, E
LEAD	19.1		0.0122	MDL	0.235	PQL	mg/Kg	J	Q
NICKEL	22.5		0.117	MDL	0.470	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP06-SA5DN-QC-052411 ***Collected:*** 5/24/2011 3:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0410	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	59.1		0.0258	MDL	0.117	PQL	mg/Kg	J	A

Sample ID: SL-001-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 9:45:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.219	J	0.0435	MDL	0.435	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 9:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.116	J	0.0652	MDL	0.217	PQL	mg/Kg	J	Z, Q
ARSENIC	6.08		0.0870	MDL	0.435	PQL	mg/Kg	J	Q
CHROMIUM	29.4		0.130	MDL	0.435	PQL	mg/Kg	J	A
COPPER	16.6		0.0718	MDL	0.435	PQL	mg/Kg	J	Q, E
LEAD	13.6		0.0113	MDL	0.217	PQL	mg/Kg	J	Q
NICKEL	22.1		0.109	MDL	0.435	PQL	mg/Kg	J	Q
SILVER	0.0456	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	55.4		0.0239	MDL	0.109	PQL	mg/Kg	J	A

Sample ID: SL-002-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 9:20:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0930	J	0.0404	MDL	0.404	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 9:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0607	MDL	0.202	PQL	mg/Kg	J	Z, Q
ARSENIC	4.68		0.0809	MDL	0.404	PQL	mg/Kg	J	Q
CHROMIUM	18.7		0.121	MDL	0.404	PQL	mg/Kg	J	A
COPPER	13.8		0.0667	MDL	0.404	PQL	mg/Kg	J	Q, E
LEAD	7.41		0.0105	MDL	0.202	PQL	mg/Kg	J	Q
NICKEL	10.9		0.101	MDL	0.404	PQL	mg/Kg	J	Q
SILVER	0.0310	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-002-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 9:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	35.2		0.0222	MDL	0.101	PQL	mg/Kg	J	A

Sample ID: SL-004-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 10:55:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0809	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0642	U	0.0642	MDL	0.214	PQL	mg/Kg	UJ	Q
ARSENIC	2.36		0.0856	MDL	0.428	PQL	mg/Kg	J	Q
CADMIUM	0.0740	J	0.0428	MDL	0.107	PQL	mg/Kg	J	Z
CHROMIUM	15.3		0.128	MDL	0.428	PQL	mg/Kg	J	A
COPPER	12.6		0.0706	MDL	0.428	PQL	mg/Kg	J	Q, E
LEAD	6.28		0.0111	MDL	0.214	PQL	mg/Kg	J	Q
NICKEL	12.9		0.107	MDL	0.428	PQL	mg/Kg	J	Q
SILVER	0.0205	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	46.5		0.0235	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: SL-005-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 10:10:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.223	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.163	J	0.0666	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	5.74		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
CHROMIUM	29.1		0.133	MDL	0.444	PQL	mg/Kg	J	A
COPPER	17.2		0.0733	MDL	0.444	PQL	mg/Kg	J	Q, E
LEAD	13.6		0.0115	MDL	0.222	PQL	mg/Kg	J	Q
NICKEL	21.6		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0414	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-005-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	53.1		0.0244	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 8:40:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.170	J	0.0479	MDL	0.479	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 8:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.359		0.0719	MDL	0.240	PQL	mg/Kg	J	Q
ARSENIC	29.4		0.0958	MDL	0.479	PQL	mg/Kg	J	Q
CHROMIUM	25.9		0.144	MDL	0.479	PQL	mg/Kg	J	A
COPPER	17.0		0.0790	MDL	0.479	PQL	mg/Kg	J	Q, E
LEAD	17.4		0.0125	MDL	0.240	PQL	mg/Kg	J	Q
NICKEL	21.4		0.120	MDL	0.479	PQL	mg/Kg	J	Q
SILVER	0.0550	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
VANADIUM	49.0		0.0263	MDL	0.120	PQL	mg/Kg	J	A

Sample ID: SL-057-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:48:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.133	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:48:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0992	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	5.68		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	27.4		0.136	MDL	0.453	PQL	mg/Kg	J	A
COPPER	22.8		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, E
LEAD	13.0		0.0118	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	20.5		0.113	MDL	0.453	PQL	mg/Kg	J	Q
SILVER	0.0417	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	52.4		0.0249	MDL	0.113	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 Laboratory: LL

EDD Filename: PrepDE163_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-060-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 3:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 3:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0788	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	4.76		0.0864	MDL	0.432	PQL	mg/Kg	J	Q
CHROMIUM	22.8		0.130	MDL	0.432	PQL	mg/Kg	J	A
COPPER	16.9		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E
LEAD	11.8		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
NICKEL	17.5		0.108	MDL	0.432	PQL	mg/Kg	J	Q
SILVER	0.0564	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	47.2		0.0238	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: SL-185-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:27:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0850	J	0.0435	MDL	0.435	PQL	mg/Kg	J	Z

Sample ID: SL-185-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.186	J	0.0652	MDL	0.217	PQL	mg/Kg	J	Z, Q
ARSENIC	3.95		0.0870	MDL	0.435	PQL	mg/Kg	J	Q
CHROMIUM	32.9		0.130	MDL	0.435	PQL	mg/Kg	J	A
COPPER	13.3		0.0717	MDL	0.435	PQL	mg/Kg	J	Q, E
LEAD	17.0		0.0113	MDL	0.217	PQL	mg/Kg	J	Q
NICKEL	19.2		0.109	MDL	0.435	PQL	mg/Kg	J	Q
SILVER	0.0203	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	53.5		0.0239	MDL	0.109	PQL	mg/Kg	J	A

Sample ID: SL-190-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.295	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-190-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.133	J	0.0689	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	6.46		0.0919	MDL	0.460	PQL	mg/Kg	J	Q
CHROMIUM	30.3		0.138	MDL	0.460	PQL	mg/Kg	J	A
COPPER	18.4		0.0758	MDL	0.460	PQL	mg/Kg	J	Q, E
LEAD	13.1		0.0119	MDL	0.230	PQL	mg/Kg	J	Q
NICKEL	21.3		0.115	MDL	0.460	PQL	mg/Kg	J	Q
SILVER	0.0303	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	57.9		0.0253	MDL	0.115	PQL	mg/Kg	J	A

Sample ID: SL-199-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 11:40:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.150	J	0.0435	MDL	0.435	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 11:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.108	J	0.0653	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	3.75		0.0870	MDL	0.435	PQL	mg/Kg	J	Q
CHROMIUM	18.8		0.131	MDL	0.435	PQL	mg/Kg	J	A
COPPER	12.6		0.0718	MDL	0.435	PQL	mg/Kg	J	Q, E
LEAD	13.7		0.0113	MDL	0.218	PQL	mg/Kg	J	Q
NICKEL	14.5		0.109	MDL	0.435	PQL	mg/Kg	J	Q
VANADIUM	34.4		0.0239	MDL	0.109	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 Laboratory: LL

EDD Filename: PrepDE163_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-001-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 9:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 9:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 8:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.73	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 3:48:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.95	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 3:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-185-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 3:27:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 11:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.75	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP06-SA5DN-QC-052411 **Collected:** 5/24/2011 3:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0319	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z, Q, E, FD

Sample ID: SL-001-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 9:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0067	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-002-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 9:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0228	J	0.0028	MDL	0.0990	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-004-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 10:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.106	PQL	mg/Kg	UJ	E

Sample ID: SL-005-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0071	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-006-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 8:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0033	U	0.0033	MDL	0.114	PQL	mg/Kg	UJ	E

Sample ID: SL-057-SA5DN-SS-0.0-0.5 **Collected:** 5/24/2011 3:48:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0185	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z, Q, E, FD

Sample ID: SL-060-SA5DN-SS-0.0-0.5 **Collected:** 5/25/2011 3:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0150	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 Laboratory: LL

EDD Filename: PrepDE163_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-185-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.109	PQL	mg/Kg	UJ	E

Sample ID: SL-190-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0176	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-199-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0500	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z, Q, E

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
4,4'-DDE	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
4,4'-DDT	0.18	U	0.18	MDL	0.40	PQL	ug/Kg	UJ	S
ALDRIN	0.078	U	0.078	MDL	0.20	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	S
BETA-BHC	0.071	U	0.071	MDL	0.20	PQL	ug/Kg	UJ	S
Chlordane	0.95	U	0.95	MDL	4.0	PQL	ug/Kg	UJ	S, FD
DELTA-BHC	0.043	U	0.043	MDL	0.20	PQL	ug/Kg	UJ	S
DIELDRIN	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.052	U	0.052	MDL	0.20	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.087	U	0.087	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.071	U	0.071	MDL	0.20	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.40	U	0.40	MDL	2.0	PQL	ug/Kg	UJ	S
MIREX	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
TOXAPHENE	2.6	U	2.6	MDL	7.8	PQL	ug/Kg	UJ	S

Sample ID: SL-001-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.7	J	0.91	MDL	3.9	PQL	ug/Kg	J	Z
DELTA-BHC	0.043	J	0.041	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-002-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.6	J	0.84	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-005-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.3		0.075	MDL	0.39	PQL	ug/Kg	J	L
DELTA-BHC	0.060	J	0.041	MDL	0.19	PQL	ug/Kg	J	Z
ENDRIN	0.12	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.056	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-006-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.079	U	0.079	MDL	0.41	PQL	ug/Kg	UJ	S
4,4'-DDE	0.58		0.079	MDL	0.41	PQL	ug/Kg	J	S
4,4'-DDT	3.0		0.079	MDL	0.41	PQL	ug/Kg	J	L, S
ALDRIN	0.079	U	0.079	MDL	0.20	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.041	U	0.041	MDL	0.20	PQL	ug/Kg	UJ	S
BETA-BHC	0.072	U	0.072	MDL	0.20	PQL	ug/Kg	UJ	S
Chlordane	2.1	J	0.96	MDL	4.1	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.043	U	0.043	MDL	0.20	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-006-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 8:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.079	U	0.079	MDL	0.41	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.053	U	0.053	MDL	0.20	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.079	U	0.079	MDL	0.41	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.079	U	0.079	MDL	0.41	PQL	ug/Kg	UJ	S
ENDRIN	0.14	U	0.14	MDL	0.41	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.28	U	0.28	MDL	0.41	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.079	U	0.079	MDL	0.41	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.041	U	0.041	MDL	0.20	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.072	U	0.072	MDL	0.20	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.041	U	0.041	MDL	0.20	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.41	U	0.41	MDL	2.0	PQL	ug/Kg	UJ	S
MIREX	0.34	U	0.34	MDL	0.41	PQL	ug/Kg	UJ	S
TOXAPHENE	2.6	U	2.6	MDL	7.9	PQL	ug/Kg	UJ	S

Sample ID: SL-057-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:48:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.9	J	0.92	MDL	3.9	PQL	ug/Kg	J	Z, FD

Sample ID: SL-060-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 3:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	5.3		0.86	MDL	3.7	PQL	ug/Kg	J	S
gamma-BHC (Lindane)	0.068	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z, S

Sample ID: SL-190-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 2:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.4	J	0.95	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-199-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 11:40:00 ***Analysis Type:*** DL-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	4.7		0.36	MDL	1.9	PQL	ug/Kg	J	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.46	U	0.46	MDL	2.0	PQL	ug/Kg	UJ	FD
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	FD

Sample ID: SL-005-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	2.3	J	0.75	MDL	3.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.5	J	0.88	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z, FD
Aroclor 5460	1.6	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-185-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.87	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-190-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.089	U	0.089	MDL	0.20	PQL	ug/Kg	UJ	FD
MCPP	570		89	MDL	300	PQL	ug/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-002-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.12	J	0.079	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.18	J	0.087	MDL	0.20	PQL	ug/Kg	J	Z, FD
MCPP	87	U	87	MDL	290	PQL	ug/Kg	UJ	FD

Sample ID: SL-199-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.17	J	0.082	MDL	0.19	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-006-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	95	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	150	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	150	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	96	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	67	J	20	MDL	200	PQL	ug/Kg	J	Z
CHRYSENE	120	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	150	J	20	MDL	200	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	99	J	20	MDL	200	PQL	ug/Kg	J	Z
PHENANTHRENE	42	J	20	MDL	200	PQL	ug/Kg	J	Z
PYRENE	170	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	R	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-185-SA5DN-SS-0.0-0.5 *Collected:* 5/24/2011 3:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	18	MDL	370	PQL	ug/Kg	UJ	L, B

Sample ID: SL-199-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	45	J	18	MDL	370	PQL	ug/Kg	UJ	L, B

Method Category: SVOA

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

Sample ID: DUP06-SA5DN-QC-052411 *Collected:* 5/24/2011 3:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	4.3	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	5.0	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z, L, FD
BENZO(B)FLUORANTHENE	7.9	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z, L, FD
BENZO(G,H,I)PERYLENE	4.4	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	4.1	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z, L, FD
CHRYSENE	4.8	J	2.0	MDL	9.9	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	6.7	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	4.0	U	4.0	MDL	9.9	PQL	ug/Kg	UJ	FD
PYRENE	6.6	J	4.0	MDL	9.9	PQL	ug/Kg	J	Z

Sample ID: SL-001-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	7.0	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z, L
BIS(2-ETHYLHEXYL)PHTHALATE	43	J	34	MDL	100	PQL	ug/Kg	J	Z
CHRYSENE	4.8	J	1.9	MDL	9.5	PQL	ug/Kg	J	Z
FLUORANTHENE	6.9	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z
PYRENE	5.4	J	3.8	MDL	9.5	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-002-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 9:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	6.0	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z, L
BIS(2-ETHYLHEXYL)PHTHALATE	69	J	32	MDL	95	PQL	ug/Kg	J	Z
CHRYSENE	4.4	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
FLUORANTHENE	4.6	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
PYRENE	4.5	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	5.6	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	7.3	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	8.7	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z, L
BENZO(B)FLUORANTHENE	5.2	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z, L
BENZO(K)FLUORANTHENE	6.4	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z, L
PHENANTHRENE	4.9	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-005-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 10:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	7.4	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	7.4	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z, L
BENZO(B)FLUORANTHENE	17		3.8	MDL	9.4	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	4.7	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	8.4	J	3.8	MDL	9.4	PQL	ug/Kg	J	Z, L

Sample ID: SL-057-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:48:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	8.2	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	9.2	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z, L, FD
BENZO(B)FLUORANTHENE	14		3.8	MDL	9.6	PQL	ug/Kg	J	L, FD
BENZO(G,H,I)PERYLENE	4.7	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	9.2	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z, L, FD
CHRYSENE	8.9	J	1.9	MDL	9.6	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	12		3.8	MDL	9.6	PQL	ug/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-057-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:48:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	4.4	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z, FD

Sample ID: SL-060-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 3:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.0	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	31		3.6	MDL	9.0	PQL	ug/Kg	J	L
BENZO(B)FLUORANTHENE	45		3.6	MDL	9.0	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	27		3.6	MDL	9.0	PQL	ug/Kg	J	L
BIS(2-ETHYLHEXYL)PHTHALATE	57	J	32	MDL	97	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	8.1	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-185-SA5DN-SS-0.0-0.5 ***Collected:*** 5/24/2011 3:27:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	4.8	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z, L
CHRYSENE	2.8	J	1.8	MDL	9.2	PQL	ug/Kg	J	Z
FLUORANTHENE	3.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PYRENE	3.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-190-SA5DN-SS-0.0-0.5 ***Collected:*** 5/25/2011 2:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.98	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z, L
BENZO(B)FLUORANTHENE	2.7		0.79	MDL	2.0	PQL	ug/Kg	J	L
BENZO(K)FLUORANTHENE	6.6		0.79	MDL	2.0	PQL	ug/Kg	J	L
BIS(2-ETHYLHEXYL)PHTHALATE	8.3	J	7.1	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.9	J	7.1	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.83	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory:** LL

EDD Filename: PrepDE163_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-199-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.97	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	3.1		0.73	MDL	1.8	PQL	ug/Kg	J	L
BENZO(B)FLUORANTHENE	7.7		0.73	MDL	1.8	PQL	ug/Kg	J	L
BENZO(G,H,I)PERYLENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	6.7		0.73	MDL	1.8	PQL	ug/Kg	J	L
INDENO(1,2,3-CD)PYRENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: PrepDE163_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE163

Method Blank Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15208BB222037	6/3/2011 8:37:00 PM	CALCIUM	9.57 mg/Kg	DUP06-SA5DN-QC-052411
		IRON	5.37 mg/Kg	SL-001-SA5DN-SS-0.0-0.5
		MANGANESE	0.0960 mg/Kg	SL-002-SA5DN-SS-0.0-0.5
		PHOSPHORUS	1.57 mg/Kg	SL-004-SA5DN-SS-0.0-0.5
		TIN	1.58 mg/Kg	SL-005-SA5DN-SS-0.0-0.5
				SL-006-SA5DN-SS-0.0-0.5
				SL-057-SA5DN-SS-0.0-0.5
				SL-060-SA5DN-SS-0.0-0.5
				SL-185-SA5DN-SS-0.0-0.5
				SL-190-SA5DN-SS-0.0-0.5
				SL-199-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP06-SA5DN-QC-052411(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-001-SA5DN-SS-0.0-0.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-002-SA5DN-SS-0.0-0.5(RES)	TIN	2.03 mg/Kg	2.03U mg/Kg
SL-004-SA5DN-SS-0.0-0.5(RES)	TIN	2.31 mg/Kg	2.31U mg/Kg
SL-005-SA5DN-SS-0.0-0.5(RES)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-006-SA5DN-SS-0.0-0.5(RES)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-057-SA5DN-SS-0.0-0.5(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-060-SA5DN-SS-0.0-0.5(RES)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-185-SA5DN-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-190-SA5DN-SS-0.0-0.5(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-199-SA5DN-SS-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15726DB220412A	6/8/2011 4:12:00 AM	COPPER	0.223 mg/Kg	DUP06-SA5DN-QC-052411
		LEAD	0.0137 mg/Kg	SL-001-SA5DN-SS-0.0-0.5
		NICKEL	0.117 mg/Kg	SL-002-SA5DN-SS-0.0-0.5
				SL-004-SA5DN-SS-0.0-0.5
				SL-005-SA5DN-SS-0.0-0.5
				SL-006-SA5DN-SS-0.0-0.5
				SL-057-SA5DN-SS-0.0-0.5
				SL-060-SA5DN-SS-0.0-0.5
				SL-185-SA5DN-SS-0.0-0.5
				SL-190-SA5DN-SS-0.0-0.5
				SL-199-SA5DN-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLE15B260616	6/4/2011 6:16:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	DUP06-SA5DN-QC-052411
		Diethylphthalate	25 ug/Kg	SL-001-SA5DN-SS-0.0-0.5
		Di-n-butylphthalate	19 ug/Kg	SL-002-SA5DN-SS-0.0-0.5
				SL-004-SA5DN-SS-0.0-0.5
				SL-005-SA5DN-SS-0.0-0.5
				SL-006-SA5DN-SS-0.0-0.5
				SL-057-SA5DN-SS-0.0-0.5
				SL-060-SA5DN-SS-0.0-0.5
				SL-185-SA5DN-SS-0.0-0.5
				SL-190-SA5DN-SS-0.0-0.5
				SL-199-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-185-SA5DN-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	30 ug/Kg	370U ug/Kg
SL-199-SA5DN-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	45 ug/Kg	370U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-057-SA5DN-SS-0.0-0.5MS SL-057-SA5DN-SS-0.0-0.5MSD (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	2233 - 4402 - 213	2991 136 1420 251 238	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	No Qual, >4x
SL-057-SA5DN-SS-0.0-0.5MS SL-057-SA5DN-SS-0.0-0.5MSD (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	MANGANESE PHOSPHORUS	36 61	- 48	75.00-125.00 75.00-125.00	- -	MANGANESE PHOSPHORUS	No Qual, >4x

Method: 7471A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-057-SA5DN-SS-0.0-0.5MS SL-057-SA5DN-SS-0.0-0.5MSD (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	MERCURY	136	-	65.00-135.00	28 (20.00)	MERCURY	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-057-SA5DN-SS-0.0-0.5MS (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5)	FLUORIDE	47	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-199-SA5DN-SS-0.0-0.5MS (SL-199-SA5DN-SS-0.0-0.5)	FLUORIDE	50	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-057-SA5DN-SS-0.0-0.5MS SL-057-SA5DN-SS-0.0-0.5MSD (SL-057-SA5DN-SS-0.0-0.5)	2,4-DINITROPHENOL	-	-	20.00-143.00	72 (30.00)	2,4-DINITROPHENOL	J(all detects)
	4,6-DINITRO-2-METHYLPHENOL	-	-	24.00-116.00	43 (30.00)	4,6-DINITRO-2-METHYLPHEN	
	BENZOIC ACID	-	-	10.00-173.00	44 (30.00)	BENZOIC ACID	
	ISOPHORONE	104	-	73.00-102.00	-	ISOPHORONE	
SL-057-SA5DN-SS-0.0-0.5MS SL-057-SA5DN-SS-0.0-0.5MSD (SL-057-SA5DN-SS-0.0-0.5)	BENZIDINE	22	0	35.00-141.00	200 (30.00)	BENZIDINE	J(all detects) R(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-057-SA5DN-SS-0.0-0.5MS	ARSENIC	138	-	75.00-125.00	-	ARSENIC	J(all detects) V, Zn No Qual, >4x
SL-057-SA5DN-SS-0.0-0.5MSD	LEAD	145	-	75.00-125.00	-	LEAD	
(DUP06-SA5DN-QC-052411	NICKEL	126	-	75.00-125.00	-	NICKEL	
SL-001-SA5DN-SS-0.0-0.5	VANADIUM	139	146	75.00-125.00	-	VANADIUM	
SL-002-SA5DN-SS-0.0-0.5	ZINC	172	172	75.00-125.00	-	ZINC	
SL-004-SA5DN-SS-0.0-0.5							
SL-005-SA5DN-SS-0.0-0.5							
SL-006-SA5DN-SS-0.0-0.5							
SL-057-SA5DN-SS-0.0-0.5							
SL-060-SA5DN-SS-0.0-0.5							
SL-185-SA5DN-SS-0.0-0.5							
SL-190-SA5DN-SS-0.0-0.5							
SL-199-SA5DN-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 6020**

***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-057-SA5DN-SS-0.0-0.5MS **SL-057-SA5DN-SS-0.0-0.5MSD** (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	ANTIMONY	29	28	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike =91%
SL-057-SA5DN-SS-0.0-0.5MS **SL-057-SA5DN-SS-0.0-0.5MSD** (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	COPPER	52	43	75.00-125.00	-	COPPER	J(all detects) UJ(all non-detects)
SL-057-SA5DN-SS-0.0-0.5MS **SL-057-SA5DN-SS-0.0-0.5MSD** (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	BARIUM	258	223	75.00-125.00	-	BARIUM	No Qual, >4x

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE163 Laboratory: LL

EDD Filename: DE163_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-199-SA5DN-SS-0.0-0.5DUP (SL-199-SA5DN-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual, OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-057-SA5DN-SS-0.0-0.5DUP (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	CALCIUM	31	20.00	J(all detects) UJ(all non-detects) Na, Zr No Qual, OK by difference
	PHOSPHORUS	107	20.00	
	SODIUM	37	20.00	
	STRONTIUM	43	20.00	
	Zirconium	32	20.00	

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-057-SA5DN-SS-0.0-0.5DUP (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	COPPER	26	20.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-057-SA5DN-SS-0.0-0.5DUP (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	HEXAVALENT CHROMIUM	29	20.00	No Qual, OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-057-SA5DN-SS-0.0-0.5DUP (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	MERCURY	101	20.00	No Qual, OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11529AQ240528A	4,4'-DDT	138	-	54.00-130.00	-	4,4'-DDT	J (all detects)
(DUP06-SA5DN-QC-052411	METHOXYCHLOR	131	-	59.00-125.00	-	METHOXYCHLOR	
SL-001-SA5DN-SS-0.0-0.5							
SL-002-SA5DN-SS-0.0-0.5							
SL-004-SA5DN-SS-0.0-0.5							
SL-005-SA5DN-SS-0.0-0.5							
SL-006-SA5DN-SS-0.0-0.5							
SL-057-SA5DN-SS-0.0-0.5							
SL-060-SA5DN-SS-0.0-0.5							
SL-185-SA5DN-SS-0.0-0.5							
SL-190-SA5DN-SS-0.0-0.5							
SL-199-SA5DN-SS-0.0-0.5)							

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8LBLCSQ261915	BENZO(A)PYRENE	134	-	58.00-129.00	-	BENZO(A)PYRENE	J(all detects)
(DUP06-SA5DN-QC-052411	BENZO(B)FLUORANTHENE	144	-	63.00-143.00	-	BENZO(B)FLUORANTHENE	
SL-001-SA5DN-SS-0.0-0.5	BENZO(K)FLUORANTHENE	139	-	66.00-137.00	-	BENZO(K)FLUORANTHENE	
SL-002-SA5DN-SS-0.0-0.5							
SL-004-SA5DN-SS-0.0-0.5							
SL-005-SA5DN-SS-0.0-0.5							
SL-006-SA5DN-SS-0.0-0.5							
SL-057-SA5DN-SS-0.0-0.5							
SL-060-SA5DN-SS-0.0-0.5							
SL-185-SA5DN-SS-0.0-0.5							
SL-190-SA5DN-SS-0.0-0.5							
SL-199-SA5DN-SS-0.0-0.5)							

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2LELCSQ260642	BIS(2-ETHYLHEXYL)PHTHALAT	118	-	75.00-117.00	-	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects)
(DUP06-SA5DN-QC-052411							
SL-001-SA5DN-SS-0.0-0.5							
SL-002-SA5DN-SS-0.0-0.5							
SL-004-SA5DN-SS-0.0-0.5							
SL-005-SA5DN-SS-0.0-0.5							
SL-006-SA5DN-SS-0.0-0.5							
SL-057-SA5DN-SS-0.0-0.5							
SL-060-SA5DN-SS-0.0-0.5							
SL-185-SA5DN-SS-0.0-0.5							
SL-190-SA5DN-SS-0.0-0.5							
SL-199-SA5DN-SS-0.0-0.5)							

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 6020**
***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P15726DQ220415A (DUP06-SA5DN-QC-052411 SL-001-SA5DN-SS-0.0-0.5 SL-002-SA5DN-SS-0.0-0.5 SL-004-SA5DN-SS-0.0-0.5 SL-005-SA5DN-SS-0.0-0.5 SL-006-SA5DN-SS-0.0-0.5 SL-057-SA5DN-SS-0.0-0.5 SL-060-SA5DN-SS-0.0-0.5 SL-185-SA5DN-SS-0.0-0.5 SL-190-SA5DN-SS-0.0-0.5 SL-199-SA5DN-SS-0.0-0.5)	ANTIMONY	69	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
DUP06-SA5DN-QC-052411	TETRACHLORO-M-XYLENE	43	50.00-130.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-006-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	47	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-060-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	172	20.00-120.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-057-SA5DN-SS-0.0-0.5	DUP06-SA5DN-QC-052411			
MOISTURE	13.4	15.7	16		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-057-SA5DN-SS-0.0-0.5	DUP06-SA5DN-QC-052411			
FLUORIDE	2.4	3.0	22	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-057-SA5DN-SS-0.0-0.5	DUP06-SA5DN-QC-052411			
ALUMINUM	33200	34800	5	50.00	No Qualifiers Applied
BORON	8.53	9.41	10	50.00	
CALCIUM	6930	6710	3	50.00	
IRON	34800	35300	1	50.00	
LITHIUM	28.4	28.9	2	50.00	
MAGNESIUM	8400	8260	2	50.00	
MANGANESE	477	440	8	50.00	
PHOSPHORUS	523	447	16	50.00	
POTASSIUM	5370	5110	5	50.00	
SODIUM	104	98.5	5	50.00	
STRONTIUM	36.3	37.2	2	50.00	
TIN	2.73	2.84	4	50.00	
TITANIUM	1480	1470	1	50.00	
Zirconium	4.02	4.13	3	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-057-SA5DN-SS-0.0-0.5	DUP06-SA5DN-QC-052411			
ANTIMONY	0.0992	0.106	7	50.00	No Qualifiers Applied
ARSENIC	5.68	6.49	13	50.00	
BARIUM	122	140	14	50.00	
BERYLLIUM	0.743	0.841	12	50.00	
CADMIUM	0.314	0.351	11	50.00	
CHROMIUM	27.4	31.7	15	50.00	
COBALT	10.7	11.9	11	50.00	
COPPER	22.8	18.7	20	50.00	
LEAD	13.0	19.1	38	50.00	
MOLYBDENUM	0.329	0.341	4	50.00	
NICKEL	20.5	22.5	9	50.00	
SELENIUM	0.133	0.122	9	50.00	
SILVER	0.0417	0.0410	2	50.00	
THALLIUM	0.342	0.348	2	50.00	
VANADIUM	52.4	59.1	12	50.00	
ZINC	69.7	78.2	11	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-057-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP06-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.95	0.58	48	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-057-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP06-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0185	0.0319	53	50.00	J(all detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-057-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP06-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
Chlordane	1.9	4.0 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-057-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP06-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	1.3	2.0 U	200	50.00	J(all detects)
Aroclor 5460	1.6	3.9 U	200	50.00	UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-057-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP06-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
2,4,5-TP (Silvex)	0.18	0.20 U	200	50.00	J(all detects)
MCPP	290 U	570	200	50.00	UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-057-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP06-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
BENZO(G,H,I)PERYLENE	4.7	4.4	7	50.00	No Qualifiers Applied
PYRENE	11	6.6	50	50.00	
BENZO(A)ANTHRACENE	8.2	4.3	62	50.00	J(all detects) UJ(all non-detects)
BENZO(A)PYRENE	9.2	5.0	59	50.00	
BENZO(B)FLUORANTHENE	14	7.9	56	50.00	
BENZO(K)FLUORANTHENE	9.2	4.1	77	50.00	
CHRYSENE	8.9	4.8	60	50.00	
FLUORANTHENE	12	6.7	57	50.00	
PHENANTHRENE	4.4	9.9 U	200	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	*Concentration (pH unit)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-057-SA5DN-SS-0.0-0.5	DUP06-SA5DN-QC-052411			
PH	7.28	7.47	3	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP06-SA5DN-QC-052411	SODIUM	J	98.5	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	11.6	PQL	mg/Kg	
	Zirconium	J	4.13	5.81	PQL	mg/Kg	
SL-001-SA5DN-SS-0.0-0.5	SODIUM	J	87.6	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.79	11.0	PQL	mg/Kg	
	Zirconium	J	4.32	5.49	PQL	mg/Kg	
SL-002-SA5DN-SS-0.0-0.5	BORON	J	2.17	5.01	PQL	mg/Kg	J (all detects)
	TIN	J	2.03	10.0	PQL	mg/Kg	
	Zirconium	J	3.15	5.01	PQL	mg/Kg	
SL-004-SA5DN-SS-0.0-0.5	TIN	J	2.31	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.68	5.35	PQL	mg/Kg	
SL-005-SA5DN-SS-0.0-0.5	SODIUM	J	86.7	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.68	11.1	PQL	mg/Kg	
	Zirconium	J	4.74	5.55	PQL	mg/Kg	
SL-006-SA5DN-SS-0.0-0.5	BORON	J	5.64	5.76	PQL	mg/Kg	J (all detects)
	SODIUM	J	105	115	PQL	mg/Kg	
	TIN	J	3.06	11.5	PQL	mg/Kg	
	Zirconium	J	3.69	5.76	PQL	mg/Kg	
SL-057-SA5DN-SS-0.0-0.5	SODIUM	J	104	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	11.3	PQL	mg/Kg	
	Zirconium	J	4.02	5.66	PQL	mg/Kg	
SL-060-SA5DN-SS-0.0-0.5	TIN	J	2.47	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.13	5.24	PQL	mg/Kg	
SL-185-SA5DN-SS-0.0-0.5	BORON	J	3.78	5.54	PQL	mg/Kg	J (all detects)
	SODIUM	J	94.1	111	PQL	mg/Kg	
	TIN	J	2.46	11.1	PQL	mg/Kg	
	Zirconium	J	1.21	5.54	PQL	mg/Kg	
SL-190-SA5DN-SS-0.0-0.5	SODIUM	J	96.6	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	11.3	PQL	mg/Kg	
	Zirconium	J	3.82	5.64	PQL	mg/Kg	
SL-199-SA5DN-SS-0.0-0.5	BORON	J	4.28	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.2	109	PQL	mg/Kg	
	TIN	J	2.55	10.9	PQL	mg/Kg	
	Zirconium	J	2.47	5.44	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP06-SA5DN-QC-052411	ANTIMONY	J	0.106	0.235	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.122	0.470	PQL	mg/Kg	
	SILVER	J	0.0410	0.117	PQL	mg/Kg	
SL-001-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.116	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.219	0.435	PQL	mg/Kg	
	SILVER	J	0.0456	0.109	PQL	mg/Kg	
SL-002-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.123	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0930	0.404	PQL	mg/Kg	
	SILVER	J	0.0310	0.101	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SS-0.0-0.5	CADMIUM	J	0.0740	0.107	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0809	0.428	PQL	mg/Kg	
	SILVER	J	0.0205	0.107	PQL	mg/Kg	
SL-005-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.163	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.223	0.444	PQL	mg/Kg	
	SILVER	J	0.0414	0.111	PQL	mg/Kg	
SL-006-SA5DN-SS-0.0-0.5	SELENIUM	J	0.170	0.479	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0550	0.120	PQL	mg/Kg	
SL-057-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0992	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.133	0.453	PQL	mg/Kg	
	SILVER	J	0.0417	0.113	PQL	mg/Kg	
SL-060-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0788	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.130	0.432	PQL	mg/Kg	
	SILVER	J	0.0564	0.108	PQL	mg/Kg	
SL-185-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.186	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0850	0.435	PQL	mg/Kg	
	SILVER	J	0.0203	0.109	PQL	mg/Kg	
SL-190-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.133	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.295	0.460	PQL	mg/Kg	
	SILVER	J	0.0303	0.115	PQL	mg/Kg	
SL-199-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.108	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.150	0.435	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP06-SA5DN-QC-052411	HEXAVALENT CHROMIUM	J	0.58	1.2	PQL	mg/Kg	J (all detects)
SL-001-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.65	1.1	PQL	mg/Kg	J (all detects)
SL-002-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.46	1.1	PQL	mg/Kg	J (all detects)
SL-006-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.73	1.2	PQL	mg/Kg	J (all detects)
SL-057-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.95	1.2	PQL	mg/Kg	J (all detects)
SL-060-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.37	1.1	PQL	mg/Kg	J (all detects)
SL-185-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.62	1.1	PQL	mg/Kg	J (all detects)
SL-199-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.75	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP06-SA5DN-QC-052411	MERCURY	J	0.0319	0.116	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-001-SA5DN-SS-0.0-0.5	MERCURY	J	0.0067	0.112	PQL	mg/Kg	J (all detects)
SL-002-SA5DN-SS-0.0-0.5	MERCURY	J	0.0228	0.0990	PQL	mg/Kg	J (all detects)
SL-005-SA5DN-SS-0.0-0.5	MERCURY	J	0.0071	0.112	PQL	mg/Kg	J (all detects)
SL-057-SA5DN-SS-0.0-0.5	MERCURY	J	0.0185	0.111	PQL	mg/Kg	J (all detects)
SL-060-SA5DN-SS-0.0-0.5	MERCURY	J	0.0150	0.106	PQL	mg/Kg	J (all detects)
SL-190-SA5DN-SS-0.0-0.5	MERCURY	J	0.0176	0.116	PQL	mg/Kg	J (all detects)
SL-199-SA5DN-SS-0.0-0.5	MERCURY	J	0.0500	0.106	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-001-SA5DN-SS-0.0-0.5	Chlordane DELTA-BHC	J J	2.7 0.043	3.9 0.19	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-002-SA5DN-SS-0.0-0.5	Chlordane	J	1.6	3.6	PQL	ug/Kg	J (all detects)
SL-005-SA5DN-SS-0.0-0.5	DELTA-BHC ENDRIN gamma-BHC (Lindane)	J J J	0.060 0.12 0.056	0.19 0.39 0.19	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-006-SA5DN-SS-0.0-0.5	Chlordane	J	2.1	4.1	PQL	ug/Kg	J (all detects)
SL-057-SA5DN-SS-0.0-0.5	Chlordane	J	1.9	3.9	PQL	ug/Kg	J (all detects)
SL-060-SA5DN-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.068	0.18	PQL	ug/Kg	J (all detects)
SL-190-SA5DN-SS-0.0-0.5	Chlordane	J	2.4	4.0	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-005-SA5DN-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	2.3 1.5	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-057-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.3 1.6	2.0 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-185-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	0.87	1.9	PQL	ug/Kg	J (all detects)
SL-190-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.7	2.0	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.12	0.18	PQL	ug/Kg	J (all detects)
SL-057-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.18	0.20	PQL	ug/Kg	J (all detects)
SL-199-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.17	0.19	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	95	200	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	150	200	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	150	200	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	96	200	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	67	200	PQL	ug/Kg	
	CHRYSENE	J	120	200	PQL	ug/Kg	
	FLUORANTHENE	J	150	200	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	99	200	PQL	ug/Kg	
	PHENANTHRENE	J	42	200	PQL	ug/Kg	
	PYRENE	J	170	200	PQL	ug/Kg	
SL-185-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	370	PQL	ug/Kg	J (all detects)
SL-199-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	45	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP06-SA5DN-QC-052411	BENZO(A)ANTHRACENE	J	4.3	9.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	5.0	9.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	7.9	9.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.4	9.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	4.1	9.9	PQL	ug/Kg	
	CHRYSENE	J	4.8	9.9	PQL	ug/Kg	
	FLUORANTHENE	J	6.7	9.9	PQL	ug/Kg	
	PYRENE	J	6.6	9.9	PQL	ug/Kg	
SL-001-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	7.0	9.5	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	43	100	PQL	ug/Kg	
	CHRYSENE	J	4.8	9.5	PQL	ug/Kg	
	FLUORANTHENE	J	6.9	9.5	PQL	ug/Kg	
	PYRENE	J	5.4	9.5	PQL	ug/Kg	
SL-002-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	6.0	8.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	69	95	PQL	ug/Kg	
	CHRYSENE	J	4.4	8.8	PQL	ug/Kg	
	FLUORANTHENE	J	4.6	8.8	PQL	ug/Kg	
	PYRENE	J	4.5	8.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE163 **Laboratory: LL**

EDD Filename: DE163_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	5.6	9.1	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	7.3	9.1	PQL	ug/Kg	
	BENZO(A)PYRENE	J	8.7	9.1	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	5.2	9.1	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	6.4	9.1	PQL	ug/Kg	
	PHENANTHRENE	J	4.9	9.1	PQL	ug/Kg	
SL-005-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	7.4	9.4	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	7.4	9.4	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.7	9.4	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	8.4	9.4	PQL	ug/Kg	
SL-057-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	8.2	9.6	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	9.2	9.6	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.7	9.6	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	9.2	9.6	PQL	ug/Kg	
	CHRYSENE	J	8.9	9.6	PQL	ug/Kg	
	PHENANTHRENE	J	4.4	9.6	PQL	ug/Kg	
SL-060-SA5DN-SS-0.0-0.5	ANTHRACENE	J	2.0	9.0	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	57	97	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	3.7	9.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	8.1	9.0	PQL	ug/Kg	
SL-185-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	4.8	9.2	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	2.8	9.2	PQL	ug/Kg	
	FLUORANTHENE	J	3.9	9.2	PQL	ug/Kg	
	PYRENE	J	3.9	9.2	PQL	ug/Kg	
SL-190-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.98	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.3	21	PQL	ug/Kg	
	CHRYSENE	J	1.7	2.0	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.9	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.83	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	2.0	PQL	ug/Kg	
	PYRENE	J	1.8	2.0	PQL	ug/Kg	
SL-199-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.97	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	

LDC #: 26275U4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/9/11
SDG #: DE163 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: W
2nd Reviewer: [illegible]

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

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

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

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

Validated Samples:

1	SL-057-SA5DN-SS-0.0-0.5	11	SL-199-SA5DN-SS-0.0-0.5	21		31	
2	SL-185-SA5DN-SS-0.0-0.5	12	SL-057-SA5DN-SS-0.0-0.5MS	22		32	
3	DUP06-SA5DN-QC-052411	13	SL-057-SA5DN-SS-0.0-0.5MSD	23		33	
4	SL-001-SA5DN-SS-0.0-0.5	14	SL-057-SA5DN-SS-0.0-0.5DUP	24		34	
5	SL-002-SA5DN-SS-0.0-0.5	15		25		35	
6	SL-004-SA5DN-SS-0.0-0.5	16		26		36	
7	SL-005-SA5DN-SS-0.0-0.5	17		27		37	
8	SL-006-SA5DN-SS-0.0-0.5	18		28		38	
9	SL-060-SA5DN-SS-0.0-0.5	19		29		39	
10	SL-190-SA5DN-SS-0.0-0.5	20		30		40	

Notes: * Sb > J/UJ post spike 9/7.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE163
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298888BKG Matrix Spike Lab Sample ID: 6298889MS Matrix Spike Duplicate Lab Sample ID: 6298890MSD
% Solids for Sample: 86.6
Batch Id(s): P15208B, P15726D, P15211B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum		33234.6964		38391.9296		40007.2114		230.9469	226.4185	MG/KG	2233		2991		4			20	P
Antimony	121	0.0992	B	0.4892		0.4785		1.3453	1.3453	MG/KG	29	N	28	N	2		75 - 125	20	MS
Arsenic	75	5.6786		8.7625		8.3903		2.2422	2.2422	MG/KG	138	N	121		4		75 - 125	20	MS
Barium	137	122.4471		151.4160		147.4697		11.2110	11.2110	MG/KG	258		223		3			20	MS
Beryllium	9	0.7429		1.5754		1.5693		0.8969	0.8969	MG/KG	93		92		0		75 - 125	20	MS
Boron		8.5292		241.2275		235.5364		230.9469	226.4185	MG/KG	101		100		2		84 - 115	20	P
Cadmium	111	0.3136		1.5487		1.5316		1.1211	1.1211	MG/KG	110		109		1		75 - 125	20	MS
Calcium		6930.5574		7314.8279		7545.0403		461.8938	452.8370	MG/KG	83		136		3			20	P
Chromium	52	27.3966		38.8574		39.7094		11.2110	11.2110	MG/KG	102		110		2		75 - 125	20	MS
Cobalt	59	10.7254		67.4903		66.3916		56.0551	56.0551	MG/KG	101		99		2		75 - 125	20	MS
Copper	63	22.7777		28.6105		27.5791		11.2110	11.2110	MG/KG	52	N	43	N	4		75 - 125	20	MS
Iron		34769.5626		39853.1120		36377.2812		115.4734	113.2093	MG/KG	4402		1420		9			20	P
Lead	208	13.0281		17.8905		16.5878		3.3633	3.3633	MG/KG	145	N	106		8		75 - 125	20	MS
Lithium		28.4427		145.6767		144.9678		115.4734	113.2093	MG/KG	102		103		0		82 - 114	20	P
Magnesium		8396.4237		8616.3176		8964.1681		230.9469	226.4185	MG/KG	95		251		4			20	P
Manganese		477.2834		498.0127		543.8267		57.7367	56.6046	MG/KG	36		118		9			20	P
Mercury		0.0185	B	0.2756		0.2089		0.1887	0.1899	MG/KG	136	N	100		28	*	65 - 135	20	CV
Molybdenum	98	0.3294		10.0989		10.1863		11.2110	11.2110	MG/KG	87		88		1		75 - 125	20	MS
Nickel	60	20.5180		34.6645		34.1487		11.2110	11.2110	MG/KG	126	N	122		1		75 - 125	20	MS
Phosphorus		522.5852		592.6975		577.4793		115.4734	113.2093	MG/KG	61		48		3			20	P
Potassium		5372.7483		6712.3591		6753.1110		1154.7344	1132.0926	MG/KG	116		122		1			20	P
Selenium	78	0.1334	B	2.2960		2.2736		2.2422	2.2422	MG/KG	96		95		1		75 - 125	20	MS
Silver	107	0.0417	B	11.0070		11.0541		11.2110	11.2110	MG/KG	98		98		0		75 - 125	20	MS
Sodium		104.3042	B	1195.4284		1197.4075		1154.7344	1132.0926	MG/KG	94		97		0		75 - 125	20	P
Strontium		36.2972		149.2506		148.1185		115.4734	113.2093	MG/KG	98		99		1		75 - 115	20	P
Thallium	203	0.3417		0.7913		0.7453		0.4484	0.4484	MG/KG	100		90		6		75 - 125	20	MS
Tin		2.7295	B	387.9619		381.7620		461.8938	452.8370	MG/KG	83		84		2		80 - 110	20	P
Titanium		1477.1091		1722.7852		1747.0203		115.4734	113.2093	MG/KG	213		238		1			20	P
Vanadium	51	52.3706		67.9612		68.7684		11.2110	11.2110	MG/KG	139		146		1			20	MS
Zinc	66	69.7143		89.0379		88.9706		11.2110	11.2110	MG/KG	172		172		0			20	MS
Zirconium		4.0201	B	112.6028		111.1522		115.4734	113.2093	MG/KG	94		95		1		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE163
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298888BKG
% Solids for Duplicate: 86.5
Batch ID(s): P15208B, P15726D, P15211B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6298891DUP
% Solids for Sample: 86.6

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			33234.6964		32664.4936		2		P
Antimony	121		0.0992	B	0.0943	B	5		MS
Arsenic	75		5.6786		6.3042		10		MS
Barium	137		122.4471		133.5376		9		MS
Beryllium	9		0.7429		0.8234		10		MS
Boron		5.7	8.5292		9.6792		13		P
Cadmium	111	0.1	0.3136		0.3615		14		MS
Calcium			6930.5574		9479.1085		31	*	P
Chromium	52		27.3966		29.7258		8		MS
Cobalt	59		10.7254		11.1746		4		MS
Copper	63		22.7777		17.5977		26	*	MS
Iron			34769.5626		34825.0806		0		P
Lead	208		13.0281		11.9246		9		MS
Lithium			28.4427		27.5113		3		P
Magnesium			8396.4237		7494.7465		11		P
Manganese			477.2834		546.3517		13		P
Mercury			0.0185	B	0.0566	B	101		CV
Molybdenum	98	0.1	0.3294		0.3165		4		MS
Nickel	60		20.5180		23.4148		13		MS
Phosphorus			522.5852		1715.6975		107	*	P
Potassium			5372.7483		5069.8843		6		P
Selenium	78		0.1334	B	0.1296	B	3		MS
Silver	107		0.0417	B	0.0490	B	16		MS
Sodium		113.2	104.3042	B	151.3914		37		P
Strontium			36.2972		56.2379		43	*	P
Thallium	203	0.1	0.3417		0.3611		6		MS
Tin			2.7295	B	2.5964	B	5		P
Titanium			1477.1091		1313.0268		12		P
Vanadium	51		52.3706		57.1651		9		MS
Zinc	66		69.7143		76.5783		9		MS
Zirconium			4.0201	B	5.5782	B	32		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE163
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298888BKG Serial Dilution Lab Sample ID: 6298888L
Batch ID(s): P15208B, P15726D
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		293568.7200		288017.1500		2		P
Antimony	121	0.4381	B	1.5000	U	100		MS
Arsenic	75	25.0800		27.0150		8		MS
Barium	137	540.8000		522.5000		3		MS
Beryllium	9	3.2810		3.9145		19		MS
Boron		75.3400		44.5000	U	100		P
Cadmium	111	1.3850		1.6320	B	18		MS
Calcium		61219.0000		64565.5500		5		P
Chromium	52	121.0000		139.0000		15	E	MS
Cobalt	59	47.3700		48.5950		3		MS
Copper	63	100.6000		103.3000		3		MS
Iron		61425.3000		61858.5500		1		P
Lead	208	57.5400		57.9500		1		MS
Lithium		251.2400		244.6000		3		P
Magnesium		74167.2900		76098.3500		3		P
Manganese		4215.9400		4527.8500		7		P
Molybdenum	98	1.4550		1.4465	B	1		MS
Nickel	60	90.6200		96.8500		7		MS
Phosphorus		4616.1000		4740.2500		3		P
Potassium		47458.5600		48644.5000		2		P
Selenium	78	0.5891	B	1.0000	U	100		MS
Silver	107	0.1842	B	0.3000	U	100		MS
Sodium		921.3400	B	1865.0000	U	100		P
Strontium		320.6200		332.7000		4		P
Thallium	203	1.5090		1.2425	B	18		MS
Tin		24.1100	B	50.0000	U	100		P
Titanium		13047.6000		13789.6500		6		P
Vanadium	51	231.3000		263.4500		14	E	MS
Zinc	66	307.9000		311.1500		1		MS
Zirconium		35.5100	B	53.2000	B	50		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE164

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	3005A	6010B	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	3020A	6020	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	3510C	8081A	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	3510C	8082	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	3510C	8270C	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	3510C	8270C SIM	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	Gen Prep	300.0	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	Gen Prep	314.0	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	Gen Prep	7199	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	METHOD	7470A	III
25-May-2011	EB07-SA5DN-SS-052511	6298922	EB	METHOD	8151A	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	3005A	6010B	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	3020A	6020	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	3510C	8082	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	5030B	8260B	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	5030B	8260B SIM	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	Gen Prep	300.0	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	Gen Prep	314.0	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	Gen Prep	7199	III
25-May-2011	EB08-SA5DN-SB-052511	6298923	EB	METHOD	7470A	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	3050B	6010B	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	3050B	6020	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	3060A	7199	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	3550B	8081A	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	3550B	8082	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	3550B	8270C	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	3550B	8270C SIM	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	METHOD	300.0	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	METHOD	314.0	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5	6298916	N	METHOD	7471A	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	3050B	6010B	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	3050B	6020	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	3060A	7199	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	3550B	8081A	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	3550B	8082	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	3550B	8151A	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	3550B	8270C	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	3550B	8270C SIM	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	METHOD	300.0	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	METHOD	314.0	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5MS	6298917	MS	METHOD	7471A	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5DU	6298919	DUP	3050B	6010B	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5DU	6298919	DUP	3050B	6020	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5DU	6298919	DUP	3060A	7199	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5DU	6298919	DUP	METHOD	300.0	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5DU	6298919	DUP	METHOD	314.0	III
25-May-2011	SL-201-SA5DN-SS-0.0-0.5DU	6298919	DUP	METHOD	7471A	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	3050B	6010B	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	3050B	6020	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	3060A	7199	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	3550B	8082	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	3550B	8151A	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	3550B	8270C	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	3550B	8270C SIM	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	METHOD	300.0	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	METHOD	314.0	III
25-May-2011	DUP08-SA5DN-QC-052411	6298921	FD	METHOD	7471A	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	3050B	6010B	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	3050B	6020	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	3060A	7199	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	3550B	8081A	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	3550B	8082	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	3550B	8151A	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	3550B	8270C	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	3550B	8270C SIM	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	METHOD	300.0	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	METHOD	314.0	III
25-May-2011	SL-200-SA5DN-SS-0.0-0.5	6298915	N	METHOD	7471A	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	3050B	6010B	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	3050B	6020	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	3060A	7199	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	3550B	8081A	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	3550B	8082	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	3550B	8151A	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	3550B	8270C	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	METHOD	300.0	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	METHOD	314.0	III
25-May-2011	SL-205-SA5DN-SS-0.0-0.5	6298920	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.94	MDL	1.2	PQL	mg/Kg	J	Q, FD

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.95	U	0.95	MDL	1.2	PQL	mg/Kg	UJ	Q, FD

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

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

Method Category: METALS

Method: 6010B **Matrix:** AQ

Sample ID: EB07-SA5DN-SS-052511 *Collected:* 5/25/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	0.0010	J	0.00084	MDL	0.0050	PQL	mg/L	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.67	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.06	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6010B **Matrix:** SO

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	91.6	J	42.3	MDL	113	PQL	mg/Kg	J	Z
TIN	2.84	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.80	J	0.952	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.82	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.13	J	0.975	MDL	5.80	PQL	mg/Kg	J	Z, FD

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	109	J	43.0	MDL	115	PQL	mg/Kg	J	Z
TIN	2.69	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.32	J	0.969	MDL	5.77	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 6020 **Matrix:** AQ

Sample ID: EB07-SA5DN-SS-052511 *Collected:* 5/25/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000065	J	0.000052	MDL	0.0010	PQL	mg/L	U	B

Sample ID: EB08-SA5DN-SB-052511 *Collected:* 5/25/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000052	J	0.000052	MDL	0.0010	PQL	mg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.300		0.0697	MDL	0.232	PQL	mg/Kg	J	Q
ARSENIC	6.34		0.0930	MDL	0.465	PQL	mg/Kg	J	E
CHROMIUM	29.5		0.139	MDL	0.465	PQL	mg/Kg	J	A
LEAD	13.7		0.0121	MDL	0.232	PQL	mg/Kg	J	E
SILVER	0.0348	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	55.1		0.0256	MDL	0.116	PQL	mg/Kg	J	A

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.314	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.504		0.0581	MDL	0.116	PQL	mg/Kg	J	E

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.291		0.0667	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	6.64		0.0889	MDL	0.445	PQL	mg/Kg	J	E
CHROMIUM	30.1		0.133	MDL	0.445	PQL	mg/Kg	J	A
LEAD	12.7		0.0116	MDL	0.222	PQL	mg/Kg	J	E
SILVER	0.0420	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	55.6		0.0245	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.310	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.533		0.0556	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.291		0.0703	MDL	0.234	PQL	mg/Kg	J	Q
ARSENIC	6.40		0.0937	MDL	0.469	PQL	mg/Kg	J	E
CHROMIUM	29.4		0.141	MDL	0.469	PQL	mg/Kg	J	A
LEAD	13.9		0.0122	MDL	0.234	PQL	mg/Kg	J	E
SILVER	0.0461	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	55.1		0.0258	MDL	0.117	PQL	mg/Kg	J	A

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.316	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.483		0.0586	MDL	0.117	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.290		0.0699	MDL	0.233	PQL	mg/Kg	J	Q
ARSENIC	6.23		0.0932	MDL	0.466	PQL	mg/Kg	J	E
CHROMIUM	29.1		0.140	MDL	0.466	PQL	mg/Kg	J	A
LEAD	13.5		0.0121	MDL	0.233	PQL	mg/Kg	J	E
SILVER	0.0388	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	54.6		0.0256	MDL	0.117	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.300	J	0.0466	MDL	0.466	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.504		0.0583	MDL	0.117	PQL	mg/Kg	J	E

Method Category: METALS **Method:** 7199 **Matrix:** AQ

Sample ID: EB07-SA5DN-SS-052511 *Collected:* 5/25/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Sample ID: EB08-SA5DN-SB-052511 *Collected:* 5/25/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

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

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.94	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	U	0.24	MDL	1.2	PQL	mg/Kg	UJ	FD

Method Category: METALS **Method:** 7470A **Matrix:** AQ

Sample ID: EB07-SA5DN-SS-052511 *Collected:* 5/25/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000046	U	0.000046	MDL	0.00020	PQL	mg/L	UJ	L

Sample ID: EB08-SA5DN-SB-052511 *Collected:* 5/25/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000046	U	0.000046	MDL	0.00020	PQL	mg/L	UJ	L

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

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0166	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0267	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0165	J	0.0034	MDL	0.118	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0137	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.8	J	0.93	MDL	4.0	PQL	ug/Kg	J	Z
DELTA-BHC	0.14	J	0.042	MDL	0.19	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.20	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z, FD
ENDRIN ALDEHYDE	0.14	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z, FD

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.35	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
Chlordane	1.9	J	0.92	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.9	J	0.95	MDL	4.0	PQL	ug/Kg	J	Z
DELTA-BHC	0.14	J	0.043	MDL	0.20	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.21	U	0.21	MDL	0.40	PQL	ug/Kg	UJ	FD
ENDRIN ALDEHYDE	0.12	U	0.12	MDL	0.40	PQL	ug/Kg	UJ	FD

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.6	J	0.93	MDL	4.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.5	J	0.77	MDL	4.0	PQL	ug/Kg	J	Z
AROCLOR 1260	3.0	J	0.91	MDL	4.0	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	970	U	970	MDL	970	PQL	ug/Kg	UJ	FD

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	110	J	90	MDL	290	PQL	ug/Kg	J	Z, FD

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB07-SA5DN-SS-052511 *Collected:* 5/25/2011 12:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	16	PQL	ug/L	UJ	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	20	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	20	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	390	PQL	ug/Kg	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB07-SA5DN-SS-052511 *Collected:* 5/25/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.028	J	0.0098	MDL	0.049	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.028	J	0.0098	MDL	0.049	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.21	J	0.049	MDL	0.98	PQL	ug/L	J	Z
Di-n-butylphthalate	0.063	J	0.049	MDL	0.98	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	0.81	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
Butylbenzylphthalate	11	J	7.0	MDL	21	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP08-SA5DN-QC-052411 *Collected:* 5/25/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.4	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
NAPHTHALENE	0.89	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, FD
PYRENE	0.97	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, FD

Sample ID: SL-200-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.1	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-201-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.93	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	0.87	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.99	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z, FD
Butylbenzylphthalate	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	FD
CHRYSENE	1.7	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
FLUORANTHENE	2.4		0.79	MDL	2.0	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	0.82	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z, Q, Q
PHENANTHRENE	2.0		0.79	MDL	2.0	PQL	ug/Kg	J	FD
PYRENE	1.9	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z, FD

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.84	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-205-SA5DN-SS-0.0-0.5 *Collected:* 5/25/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.79	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.5	J	7.0	MDL	21	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.98	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: EB08-SA5DN-SB-052511 *Collected:* 5/25/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2	J	2	MDL	5	PQL	ug/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE164

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**

Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB07-SA5DN-SS-052511 (RES)	Sampling To Analysis	25.00	24.00	HOURS	J (all detects)
EB08-SA5DN-SB-052511 (RES)		25.00	24.00	HOURS	UJ (all non-detects)

Method: 9040B **Preparation Method: Gen Prep**

Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB07-SA5DN-SS-052511 (RES)	Sampling To Analysis	174.00	48.00	HOURS	No Qualifiers Applied
EB08-SA5DN-SB-052511 (RES)		174.00	48.00	HOURS	

Method Blank Outlier Report

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14748CB222255	5/31/2011 10:55:00 PM	MAGNESIUM	0.0211 mg/L	EB07-SA5DN-SS-052511 EB08-SA5DN-SB-052511

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15708BB220800	6/7/2011 8:00:00 AM	CALCIUM PHOSPHORUS TIN	6.81 mg/Kg 1.17 mg/Kg 1.38 mg/Kg	DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP08-SA5DN-QC-052411(REA)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-200-SA5DN-SS-0.0-0.5(REA)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-201-SA5DN-SS-0.0-0.5(REA)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-205-SA5DN-SS-0.0-0.5(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg

Method: **6020**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14750CB220953A	6/1/2011 9:53:00 AM	LEAD	0.000055 mg/L	EB07-SA5DN-SS-052511 EB08-SA5DN-SB-052511

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB07-SA5DN-SS-052511(RES)	LEAD	0.000065 mg/L	0.000065U mg/L
EB08-SA5DN-SB-052511(RES)	LEAD	0.000052 mg/L	0.000052U mg/L

Method: **8081A**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P46460AB240550A	6/3/2011 5:50:00 AM	ENDOSULFAN II	0.59 ug/L	EB07-SA5DN-SS-052511

Method Blank Outlier Report

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLF15B260623	6/10/2011 6:23:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP08-SA5DN-QC-052411(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	27 ug/Kg	390U ug/Kg
SL-201-SA5DN-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	30 ug/Kg	390U ug/Kg
SL-205-SA5DN-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	27 ug/Kg	390U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-201-SA5DN-SS-0.0-0.5MSD (SL-201-SA5DN-SS-0.0-0.5)	DINOSEB	-	-	10.00-46.00	43 (35.00)	DINOSEB	J (all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-201-SA5DN-SS-0.0-0.5MS SL-201-SA5DN-SS-0.0-0.5MSD (SL-201-SA5DN-SS-0.0-0.5)	BENZIDINE	21	20	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-201-SA5DN-SS-0.0-0.5MS SL-201-SA5DN-SS-0.0-0.5MSD (SL-201-SA5DN-SS-0.0-0.5)	NAPHTHALENE	107	-	61.00-102.00	31 (30.00)	NAPHTHALENE	J(all detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-201-SA5DN-SS-0.0-0.5MS (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	FLUORIDE	75	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-201-SA5DN-SS-0.0-0.5MS SL-201-SA5DN-SS-0.0-0.5MSD (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	ANTIMONY	39	37	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-201-SA5DN-SS-0.0-0.5MS SL-201-SA5DN-SS-0.0-0.5MSD (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	ALUMINUM MAGNESIUM POTASSIUM TITANIUM	4015 506 183 464	3538 411 164 429	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM MAGNESIUM POTASSIUM TITANIUM	No Qual, >4x
SL-201-SA5DN-SS-0.0-0.5MS SL-201-SA5DN-SS-0.0-0.5MSD (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	CALCIUM IRON	-26 -803	-94 166	75.00-125.00 75.00-125.00	- -	CALCIUM IRON	No Qual, >4x
SL-201-SA5DN-SS-0.0-0.5MSD (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	MANGANESE	-	50	75.00-125.00	-	MANGANESE	No Qual, >4x

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-201-SA5DN-SS-0.0-0.5DUP (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual, OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-201-SA5DN-SS-0.0-0.5DUP (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	Zirconium	31	20.00	No Qual, OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-201-SA5DN-SS-0.0-0.5DUP (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	ANTIMONY	63	20.00	J(all detects) UJ(all non-detects) Sb, Cd, Se, Ag No Qual, OK by difference
	ARSENIC	37	20.00	
	CADMIUM	25	20.00	
	LEAD	25	20.00	
	MOLYBDENUM	0.8938	0.234	
	SELENIUM	56	20.00	
	SILVER	22	20.00	

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-201-SA5DN-SS-0.0-0.5DUP (DUP08-SA5DN-QC-052411 SL-200-SA5DN-SS-0.0-0.5 SL-201-SA5DN-SS-0.0-0.5 SL-205-SA5DN-SS-0.0-0.5)	MERCURY	66	20.00	No Qual, OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11460AY240614A (EB07-SA5DN-SS-052511)	HEPTACHLOR	-	130	57.00-126.00	-	HEPTACHLOR	J (all detects)

Method: 8151A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11516AQ241612A (EB07-SA5DN-SS-052511)	MCPP	140	-	67.00-137.00	-	MCPP	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1WFLCSY260101 (EB07-SA5DN-SS-052511)	BENZOIC ACID	-	-	10.00-69.00	83 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 7470A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15213DY222331 (EB07-SA5DN-SS-052511 EB08-SA5DN-SB-052511)	MERCURY	-	89	90.00-115.00	-	MERCURY	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-201-SA5DN-SS-0.0-0.5	DUP08-SA5DN-QC-052411			
MOISTURE	15.5	14.8	5		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-201-SA5DN-SS-0.0-0.5	DUP08-SA5DN-QC-052411			
FLUORIDE	1.2 U	1.3	200	50.00	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-201-SA5DN-SS-0.0-0.5	DUP08-SA5DN-QC-052411			
ALUMINUM	27600	27200	1	50.00	
BORON	21.9	21.4	2	50.00	
CALCIUM	34400	32900	4	50.00	
IRON	33800	33000	2	50.00	
LITHIUM	23.2	23.7	2	50.00	
MAGNESIUM	8020	7980	0	50.00	
MANGANESE	440	418	5	50.00	No Qualifiers Applied
PHOSPHORUS	694	694	0	50.00	
POTASSIUM	7380	7370	0	50.00	
SODIUM	121	116	4	50.00	
STRONTIUM	73.6	69.6	6	50.00	
TIN	2.82	2.67	5	50.00	
TITANIUM	1210	1180	3	50.00	
Zirconium	2.13	1.06	67	50.00	J(all detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-201-SA5DN-SS-0.0-0.5	DUP08-SA5DN-QC-052411			
ANTIMONY	0.291	0.300	3	50.00	
ARSENIC	6.40	6.34	1	50.00	
BARIUM	118	119	1	50.00	
BERYLLIUM	0.724	0.694	4	50.00	
CADMIUM	0.387	0.393	2	50.00	
CHROMIUM	29.4	29.5	0	50.00	
COBALT	10.7	10.4	3	50.00	
COPPER	18.5	18.5	0	50.00	
LEAD	13.9	13.7	1	50.00	No Qualifiers Applied
MOLYBDENUM	0.483	0.504	4	50.00	
NICKEL	20.9	21.0	0	50.00	
SELENIUM	0.316	0.314	1	50.00	
SILVER	0.0461	0.0348	28	50.00	
THALLIUM	0.401	0.380	5	50.00	
VANADIUM	55.1	55.1	0	50.00	
ZINC	81.4	78.8	3	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE164 Laboratory: LL

EDD Filename: DE164_v1 eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-201-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP08-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.2 U	0.60	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-201-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP08-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0165	0.0166	1	50.00	No Qualifiers Applied

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-201-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP08-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
4,4'-DDE	1.1	1.0	10	50.00	No Qualifiers Applied
4,4'-DDT	1.3	1.3	0	50.00	
Chlordane	1.9	1.8	5	50.00	
DELTA-BHC	0.14	0.14	0	50.00	
ENDOSULFAN II	0.40 U	0.20	200	50.00	J(all detects)
ENDRIN ALDEHYDE	0.40 U	0.14	200	50.00	UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-201-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP08-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
AROCLOR 1254	3.1	4.7	41	50.00	No Qualifiers Applied
AROCLOR 1260	2.3	2.8	20	50.00	

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-201-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP08-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
MCPA	110	970 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-201-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP08-SA5DN-QC-052411	Sample RPD	eQAPP RPD	Flag
BENZO(A)PYRENE	1.1	0.81	30	50.00	No Qualifiers Applied
BENZO(B)FLUORANTHENE	4.9	4.0	20	50.00	
CHRYSENE	1.7	1.4	19	50.00	
NAPHTHALENE	1.4	0.89	45	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

2-METHYLNAPHTHALENE	0.93	2.0 U	200	50.00	
BENZO(A)ANTHRACENE	0.87	2.0 U	200	50.00	
BENZO(G,H,I)PERYLENE	0.99	2.0 U	200	50.00	
Butylbenzylphthalate	21 U	11	200	50.00	J(all detects)
FLUORANTHENE	2.4	1.3	59	50.00	UJ(all non-detects)
INDENO(1,2,3-CD)PYRENE	0.82	2.0 U	200	50.00	
PHENANTHRENE	2.0	1.0	67	50.00	
PYRENE	1.9	0.97	65	50.00	

Method: 8270C
Matrix: SO

Analyte	*Concentration (ug/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-201-SA5DN-SS-0.0-0.5	DUP08-SA5DN-QC-052411			
BIS(2-ETHYLHEXYL)PHTHALATE	30	27	11	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	*Concentration (pH unit)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-201-SA5DN-SS-0.0-0.5	DUP08-SA5DN-QC-052411			
PH	8.09	8.02	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB07-SA5DN-SS-052511	MANGANESE	J	0.0010	0.0050	PQL	mg/L	J (all detects)

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB07-SA5DN-SS-052511	LEAD	J	0.000065	0.0010	PQL	mg/L	J (all detects)
EB08-SA5DN-SB-052511	LEAD	J	0.000052	0.0010	PQL	mg/L	J (all detects)

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB08-SA5DN-SB-052511	METHYLENE CHLORIDE	J	2	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB07-SA5DN-SS-052511	1-METHYLNAPHTHALENE	J	0.028	0.049	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.028	0.049	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.21	0.98	PQL	ug/L	
	Di-n-butylphthalate	J	0.063	0.98	PQL	ug/L	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5DN-QC-052411	TIN	J	2.67	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.06	5.70	PQL	mg/Kg	
SL-200-SA5DN-SS-0.0-0.5	SODIUM	J	91.6	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	11.3	PQL	mg/Kg	
	Zirconium	J	1.80	5.67	PQL	mg/Kg	
SL-201-SA5DN-SS-0.0-0.5	TIN	J	2.82	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.13	5.80	PQL	mg/Kg	
SL-205-SA5DN-SS-0.0-0.5	SODIUM	J	109	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	11.5	PQL	mg/Kg	
	Zirconium	J	1.32	5.77	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5DN-QC-052411	SELENIUM	J	0.314	0.465	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0348	0.116	PQL	mg/Kg	
SL-200-SA5DN-SS-0.0-0.5	SELENIUM	J	0.310	0.445	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0420	0.111	PQL	mg/Kg	
SL-201-SA5DN-SS-0.0-0.5	SELENIUM	J	0.316	0.469	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0461	0.117	PQL	mg/Kg	
SL-205-SA5DN-SS-0.0-0.5	SELENIUM	J	0.300	0.466	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0388	0.117	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5DN-QC-052411	HEXAVALENT CHROMIUM	J	0.60	1.2	PQL	mg/Kg	J (all detects)
SL-200-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.94	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5DN-QC-052411	MERCURY	J	0.0166	0.114	PQL	mg/Kg	J (all detects)
SL-200-SA5DN-SS-0.0-0.5	MERCURY	J	0.0267	0.114	PQL	mg/Kg	J (all detects)
SL-201-SA5DN-SS-0.0-0.5	MERCURY	J	0.0165	0.118	PQL	mg/Kg	J (all detects)
SL-205-SA5DN-SS-0.0-0.5	MERCURY	J	0.0137	0.116	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5DN-QC-052411	Chlordane	J	1.8	4.0	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.14	0.19	PQL	ug/Kg	
	ENDOSULFAN II	J	0.20	0.40	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.14	0.40	PQL	ug/Kg	
SL-200-SA5DN-SS-0.0-0.5	4,4'-DDT	J	0.35	0.39	PQL	ug/Kg	J (all detects)
	Chlordane	J	1.9	3.9	PQL	ug/Kg	
SL-201-SA5DN-SS-0.0-0.5	Chlordane	J	1.9	4.0	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.14	0.20	PQL	ug/Kg	
SL-205-SA5DN-SS-0.0-0.5	Chlordane	J	3.6	4.0	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-200-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.1	2.0	PQL	ug/Kg	J (all detects)
SL-205-SA5DN-SS-0.0-0.5	AROCLOR 1254	J	3.5	4.0	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	3.0	4.0	PQL	ug/Kg	

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-201-SA5DN-SS-0.0-0.5	MCPA	J	110	290	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5DN-QC-052411	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)
SL-201-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	390	PQL	ug/Kg	J (all detects)
SL-205-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5DN-QC-052411	BENZO(A)PYRENE	J	0.81	2.0	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	11	21	PQL	ug/Kg	
	CHRYSENE	J	1.4	2.0	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.89	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	2.0	PQL	ug/Kg	
	PYRENE	J	0.97	2.0	PQL	ug/Kg	
SL-200-SA5DN-SS-0.0-0.5	CHRYSENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.9	PQL	ug/Kg	
	PYRENE	J	1.1	1.9	PQL	ug/Kg	
SL-201-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.93	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.87	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.99	2.0	PQL	ug/Kg	
	CHRYSENE	J	1.7	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.82	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	2.0	PQL	ug/Kg	
	PYRENE	J	1.9	2.0	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE164 **Laboratory: LL**

EDD Filename: DE164_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-205-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	0.84	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.79	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.5	21	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.98	1.9	PQL	ug/Kg	
	PYRENE	J	1.1	1.9	PQL	ug/Kg	

LDC #: 26275V4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE164 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
2nd Reviewer: CR

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	Al, Ca, Fe, Mg, Mn, K, Ti > 4X
VII.	Duplicate Sample Analysis	SW	Sb, Cd, Hg, Se, Ag, Zr <5X. Mo difference 0.8938 (≤ 0.23 X) mg/kg
VIII.	Laboratory Control Samples (LCS)	A	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr, V.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	FB=5, 6, (No qual >5X)

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

Validated Samples:

1	SL-200-SA5DN-SS-0.0-0.5	11		21		31	
2	SL-201-SA5DN-SS-0.0-0.5	12		22		32	
3	SL-205-SA5DN-SS-0.0-0.5	13		23		33	
4	DUP08-SA5DN-QC-052411	14		24		34	
5	EB07-SA5DN-SS-052511	15		25		35	
6	EB08-SA5DN-SB-052511	16		26		36	
7	SL-201-SA5DN-SS-0.0-0.5MS	17		27		37	
8	SL-201-SA5DN-SS-0.0-0.5MSD	18		28		38	
9	SL-201-SA5DN-SS-0.0-0.5DUP	19		29		39	
10		20		30		40	

Notes:

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE164
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298916BKG Matrix Spike Lab Sample ID: 6298917MS Matrix Spike Duplicate Lab Sample ID: 6298918MSD
% Solids for Sample: 84.5
Batch Id(s): P15708B, P15726E, P15711A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		27612.4202		37021.6217		35903.0090		234.3430	234.3430	MG/KG	4015		3538		3			20	P
Antimony	121	0.2913		0.8346		0.8024		1.3788	1.3923	MG/KG	39	N	37	N	4		75 - 125	20	MS
Arsenic	75	6.4022		9.0377		9.1147		2.2979	2.3205	MG/KG	115		117		1		75 - 125	20	MS
Barium	137	117.6402		128.1783		130.1079		11.4896	11.6023	MG/KG	92		107		1			20	MS
Beryllium	9	0.7237		1.4369		1.4554		0.9192	0.9282	MG/KG	78		79		1		75 - 125	20	MS
Boron		21.9237		265.1684		255.4327		234.3430	234.3430	MG/KG	104		100		4		84 - 115	20	P
Cadmium	111	0.3874		1.5022		1.5477		1.1490	1.1602	MG/KG	97		100		3		75 - 125	20	MS
Calcium		34412.8112		34291.8812		33972.4284		468.6859	468.6859	MG/KG	-26		-94		1			20	P
Chromium	52	29.4335		39.9380		40.3295		11.4896	11.6023	MG/KG	91		94		1		75 - 125	20	MS
Cobalt	59	10.7212		64.9394		64.9727		57.4482	58.0114	MG/KG	94		94		0		75 - 125	20	MS
Copper	63	18.5342		29.0228		29.4002		11.4896	11.6023	MG/KG	91		94		1		75 - 125	20	MS
Iron		33849.8260		32908.8230		34044.5252		117.1715	117.1715	MG/KG	-803		166		3			20	P
Lead	208	13.8989		17.0782		17.1064		3.4469	3.4807	MG/KG	92		92		0			20	MS
Lithium		23.1906		151.1254		147.4544		117.1715	117.1715	MG/KG	109		106		2		82 - 114	20	P
Magnesium		8018.8003		9203.8069		8982.6750		234.3430	234.3430	MG/KG	506		411		2			20	P
Manganese		440.3597		491.7875		469.7100		58.5857	58.5857	MG/KG	88		50		5			20	P
Mercury		0.0165	B	0.2198		0.2052		0.1928	0.1954	MG/KG	105		97		7		65 - 135	20	CV
Molybdenum	98	0.4827		11.3954		11.5721		11.4896	11.6023	MG/KG	95		96		2		75 - 125	20	MS
Nickel	60	20.8800		32.2169		32.3471		11.4896	11.6023	MG/KG	99		99		0		75 - 125	20	MS
Phosphorus		694.3172		806.8827		796.6067		117.1715	117.1715	MG/KG	96		87		1			20	P
Potassium		7376.6887		9522.4782		9297.1855		1171.7148	1171.7148	MG/KG	183		164		2			20	P
Selenium	78	0.3161	B	2.4588		2.4434		2.2979	2.3205	MG/KG	93		92		1		75 - 125	20	MS
Silver	107	0.0461	B	11.3426		11.6255		11.4896	11.6023	MG/KG	98		100		2		75 - 125	20	MS
Sodium		120.7576		1301.4377		1276.2025		1171.7148	1171.7148	MG/KG	101		99		2		75 - 125	20	P
Strontium		73.5770		189.5647		182.3282		117.1715	117.1715	MG/KG	99		93		4		75 - 115	20	P
Thallium	203	0.4012		0.8397		0.7934		0.4596	0.4641	MG/KG	95		85		6		75 - 125	20	MS
Tin		2.8228	B	402.0435		388.7551		468.6859	468.6859	MG/KG	85		82		3		80 - 110	20	P
Titanium		1206.1098		1749.4218		1709.0726		117.1715	117.1715	MG/KG	464		429		2			20	P
Vanadium	51	55.1175		67.0535		68.6158		11.4896	11.6023	MG/KG	104		116		2			20	MS
Zinc	66	81.4107		91.2506		91.4955		11.4896	11.6023	MG/KG	86		87		0			20	MS
Zirconium		2.1279	B	92.4647		92.9978		117.1715	117.1715	MG/KG	77		78		1		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE164
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298916BKG
% Solids for Duplicate: 84.7
Batch ID(s): P15708B, P15726E, P15711A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6298919DUP
% Solids for Sample: 84.5

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			27612.4202		28482.3828		3		P
Antimony	121	0.2	0.2913		0.5620		63	*	MS
Arsenic	75		6.4022		9.3305		37	*	MS
Barium	137		117.6402		110.6161		6		MS
Beryllium	9		0.7237		0.8442		15		MS
Boron		5.8	21.9237		22.4602		2		P
Cadmium	111	0.1	0.3874		0.4975		25		MS
Calcium			34412.8112		30512.8334		12		P
Chromium	52		29.4335		27.5206		7		MS
Cobalt	59		10.7212		12.2334		13		MS
Copper	63		18.5342		21.0442		13		MS
Iron			33849.8260		34079.5175		1		P
Lead	208		13.8989		17.7956		25	*	MS
Lithium			23.1906		24.7212		6		P
Magnesium			8018.8003		8096.8798		1		P
Manganese			440.3597		427.9483		3		P
Mercury			0.0165	B	0.0083	B	66		CV
Molybdenum	98	0.1	0.4827		1.3765		96	*	MS
Nickel	60		20.8800		24.8521		17		MS
Phosphorus			694.3172		689.1340		1		P
Potassium			7376.6887		7434.6359		1		P
Selenium	78	0.5	0.3161	B	0.5592		56		MS
Silver	107		0.0461	B	0.0369	B	22		MS
Sodium		116.0	120.7576		117.0744		3		P
Strontium			73.5770		68.7858		7		P
Thallium	203	0.1	0.4012		0.3529		13		MS
Tin			2.8228	B	2.6673	B	6		P
Titanium			1206.1098		1252.6195		4		P
Vanadium	51		55.1175		57.2224		4		MS
Zinc	66		81.4107		90.4977		11		MS
Zirconium			2.1279	B	2.9028	B	31		P

Difference 0.8938 (<0.934)

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE164
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6298916BKG Serial Dilution Lab Sample ID: 6298916L
Batch ID(s): P15708B, P15726E
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		237991.4500		238959.6500		0		P
Antimony	121	1.2430		1.5000	U	100		MS
Arsenic	75	27.3200		27.5800		1		MS
Barium	137	502.0000		498.8500		1		MS
Beryllium	9	3.0880		3.5010		13		MS
Boron		188.9600		220.7000	B	17		P
Cadmium	111	1.6530		1.5080	B	9		MS
Calcium		296604.0200		313274.9500		6		P
Chromium	52	125.6000		146.5500		17	E	MS
Cobalt	59	45.7500		47.1450		3		MS
Copper	63	79.0900		82.0500		4		MS
Iron		58350.3300		57969.7500		1		P
Lead	208	59.3100		59.9000		1		MS
Lithium		199.8800		192.5000		4		P
Magnesium		69114.0400		71476.0500		3		P
Manganese		3795.4600		4065.2500		7		P
Molybdenum	98	2.0600		2.5100		22		MS
Nickel	60	89.1000		91.3500		3		MS
Phosphorus		5984.3200		6170.3500		3		P
Potassium		63579.6800		64068.7000		1		P
Selenium	78	1.3490	B	1.4040	B	4		MS
Silver	107	0.1968	B	0.3000	U	100		MS
Sodium		1040.8100		1865.0000	U	100		P
Strontium		634.1600		669.4500		6		P
Thallium	203	1.7120		1.5100	B	12		MS
Tin		24.3300	B	50.0000	U	100		P
Titanium		10395.4600		11102.9500		7		P
Vanadium	51	235.2000		270.7500		15	E	MS
Zinc	66	347.4000		355.5500		2		MS
Zirconium		18.3400	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE164 2887
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE166

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	TB-052611	6300344	TB	5030B	8260B	III
26-May-2011	TB-052611	6300344	TB	5030B	8260B SIM	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3050B	6010B	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3050B	6020	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3060A	7199	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3546	1625C	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3550B	8015B	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3550B	8015M	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3550B	8081A	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3550B	8082	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3550B	8151A	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3550B	8270C	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	3550B	8270C SIM	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	8330	8330A	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	METHOD	300.0	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	METHOD	314.0	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	METHOD	6850	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	METHOD	7471A	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	METHOD	8015B	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	METHOD	8015M	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	METHOD	8315A	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5	6300354	N	METHOD	9012B	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5DU	P300354D270911B	DUP	METHOD	9012B	III
26-May-2011	SL-179-SA5DN-SS-0.0-0.5MS	P300354R270915B	MS	METHOD	9012B	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	3050B	6010B	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	3060A	7199	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	3550B	8082	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	3550B	8270C	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	3550B	8270C SIM	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	5035	8260B	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	5035	8260B SIM	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	METHOD	300.0	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	METHOD	314.0	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	METHOD	7471A	III
26-May-2011	SL-008-SA8N-SB-4.0-5.0	6300341	N	METHOD	8015M	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	3050B	6010B	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	3050B	6020	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	3060A	7199	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	3550B	8081A	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	3550B	8082	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	3550B	8151A	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	3550B	8270C	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	3550B	8270C SIM	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	METHOD	300.0	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	METHOD	314.0	III
26-May-2011	SL-172-SA5DN-SS-0.0-0.5	6300349	N	METHOD	7471A	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3050B	6010B	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3050B	6020	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3060A	7199	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3546	1625C	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3550B	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3550B	8015M	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3550B	8081A	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3550B	8082	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3550B	8151A	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3550B	8270C	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	3550B	8270C SIM	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	8330	8330A	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	METHOD	300.0	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	METHOD	314.0	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	METHOD	7471A	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	METHOD	8015B	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	METHOD	8015M	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	METHOD	8315A	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5	6300348	N	METHOD	9012B	III
26-May-2011	SL-171-SA5DN-SS-0.0-0.5MS	P300348R320502A	MS	3550B	8015B	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	3050B	6010B	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	3050B	6020	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	3060A	7199	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	3550B	8082	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	3550B	8270C	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	3550B	8270C SIM	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	METHOD	300.0	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	METHOD	314.0	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	METHOD	7471A	III
26-May-2011	SL-008-SA8N-SB-9.0-10.0	6300342	N	METHOD	8015M	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	3050B	6020	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	3060A	7199	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	3550B	8081A	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	3550B	8082	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	3550B	8151A	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	3550B	8270C	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	3550B	8270C SIM	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	METHOD	300.0	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	METHOD	314.0	III
26-May-2011	SL-170-SA5DN-SS-0.0-0.5	6300347	N	METHOD	7471A	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	3050B	6010B	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	3050B	6020	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	3060A	7199	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	3550B	8081A	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	3550B	8082	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	3550B	8151A	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	3550B	8270C	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	3550B	8270C SIM	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	METHOD	300.0	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	METHOD	314.0	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5	6300350	N	METHOD	7471A	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5DU	P300350D271020B	DUP	METHOD	314.0	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5DU	P300350D272337B	DUP	METHOD	300.0	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5MS	P300350R270018B	MS	METHOD	300.0	III
26-May-2011	SL-173-SA5DN-SS-0.0-0.5MS	P300350R271042B	MS	METHOD	314.0	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	3050B	6020	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	3060A	7199	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	3550B	8081A	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	3550B	8082	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	3550B	8151A	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	3550B	8270C	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	3550B	8270C SIM	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	METHOD	300.0	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	METHOD	314.0	III
26-May-2011	SL-174-SA5DN-SS-0.0-0.5	6300351	N	METHOD	7471A	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3050B	6010B	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3050B	6020	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3060A	7199	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3546	1625C	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3550B	8015B	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3550B	8015M	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3550B	8081A	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3550B	8082	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3550B	8151A	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3550B	8270C	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	3550B	8270C SIM	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	8330	8330A	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	METHOD	300.0	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	METHOD	314.0	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	METHOD	7471A	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	METHOD	8015M	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	METHOD	8315A	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5	6300352	N	METHOD	9012B	III
26-May-2011	SL-175-SA5DN-SS-0.0-0.5MS	P300352R320238A	MS	METHOD	8015B	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	3050B	6010B	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	3050B	6020	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	3060A	7199	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	3550B	8081A	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	3550B	8082	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	3550B	8151A	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	3550B	8270C	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	3550B	8270C SIM	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	METHOD	300.0	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	METHOD	314.0	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	METHOD	6850	III
26-May-2011	SL-176-SA5DN-SS-0.0-0.5	6300353	N	METHOD	7471A	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3005A	6010B	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3020A	6020	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3510C	8015B	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3510C	8015M	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3510C	8081A	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3510C	8082	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3510C	8270C	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3510C	8270C SIM	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	3520C	1625C	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	8330	8330A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	Gen Prep	300.0	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	Gen Prep	314.0	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	Gen Prep	7199	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	Gen Prep	8015B	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	Gen Prep	8015M	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	METHOD	7470A	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	METHOD	8151A	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	METHOD	8315A	III
26-May-2011	EB09-SA5DN-SS-052611	6300360	EB	METHOD	9012B	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	3005A	6010B	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	3020A	6020	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	3510C	8082	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	3510C	8270C	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	3510C	8270C SIM	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	5030B	8260B	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	5030B	8260B SIM	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	Gen Prep	300.0	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	Gen Prep	314.0	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	Gen Prep	7199	III
26-May-2011	EB11-SA8N-SB-052611	6300361	EB	METHOD	7470A	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	3050B	6010B	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	3050B	6020	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	3060A	7199	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	3550B	8081A	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	3550B	8082	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	3550B	8270C	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	3550B	8270C SIM	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	METHOD	300.0	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	METHOD	314.0	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	METHOD	6850	III
26-May-2011	SL-180-SA5DN-SS-0.0-0.5	6300355	N	METHOD	7471A	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	3050B	6010B	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	3050B	6020	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	3060A	7199	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	3550B	8081A	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	3550B	8082	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	3550B	8151A	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	3550B	8270C	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	3550B	8270C SIM	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	METHOD	300.0	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	METHOD	314.0	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	METHOD	6850	III
26-May-2011	SL-181-SA5DN-SS-0.0-0.5	6300356	N	METHOD	7471A	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	3050B	6010B	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	3050B	6020	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	3060A	7199	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	3550B	8082	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	3550B	8270C	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	3550B	8270C SIM	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	5035	8260B	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	5035	8260B SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	METHOD	300.0	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	METHOD	314.0	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	METHOD	7471A	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0	6300336	N	METHOD	8015M	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	3050B	6010B	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	3050B	6020	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	3060A	7199	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	3550B	8082	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	3550B	8270C	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	3550B	8270C SIM	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	5035	8260B	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	5035	8260B SIM	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	METHOD	314.0	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	METHOD	7471A	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	6300337	MS	METHOD	8015M	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	3050B	6010B	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	3050B	6020	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	3550B	8082	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	3550B	8270C	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	3550B	8270C SIM	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	5035	8260B	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	5035	8260B SIM	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	METHOD	7471A	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MSD	6300338	MSD	METHOD	8015M	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0DUP	6300339	DUP	3050B	6010B	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0DUP	6300339	DUP	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-002-SA8N-SB-4.0-5.0DUP	6300339	DUP	3060A	7199	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0DUP	6300339	DUP	METHOD	300.0	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0DUP	6300339	DUP	METHOD	314.0	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0DUP	6300339	DUP	METHOD	7471A	III
26-May-2011	SL-002-SA8N-SB-4.0-5.0MS	P300336R272039A	MS	METHOD	300.0	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	3050B	6010B	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	3050B	6020	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	3060A	7199	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	3550B	8081A	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	3550B	8082	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	3550B	8151A	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	3550B	8270C	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	3550B	8270C SIM	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	METHOD	300.0	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	METHOD	314.0	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	METHOD	6850	III
26-May-2011	SL-182-SA5DN-SS-0.0-0.5	6300357	N	METHOD	7471A	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	3050B	6010B	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	3050B	6020	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	3060A	7199	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	3550B	8082	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	3550B	8270C	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	3550B	8270C SIM	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	5035	8260B	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	5035	8260B SIM	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	METHOD	314.0	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	METHOD	7471A	III
26-May-2011	DUP09-SA8N-QC-052611	6300343	FD	METHOD	8015M	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	3050B	6010B	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	3050B	6020	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	3060A	7199	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	3550B	8081A	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	3550B	8082	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	3550B	8151A	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	3550B	8270C	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	3550B	8270C SIM	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	METHOD	300.0	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	METHOD	314.0	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	METHOD	6850	III
26-May-2011	SL-183-SA5DN-SS-0.0-0.5	6300358	N	METHOD	7471A	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	3050B	6010B	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	3050B	6020	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	3060A	7199	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	3550B	8082	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	3550B	8270C	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	3550B	8270C SIM	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	METHOD	300.0	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	METHOD	314.0	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	METHOD	7471A	III
26-May-2011	SL-002-SA8N-SB-9.0-10.0	6300340	N	METHOD	8015M	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	3050B	6020	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	3060A	7199	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	3550B	8081A	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	3550B	8082	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	3550B	8151A	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	3550B	8270C	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	3550B	8270C SIM	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	METHOD	300.0	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	METHOD	314.0	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	METHOD	6850	III
26-May-2011	SL-184-SA5DN-SS-0.0-0.5	6300359	N	METHOD	7471A	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	3050B	6010B	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	3050B	6020	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	3060A	7199	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	3550B	8081A	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	3550B	8082	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	3550B	8151A	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	3550B	8270C	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	3550B	8270C SIM	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	METHOD	300.0	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	METHOD	314.0	III
26-May-2011	SL-165-SA5DN-SS-0.0-0.5	6300346	N	METHOD	7471A	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	3050B	6010B	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	3050B	6020	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	3060A	7199	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	3550B	8082	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	3550B	8151A	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	3550B	8270C	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	3550B	8270C SIM	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	METHOD	300.0	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	METHOD	314.0	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5	6300345	N	METHOD	7471A	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5MS	P300345R240512A	MS	3550B	8081A	III
26-May-2011	SL-164-SA5DN-SS-0.0-0.5MS	P300345R242058A	MS	3550B	8151A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.3		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.6		0.96	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 2:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.3		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.8		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.82	U	0.82	MDL	1.0	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.85	U	0.85	MDL	1.1	PQL	mg/Kg	UJ	Q
Nitrate-NO3	1.3	J	0.85	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

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

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3730		20.8	MDL	57.9	PQL	mg/Kg	J	Q
TIN	2.64	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.92	J	0.972	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3770		21.5	MDL	59.7	PQL	mg/Kg	J	Q
TIN	2.72	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	4.41	J	1.00	MDL	5.97	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 2:50:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3010		21.0	MDL	58.4	PQL	mg/Kg	J	Q
TIN	2.44	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.57	J	0.981	MDL	5.84	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4750		20.6	MDL	57.2	PQL	mg/Kg	J	Q
TIN	2.53	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.48	J	0.960	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 9:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.46	J	1.01	MDL	5.65	PQL	mg/Kg	J	Z
POTASSIUM	2830		20.3	MDL	56.5	PQL	mg/Kg	J	Q
TIN	2.65	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.78	J	0.949	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4800		19.4	MDL	53.9	PQL	mg/Kg	J	Q
SODIUM	67.9	J	40.2	MDL	108	PQL	mg/Kg	J	Z
TIN	2.45	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.03	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3760		19.0	MDL	52.7	PQL	mg/Kg	J	Q
SODIUM	75.2	J	39.3	MDL	105	PQL	mg/Kg	J	Z
TIN	2.37	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.07	J	0.886	MDL	5.27	PQL	mg/Kg	J	Z

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.06	J	0.890	MDL	5.00	PQL	mg/Kg	J	Z
POTASSIUM	2890		18.0	MDL	50.0	PQL	mg/Kg	J	Q
SODIUM	56.5	J	37.3	MDL	100	PQL	mg/Kg	J	Z
TIN	2.23	J	1.00	MDL	10.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	0.906	J	0.840	MDL	5.00	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.71	J	0.928	MDL	5.21	PQL	mg/Kg	J	Z
POTASSIUM	4130		18.8	MDL	52.1	PQL	mg/Kg	J	Q
SODIUM	82.3	J	38.9	MDL	104	PQL	mg/Kg	J	Z
TIN	2.24	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.94	J	0.932	MDL	5.24	PQL	mg/Kg	J	Z
POTASSIUM	3020		18.9	MDL	52.4	PQL	mg/Kg	J	Q
SODIUM	91.7	J	39.1	MDL	105	PQL	mg/Kg	J	Z
TIN	2.17	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	3.31	J	0.880	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.90	J	0.909	MDL	5.10	PQL	mg/Kg	J	Z
POTASSIUM	2820		18.4	MDL	51.0	PQL	mg/Kg	J	Q
SODIUM	63.1	J	38.1	MDL	102	PQL	mg/Kg	J	Z
TIN	2.37	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.86	J	0.908	MDL	5.10	PQL	mg/Kg	J	Z
POTASSIUM	4290		18.4	MDL	51.0	PQL	mg/Kg	J	Q
TIN	2.34	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.27	J	0.857	MDL	5.10	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.38	J	0.927	MDL	5.21	PQL	mg/Kg	J	Z
POTASSIUM	3070		18.8	MDL	52.1	PQL	mg/Kg	J	Q
SODIUM	66.4	J	38.9	MDL	104	PQL	mg/Kg	J	Z
TIN	2.16	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.33	J	0.875	MDL	5.21	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.60	J	0.891	MDL	5.01	PQL	mg/Kg	J	Z
POTASSIUM	2560		18.0	MDL	50.1	PQL	mg/Kg	J	Q
SODIUM	61.7	J	37.4	MDL	100	PQL	mg/Kg	J	Z
TIN	4.84	J	1.00	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	1.06	J	0.841	MDL	5.01	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.23	J	0.933	MDL	5.24	PQL	mg/Kg	J	Z
POTASSIUM	3040		18.9	MDL	52.4	PQL	mg/Kg	J	Q
SODIUM	72.2	J	39.1	MDL	105	PQL	mg/Kg	J	Z
TIN	2.39	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.76	J	0.881	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.69	J	0.912	MDL	5.12	PQL	mg/Kg	J	Z
POTASSIUM	3170		18.4	MDL	51.2	PQL	mg/Kg	J	Q
SODIUM	84.5	J	38.2	MDL	102	PQL	mg/Kg	J	Z
TIN	2.40	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.67	J	0.861	MDL	5.12	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.59	J	0.912	MDL	5.13	PQL	mg/Kg	J	Z
POTASSIUM	3450		18.5	MDL	51.3	PQL	mg/Kg	J	Q
SODIUM	82.8	J	38.2	MDL	103	PQL	mg/Kg	J	Z
TIN	2.27	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.90	J	0.861	MDL	5.13	PQL	mg/Kg	J	Z

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.95	J	0.917	MDL	5.15	PQL	mg/Kg	J	Z
POTASSIUM	3190		18.6	MDL	51.5	PQL	mg/Kg	J	Q
SODIUM	96.7	J	38.4	MDL	103	PQL	mg/Kg	J	Z
TIN	2.15	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.92	J	0.866	MDL	5.15	PQL	mg/Kg	J	Z

Sample ID: SL-183-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.11	J	0.886	MDL	4.98	PQL	mg/Kg	J	Z
POTASSIUM	3140		17.9	MDL	49.8	PQL	mg/Kg	J	Q
TIN	2.44	J	0.996	MDL	9.96	PQL	mg/Kg	U	B

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.51	J	0.908	MDL	5.10	PQL	mg/Kg	J	Z
POTASSIUM	3200		18.4	MDL	51.0	PQL	mg/Kg	J	Q
SODIUM	78.2	J	38.1	MDL	102	PQL	mg/Kg	J	Z
TIN	2.19	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.87	J	0.857	MDL	5.10	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** AQ

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000071	J	0.000052	MDL	0.0010	PQL	mg/L	U	B

Sample ID: EB11-SA8N-SB-052611 *Collected:* 5/26/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000062	J	0.000052	MDL	0.0010	PQL	mg/L	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.129	J	0.0675	MDL	0.225	PQL	mg/Kg	J	Z, Q
LEAD	11.7		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A
SILVER	0.0304	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.89		0.0900	MDL	0.450	PQL	mg/Kg	J	Q
CHROMIUM	33.6		0.135	MDL	0.450	PQL	mg/Kg	J	Q, A
NICKEL	28.5		0.112	MDL	0.450	PQL	mg/Kg	J	Q
VANADIUM	68.6		0.0247	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	129		0.121	MDL	0.450	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0683	MDL	0.228	PQL	mg/Kg	J	Z, Q
LEAD	10.2		0.0118	MDL	0.228	PQL	mg/Kg	J	Q, A
SILVER	0.0264	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.98		0.0910	MDL	0.455	PQL	mg/Kg	J	Q
CHROMIUM	31.8		0.137	MDL	0.455	PQL	mg/Kg	J	Q, A
NICKEL	23.0		0.114	MDL	0.455	PQL	mg/Kg	J	Q
VANADIUM	63.9		0.0250	MDL	0.114	PQL	mg/Kg	J	A

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.147	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.123	MDL	0.455	PQL	mg/Kg	J	A

Sample ID: SL-002-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 2:50:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0701	MDL	0.234	PQL	mg/Kg	J	Z, Q
LEAD	11.5		0.0121	MDL	0.234	PQL	mg/Kg	J	Q, A
SILVER	0.0453	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 2:50:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.73		0.0934	MDL	0.467	PQL	mg/Kg	J	Q
CHROMIUM	33.3		0.140	MDL	0.467	PQL	mg/Kg	J	Q, A
NICKEL	24.6		0.117	MDL	0.467	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-002-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 2:50:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	65.9		0.0257	MDL	0.117	PQL	mg/Kg	J	A

Sample ID: SL-002-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 2:50:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0898	J	0.0467	MDL	0.467	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 2:50:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	117		0.126	MDL	0.467	PQL	mg/Kg	J	A

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0686	MDL	0.229	PQL	mg/Kg	J	Z, Q
LEAD	8.93		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, A
SILVER	0.0372	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.32		0.0915	MDL	0.457	PQL	mg/Kg	J	Q
CHROMIUM	29.8		0.137	MDL	0.457	PQL	mg/Kg	J	Q, A
NICKEL	19.2		0.114	MDL	0.457	PQL	mg/Kg	J	Q
VANADIUM	56.6		0.0252	MDL	0.114	PQL	mg/Kg	J	A

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.125	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	100		0.123	MDL	0.457	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-008-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 9:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0814	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q
LEAD	6.58		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, A
SILVER	0.0394	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 9:40:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.39		0.0895	MDL	0.447	PQL	mg/Kg	J	Q
CHROMIUM	25.5		0.134	MDL	0.447	PQL	mg/Kg	J	Q, A
NICKEL	17.2		0.112	MDL	0.447	PQL	mg/Kg	J	Q
VANADIUM	49.5		0.0246	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: SL-008-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 9:40:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0529	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 9:40:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	86.3		0.121	MDL	0.447	PQL	mg/Kg	J	A

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.179	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q
LEAD	11.4		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
SILVER	0.0410	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	10.1		0.0854	MDL	0.427	PQL	mg/Kg	J	Q
CHROMIUM	24.5		0.128	MDL	0.427	PQL	mg/Kg	J	Q, A
NICKEL	18.5		0.107	MDL	0.427	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	48.7		0.0235	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.221	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	106		0.115	MDL	0.427	PQL	mg/Kg	J	A

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0721	J	0.0626	MDL	0.209	PQL	mg/Kg	J	Z, Q
LEAD	9.29		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, A
SILVER	0.0647	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.30		0.0835	MDL	0.418	PQL	mg/Kg	J	Q
CHROMIUM	21.7		0.125	MDL	0.418	PQL	mg/Kg	J	Q, A
NICKEL	15.4		0.104	MDL	0.418	PQL	mg/Kg	J	Q
VANADIUM	43.3		0.0230	MDL	0.104	PQL	mg/Kg	J	A

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	98.4		0.113	MDL	0.418	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0588	U	0.0588	MDL	0.196	PQL	mg/Kg	UJ	Q
CADMIUM	0.0683	J	0.0392	MDL	0.0981	PQL	mg/Kg	J	Z
LEAD	3.56		0.0102	MDL	0.196	PQL	mg/Kg	J	Q, A

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.48		0.0785	MDL	0.392	PQL	mg/Kg	J	Q
CHROMIUM	16.5		0.118	MDL	0.392	PQL	mg/Kg	J	Q, A
NICKEL	11.5		0.0981	MDL	0.392	PQL	mg/Kg	J	Q
VANADIUM	31.2		0.0216	MDL	0.0981	PQL	mg/Kg	J	A

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0474	J	0.0392	MDL	0.392	PQL	mg/Kg	J	Z

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	67.2		0.106	MDL	0.392	PQL	mg/Kg	J	A

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0646	J	0.0626	MDL	0.209	PQL	mg/Kg	J	Z, Q
LEAD	12.2		0.0108	MDL	0.209	PQL	mg/Kg	J	Q, A

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	13.4		0.0834	MDL	0.417	PQL	mg/Kg	J	Q
CHROMIUM	16.3		0.125	MDL	0.417	PQL	mg/Kg	J	Q, A
NICKEL	13.3		0.104	MDL	0.417	PQL	mg/Kg	J	Q
VANADIUM	33.8		0.0229	MDL	0.104	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0725	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	106		0.113	MDL	0.417	PQL	mg/Kg	J	A

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0818	J	0.0616	MDL	0.205	PQL	mg/Kg	J	Z, Q
LEAD	6.87		0.0107	MDL	0.205	PQL	mg/Kg	J	Q, A
SILVER	0.0272	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.81		0.0822	MDL	0.411	PQL	mg/Kg	J	Q
CHROMIUM	18.7		0.123	MDL	0.411	PQL	mg/Kg	J	Q, A
NICKEL	12.6		0.103	MDL	0.411	PQL	mg/Kg	J	Q
VANADIUM	38.3		0.0226	MDL	0.103	PQL	mg/Kg	J	A

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.256	J	0.0411	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.111	MDL	0.411	PQL	mg/Kg	J	A

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0902	J	0.0607	MDL	0.202	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	14.4		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, A
SILVER	0.0392	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.09		0.0809	MDL	0.404	PQL	mg/Kg	J	Q
CHROMIUM	16.1		0.121	MDL	0.404	PQL	mg/Kg	J	Q, A
NICKEL	12.8		0.101	MDL	0.404	PQL	mg/Kg	J	Q
VANADIUM	29.3		0.0222	MDL	0.101	PQL	mg/Kg	J	A

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.228	J	0.0404	MDL	0.404	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.3		0.109	MDL	0.404	PQL	mg/Kg	J	A

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.111	J	0.0618	MDL	0.206	PQL	mg/Kg	J	Z, Q
LEAD	11.9		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, A
SILVER	0.0761	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.11		0.0824	MDL	0.412	PQL	mg/Kg	J	Q
CHROMIUM	21.8		0.124	MDL	0.412	PQL	mg/Kg	J	Q, A
NICKEL	26.3		0.103	MDL	0.412	PQL	mg/Kg	J	Q
VANADIUM	43.8		0.0227	MDL	0.103	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.180	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	162		0.111	MDL	0.412	PQL	mg/Kg	J	A

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0802	J	0.0619	MDL	0.206	PQL	mg/Kg	J	Z, Q
LEAD	6.55		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, A
SILVER	0.0421	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.89		0.0825	MDL	0.413	PQL	mg/Kg	J	Q
CHROMIUM	16.6		0.124	MDL	0.413	PQL	mg/Kg	J	Q, A
NICKEL	11.7		0.103	MDL	0.413	PQL	mg/Kg	J	Q
VANADIUM	33.9		0.0227	MDL	0.103	PQL	mg/Kg	J	A

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0413	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.111	MDL	0.413	PQL	mg/Kg	J	A

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0871	J	0.0601	MDL	0.200	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	7.30		0.0104	MDL	0.200	PQL	mg/Kg	J	Q, A

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.23		0.0801	MDL	0.401	PQL	mg/Kg	J	Q
CHROMIUM	15.0		0.120	MDL	0.401	PQL	mg/Kg	J	Q, A
NICKEL	11.2		0.100	MDL	0.401	PQL	mg/Kg	J	Q
VANADIUM	27.5		0.0220	MDL	0.100	PQL	mg/Kg	J	A

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.178	J	0.0401	MDL	0.401	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	80.0		0.108	MDL	0.401	PQL	mg/Kg	J	A

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.102	J	0.0623	MDL	0.208	PQL	mg/Kg	J	Z, Q
LEAD	5.56		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, A
SILVER	0.0498	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.07		0.0830	MDL	0.415	PQL	mg/Kg	J	Q
CHROMIUM	14.4		0.125	MDL	0.415	PQL	mg/Kg	J	Q, A
NICKEL	9.48		0.104	MDL	0.415	PQL	mg/Kg	J	Q
VANADIUM	25.6		0.0228	MDL	0.104	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	72.6		0.112	MDL	0.415	PQL	mg/Kg	J	A

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0627	U	0.0627	MDL	0.209	PQL	mg/Kg	UJ	Q
LEAD	4.48		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, A
SILVER	0.0495	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.30		0.0836	MDL	0.418	PQL	mg/Kg	J	Q
CHROMIUM	13.0		0.125	MDL	0.418	PQL	mg/Kg	J	Q, A
NICKEL	9.17		0.104	MDL	0.418	PQL	mg/Kg	J	Q
VANADIUM	27.9		0.0230	MDL	0.104	PQL	mg/Kg	J	A

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0911	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	74.2		0.113	MDL	0.418	PQL	mg/Kg	J	A

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0858	J	0.0621	MDL	0.207	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	8.04		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, A
SILVER	0.0466	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.45		0.0828	MDL	0.414	PQL	mg/Kg	J	Q
CHROMIUM	14.3		0.124	MDL	0.414	PQL	mg/Kg	J	Q, A
NICKEL	10.1		0.104	MDL	0.414	PQL	mg/Kg	J	Q
VANADIUM	31.2		0.0228	MDL	0.104	PQL	mg/Kg	J	A

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.112	MDL	0.414	PQL	mg/Kg	J	A

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0624	MDL	0.208	PQL	mg/Kg	J	Z, Q
LEAD	9.67		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, A
SILVER	0.0367	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.52		0.0833	MDL	0.416	PQL	mg/Kg	J	Q
CHROMIUM	38.1		0.125	MDL	0.416	PQL	mg/Kg	J	Q, A
NICKEL	27.7		0.104	MDL	0.416	PQL	mg/Kg	J	Q
VANADIUM	41.5		0.0229	MDL	0.104	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.112	MDL	0.416	PQL	mg/Kg	J	A

Sample ID: SL-183-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0609	U	0.0609	MDL	0.203	PQL	mg/Kg	UJ	Q
LEAD	4.85		0.0106	MDL	0.203	PQL	mg/Kg	J	Q, A

Sample ID: SL-183-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.67		0.0812	MDL	0.406	PQL	mg/Kg	J	Q
CHROMIUM	13.0		0.122	MDL	0.406	PQL	mg/Kg	J	Q, A
NICKEL	8.89		0.102	MDL	0.406	PQL	mg/Kg	J	Q
VANADIUM	24.3		0.0223	MDL	0.102	PQL	mg/Kg	J	A

Sample ID: SL-183-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0406	MDL	0.406	PQL	mg/Kg	J	Z

Sample ID: SL-183-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	71.2		0.110	MDL	0.406	PQL	mg/Kg	J	A

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.133	J	0.0624	MDL	0.208	PQL	mg/Kg	J	Z, Q
LEAD	9.63		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0547	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.27		0.0833	MDL	0.416	PQL	mg/Kg	J	Q
CHROMIUM	19.1		0.125	MDL	0.416	PQL	mg/Kg	J	Q, A
NICKEL	13.9		0.104	MDL	0.416	PQL	mg/Kg	J	Q
VANADIUM	44.1		0.0229	MDL	0.104	PQL	mg/Kg	J	A

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.252	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	122		0.112	MDL	0.416	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.85	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.83	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7470A **Matrix: AQ**

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000046	U	0.000046	MDL	0.00020	PQL	mg/L	UJ	L

Sample ID: EB11-SA8N-SB-052611 *Collected:* 5/26/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000046	U	0.000046	MDL	0.00020	PQL	mg/L	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-008-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0059	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0128	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0070	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0068	J	0.0028	MDL	0.0972	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0150	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0172	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0207	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0143	J	0.0029	MDL	0.0999	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0151	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0050	J	0.0028	MDL	0.0968	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0083	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0344	J	0.0029	MDL	0.0997	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** AQ

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	1.68		0.495	MDL	0.990	PQL	ng/L	U	B

Method Category: SVOA

Method: 8015M **Matrix:** AQ

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.22	U	0.22	MDL	1.3	PQL	mg/L	UJ	H
EFH (C15-C20)	0.22	U	0.22	MDL	1.3	PQL	mg/L	UJ	H
EFH (C21-C30)	0.22	U	0.22	MDL	1.3	PQL	mg/L	UJ	H
EFH (C30-C40)	0.22	U	0.22	MDL	1.3	PQL	mg/L	UJ	H

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8015M **Matrix:** AQ

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.40	J	0.22	MDL	1.3	PQL	mg/L	UJ	B, H

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.0	U	6.0	MDL	12	PQL	mg/Kg	UJ	Q

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.0	J	4.3	MDL	13	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.5		0.42	MDL	1.3	PQL	mg/Kg	J	L
EFH (C30-C40)	36		0.42	MDL	1.3	PQL	mg/Kg	J	L

Method Category: SVOA **Method:** 8081A **Matrix:** AQ

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.0088	J	0.0026	MDL	0.010	PQL	ug/L	J	Z, L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDE	0.56	U	0.56	MDL	0.56	PQL	ug/Kg	UJ	S
4,4'-DDT	0.82	U	0.82	MDL	0.82	PQL	ug/Kg	UJ	S
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.12	J	0.066	MDL	0.18	PQL	ug/Kg	J	Z, Q, Q, S
Chlordane	2.5	J	0.88	MDL	3.7	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.10	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z, S
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.16	U	0.16	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.089	U	0.089	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	S

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.5		0.071	MDL	0.37	PQL	ug/Kg	J	L
Chlordane	2.1	J	0.86	MDL	3.7	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.053	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.27		0.064	MDL	0.18	PQL	ug/Kg	J	S
Chlordane	1.2	J	0.85	MDL	3.6	PQL	ug/Kg	J	Z, S
gamma-BHC (Lindane)	0.041	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-172-SA5DN-SS-0.0-0.5 ***Collected:*** 5/26/2011 9:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDE	0.18	U	0.18	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDT	0.50	U	0.50	MDL	0.50	PQL	ug/Kg	UJ	S
ALDRIN	0.071	U	0.071	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	5.1		0.86	MDL	3.7	PQL	ug/Kg	J	S, S
DELTA-BHC	0.039	U	0.039	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.30	U	0.30	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.12	U	0.12	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.27	U	0.27	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.1	PQL	ug/Kg	UJ	S

Sample ID: SL-173-SA5DN-SS-0.0-0.5 ***Collected:*** 5/26/2011 10:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.9		0.069	MDL	0.36	PQL	ug/Kg	J	L, S
Chlordane	2.3	J	0.84	MDL	3.6	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.067	J	0.038	MDL	0.17	PQL	ug/Kg	J	Z, S

Sample ID: SL-176-SA5DN-SS-0.0-0.5 ***Collected:*** 5/26/2011 11:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.7		0.069	MDL	0.35	PQL	ug/Kg	J	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.88		0.069	MDL	0.36	PQL	ug/Kg	J	L

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALDRIN	0.11	J	0.069	MDL	0.17	PQL	ug/Kg	J	Z, S

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.4		0.070	MDL	0.36	PQL	ug/Kg	J	L, S

Sample ID: SL-183-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	2.2		0.068	MDL	0.35	PQL	ug/Kg	J	S

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.23	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z
4,4'-DDT	0.41		0.070	MDL	0.36	PQL	ug/Kg	J	L
Chlordane	1.6	J	0.85	MDL	3.6	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.11	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.051	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z
MIREX	0.25	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-165-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.45	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.40	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	2.8	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	S
AROCLOR 1221	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	S
AROCLOR 1232	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	S
AROCLOR 1242	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	S
AROCLOR 1248	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	S
AROCLOR 1254	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	S
AROCLOR 1260	2.0		0.41	MDL	1.8	PQL	ug/Kg	J	S
Aroclor 1262	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	S
Aroclor 1268	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	S
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	S
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	S
Aroclor 5460	2.0	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, S

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.9	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.86	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.52	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.5	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.74	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.83	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	2.7	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.2	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	230	J	83	MDL	270	PQL	ug/Kg	J	Z, Q, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	160	J	78	MDL	260	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	220	J	82	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	210	J	79	MDL	260	PQL	ug/Kg	J	Z

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.2	J	0.65	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	160	J	79	MDL	260	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Sample ID: EB11-SA8N-SB-052611 *Collected:* 5/26/2011 1:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-170-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-171-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	35	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	31	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	39	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	18	MDL	350	PQL	ug/Kg	J	Z
CHRYSENE	40	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	43	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	44	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	31	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	34	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	18	MDL	350	PQL	ug/Kg	J	Z
CHRYSENE	35	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	69	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-173-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	45	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	55	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-174-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 10:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-175-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-176-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-179-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	62	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	160	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	100	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	100	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	17	MDL	350	PQL	ug/Kg	J	Z
CARBAZOLE	27	J	17	MDL	170	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	32	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	94	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	26	J	17	MDL	170	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	31	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-180-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	17	MDL	350	PQL	ug/Kg	J	Z
DIBENZOFURAN	150	J	17	MDL	170	PQL	ug/Kg	J	Z
NAPHTHALENE	37	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-181-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-182-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-183-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	350	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.032	J	0.0098	MDL	0.049	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.032	J	0.0098	MDL	0.049	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.059	J	0.049	MDL	0.98	PQL	ug/L	U	B
Di-n-butylphthalate	0.065	J	0.049	MDL	0.98	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB11-SA8N-SB-052611 *Collected:* 5/26/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.033	J	0.0097	MDL	0.048	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.034	J	0.0097	MDL	0.048	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.058	J	0.048	MDL	0.97	PQL	ug/L	U	B
Di-n-butylphthalate	0.065	J	0.048	MDL	0.97	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	7.1	MDL	21	PQL	ug/Kg	J	Z, FD

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.2	U	7.2	MDL	22	PQL	ug/Kg	UJ	FD

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.8	J	7.1	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	0.47	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-008-SA8N-SB-9.0-10.0 *Collected:* 5/26/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-164-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.77	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-164-SA5DN-SS-0.0-0.5** *Collected:* **5/26/2011 3:55:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.83	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	6.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-165-SA5DN-SS-0.0-0.5** *Collected:* **5/26/2011 3:30:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.5	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	64	J	32	MDL	97	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	5.8	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: **SL-172-SA5DN-SS-0.0-0.5** *Collected:* **5/26/2011 9:25:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	3.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	4.9	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
CHRYSENE	4.7	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
FLUORANTHENE	4.9	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
PYRENE	7.1	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: **SL-173-SA5DN-SS-0.0-0.5** *Collected:* **5/26/2011 10:20:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.9	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.4	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	4.3	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	7.9	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

Sample ID: **SL-174-SA5DN-SS-0.0-0.5** *Collected:* **5/26/2011 10:53:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.8	J	1.7	MDL	8.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

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

Sample ID: **SL-175-SA5DN-SS-0.0-0.5** ***Collected:*** **5/26/2011 11:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.79	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.83	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.88	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.79	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-176-SA5DN-SS-0.0-0.5** ***Collected:*** **5/26/2011 11:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.97	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.87	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-182-SA5DN-SS-0.0-0.5** ***Collected:*** **5/26/2011 2:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.80	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	6.9	J	6.4	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	0.80	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.89	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.96	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-183-SA5DN-SS-0.0-0.5** ***Collected:*** **5/26/2011 2:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.87	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.81	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.82	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.92	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE166 Laboratory: LL

EDD Filename: PrepDE166_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-184-SA5DN-SS-0.0-0.5 *Collected:* 5/26/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	4.4	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
CHRYSENE	3.3	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
FLUORANTHENE	3.8	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
PYRENE	4.4	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8330A **Matrix:** AQ

Sample ID: EB09-SA5DN-SS-052611 *Collected:* 5/26/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
RDX	0.58	J	0.20	MDL	0.60	PQL	ug/L	J	Z

Method Category: VOA
Method: 8260B **Matrix:** AQ

Sample ID: EB11-SA8N-SB-052611 *Collected:* 5/26/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	1	J	0.5	MDL	5	PQL	ug/L	J	Z
TOLUENE	0.7	J	0.7	MDL	5	PQL	ug/L	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: DUP09-SA8N-QC-052611 *Collected:* 5/26/2011 2:45:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.8		7.6	MDL	9.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.09	U	0.09	MDL	4.5	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory:** LL

EDD Filename: PrepDE166_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-002-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.7	J	8.3	MDL	9.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.9	J	0.30	MDL	5.0	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.1	MDL	5.0	PQL	ug/Kg	J	Z, FD

Sample ID: SL-008-SA8N-SB-4.0-5.0 *Collected:* 5/26/2011 9:15:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.9		7.7	MDL	9.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.27	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE166

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE166 **Laboratory: LL**
EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M **Preparation Method: 3510C**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB09-SA5DN-SS-052611 (REA3)	Sampling To Analysis	9.00	7.00	DAYS	J (all detects) UJ (all non-detects)

Method: 9040B **Preparation Method: 3510C**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB09-SA5DN-SS-052611 (RES)	Sampling To Analysis	150.00	48.00	HOURS	No Qualifiers Applied
EB11-SA8N-SB-052611 (RES)		150.00	48.00	HOURS	

Method Blank Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI15B261718	6/21/2011 5:18:00 PM	N-NITROSODIMETHYLAMINE	12.1 ng/L	EB09-SA5DN-SS-052611

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB09-SA5DN-SS-052611(RES)	N-NITROSODIMETHYLAMINE	1.68 ng/L	1.68U ng/L

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14748CB222255	5/31/2011 10:55:00 PM	MAGNESIUM	0.0211 mg/L	EB09-SA5DN-SS-052611 EB11-SA8N-SB-052611

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15208EB220140	6/3/2011 1:40:00 AM	ALUMINUM CALCIUM PHOSPHORUS STRONTIUM TIN	7.72 mg/Kg 21.3 mg/Kg 1.14 mg/Kg 0.118 mg/Kg 1.21 mg/Kg	DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP09-SA8N-QC-052611(REA)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-002-SA8N-SB-4.0-5.0(REA)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-002-SA8N-SB-9.0-10.0(REA)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-008-SA8N-SB-4.0-5.0(REA)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-008-SA8N-SB-9.0-10.0(REA)	TIN	2.65 mg/Kg	2.65U mg/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-164-SA5DN-SS-0.0-0.5(REA)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-165-SA5DN-SS-0.0-0.5(REA)	TIN	2.37 mg/Kg	2.37U mg/Kg
SL-170-SA5DN-SS-0.0-0.5(REA)	TIN	2.23 mg/Kg	2.23U mg/Kg
SL-171-SA5DN-SS-0.0-0.5(REA)	TIN	2.24 mg/Kg	2.24U mg/Kg
SL-172-SA5DN-SS-0.0-0.5(REA)	TIN	2.17 mg/Kg	2.17U mg/Kg
SL-173-SA5DN-SS-0.0-0.5(REA)	TIN	2.37 mg/Kg	2.37U mg/Kg
SL-174-SA5DN-SS-0.0-0.5(REA)	TIN	2.34 mg/Kg	2.34U mg/Kg
SL-175-SA5DN-SS-0.0-0.5(REA)	TIN	2.16 mg/Kg	2.16U mg/Kg
SL-176-SA5DN-SS-0.0-0.5(REA)	TIN	4.84 mg/Kg	4.84U mg/Kg
SL-179-SA5DN-SS-0.0-0.5(REA)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-180-SA5DN-SS-0.0-0.5(REA)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-181-SA5DN-SS-0.0-0.5(REA)	TIN	2.27 mg/Kg	2.27U mg/Kg
SL-182-SA5DN-SS-0.0-0.5(REA)	TIN	2.15 mg/Kg	2.15U mg/Kg
SL-183-SA5DN-SS-0.0-0.5(REA)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-184-SA5DN-SS-0.0-0.5(REA)	TIN	2.19 mg/Kg	2.19U mg/Kg

Method: **6020**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P14750CB220953A	6/1/2011 9:53:00 AM	LEAD	0.000055 mg/L	EB09-SA5DN-SS-052611 EB11-SA8N-SB-052611

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB09-SA5DN-SS-052611(RES)	LEAD	0.000071 mg/L	0.000071U mg/L
EB11-SA8N-SB-052611(RES)	LEAD	0.000062 mg/L	0.000062U mg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15826FB222052A	6/10/2011 8:52:00 PM	COPPER	0.160 mg/Kg	DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5
P15826FB222348A	6/9/2011 11:48:00 PM	LEAD	0.0416 mg/Kg	DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5

Method: **8015M**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P52524AB321224A	6/4/2011 12:24:00 PM	EFH (C8-C11)	0.17 mg/L	EB09-SA5DN-SS-052611

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB09-SA5DN-SS-052611(REA3)	EFH (C8-C11)	0.40 mg/L	1.3U mg/L

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P48483AB321813A	6/4/2011 6:13:00 PM	EFH (C30-C40)	1.4 mg/Kg	SL-171-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB72B211210A	6/1/2011 12:10:00 PM	ACETONE METHYLENE CHLORIDE	8.6 ug/Kg 1.4 ug/Kg	DUP09-SA8N-QC-052611 SL-008-SA8N-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP09-SA8N-QC-052611(RES)	ACETONE	9.8 ug/Kg	9.8U ug/Kg
DUP09-SA8N-QC-052611(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.5U ug/Kg
SL-002-SA8N-SB-4.0-5.0(RES)	ACETONE	9.7 ug/Kg	9.9U ug/Kg
SL-002-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.9 ug/Kg	5.0U ug/Kg
SL-008-SA8N-SB-4.0-5.0(RES)	ACETONE	9.9 ug/Kg	9.9U ug/Kg
SL-008-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.6U ug/Kg

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWH15B261040	6/4/2011 10:40:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-octylphthalate	0.13 ug/L 0.053 ug/L	EB09-SA5DN-SS-052611 EB11-SA8N-SB-052611

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB09-SA5DN-SS-052611(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.059 ug/L	0.98U ug/L
EB11-SA8N-SB-052611(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.058 ug/L	0.97U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-002-SA8N-SB-4.0-5.0MS SL-002-SA8N-SB-4.0-5.0MSD (SL-002-SA8N-SB-4.0-5.0)*	DIETHYLENE GLYCOL	51	54	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-164-SA5DN-SS-0.0-0.5MS SL-164-SA5DN-SS-0.0-0.5MSD (SL-164-SA5DN-SS-0.0-0.5)	4,4'-DDE	171	-	18.00-161.00	-	4,4'-DDE	J(all detects)
	4,4'-DDT	230	227	10.00-176.00	-	4,4'-DDT	
	BETA-BHC	203	-	14.00-147.00	84 (50.00)	BETA-BHC	
	DIELDRIN	-	-	19.00-154.00	51 (50.00)	DIELDRIN	
	ENDRIN ALDEHYDE	-	-	10.00-148.00	46 (35.00)	ENDRIN ALDEHYDE	
	METHOXYCHLOR	149	-	32.00-147.00	-	METHOXYCHLOR	

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-164-SA5DN-SS-0.0-0.5MSD (SL-164-SA5DN-SS-0.0-0.5)	2,4-D	-	-	17.00-180.00	78 (35.00)	2,4-D	J(all detects)
	DALAPON	-	-	10.00-125.00	62 (50.00)	DALAPON	
SL-164-SA5DN-SS-0.0-0.5MS SL-164-SA5DN-SS-0.0-0.5MSD (SL-164-SA5DN-SS-0.0-0.5)	MCPA	0	-	10.00-213.00	200 (50.00)	MCPA	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-002-SA8N-SB-4.0-5.0MS SL-002-SA8N-SB-4.0-5.0MSD (DUP09-SA8N-QC-052611 SL -002-SA8N-SB-4.0-5.0 SL -002-SA8N-SB-9.0-10.0 SL -008-SA8N-SB-4.0-5.0 SL -008-SA8N-SB-9.0-10.0 SL -164-SA5DN-SS-0.0-0.5 SL -165-SA5DN-SS-0.0-0.5 SL -170-SA5DN-SS-0.0-0.5 SL -171-SA5DN-SS-0.0-0.5 SL -172-SA5DN-SS-0.0-0.5 SL -173-SA5DN-SS-0.0-0.5 SL -174-SA5DN-SS-0.0-0.5 SL -175-SA5DN-SS-0.0-0.5 SL -176-SA5DN-SS-0.0-0.5 SL -179-SA5DN-SS-0.0-0.5 SL -180-SA5DN-SS-0.0-0.5 SL -181-SA5DN-SS-0.0-0.5 SL -182-SA5DN-SS-0.0-0.5 SL -183-SA5DN-SS-0.0-0.5 SL -184-SA5DN-SS-0.0-0.5)	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM	4020 293 1258 579 135	3884 248 970 495 128	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM	J(all detects) Al, Ca, Fe, Mg No Qual, >4x
SL-002-SA8N-SB-4.0-5.0MS SL-002-SA8N-SB-4.0-5.0MSD (DUP09-SA8N-QC-052611 SL -002-SA8N-SB-4.0-5.0 SL -002-SA8N-SB-9.0-10.0 SL -008-SA8N-SB-4.0-5.0 SL -008-SA8N-SB-9.0-10.0 SL -164-SA5DN-SS-0.0-0.5 SL -165-SA5DN-SS-0.0-0.5 SL -170-SA5DN-SS-0.0-0.5 SL -171-SA5DN-SS-0.0-0.5 SL -172-SA5DN-SS-0.0-0.5 SL -173-SA5DN-SS-0.0-0.5 SL -174-SA5DN-SS-0.0-0.5 SL -175-SA5DN-SS-0.0-0.5 SL -176-SA5DN-SS-0.0-0.5 SL -179-SA5DN-SS-0.0-0.5 SL -180-SA5DN-SS-0.0-0.5 SL -181-SA5DN-SS-0.0-0.5 SL -182-SA5DN-SS-0.0-0.5 SL -183-SA5DN-SS-0.0-0.5 SL -184-SA5DN-SS-0.0-0.5)	MANGANESE	37	19	75.00-125.00	-	MANGANESE	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-002-SA8N-SB-4.0-5.0MSD (SL-002-SA8N-SB-4.0-5.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	65 (30.00)	2,4-DINITROPHENOL	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-002-SA8N-SB-4.0-5.0MS (DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5)	FLUORIDE	67	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: **6010B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-002-SA8N-SB-4.0-5.0MS SL-002-SA8N-SB-4.0-5.0MSD (DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5)	TITANIUM	254	263	75.00-125.00	-	TITANIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-002-SA8N-SB-4.0-5.0MS **SL-002-SA8N-SB-4.0-5.0MSD** (DUP09-SA8N-QC-052611 SL -002-SA8N-SB-4.0-5.0 SL -002-SA8N-SB-9.0-10.0 SL -008-SA8N-SB-4.0-5.0 SL -008-SA8N-SB-9.0-10.0 SL -164-SA5DN-SS-0.0-0.5 SL -165-SA5DN-SS-0.0-0.5 SL -170-SA5DN-SS-0.0-0.5 SL -171-SA5DN-SS-0.0-0.5 SL -172-SA5DN-SS-0.0-0.5 SL -173-SA5DN-SS-0.0-0.5 SL -174-SA5DN-SS-0.0-0.5 SL -175-SA5DN-SS-0.0-0.5 SL -176-SA5DN-SS-0.0-0.5 SL -179-SA5DN-SS-0.0-0.5 SL -180-SA5DN-SS-0.0-0.5 SL -181-SA5DN-SS-0.0-0.5 SL -182-SA5DN-SS-0.0-0.5 SL -183-SA5DN-SS-0.0-0.5 SL -184-SA5DN-SS-0.0-0.5)	ARSENIC CHROMIUM LEAD NICKEL VANADIUM ZINC	- - - 137 169 194	151 131 146 152 193 192	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ARSENIC CHROMIUM LEAD NICKEL VANADIUM ZINC	J(all detects) V, Zn No Qual, >4x
SL-002-SA8N-SB-4.0-5.0MS **SL-002-SA8N-SB-4.0-5.0MSD** (DUP09-SA8N-QC-052611 SL -002-SA8N-SB-4.0-5.0 SL -002-SA8N-SB-9.0-10.0 SL -008-SA8N-SB-4.0-5.0 SL -008-SA8N-SB-9.0-10.0 SL -164-SA5DN-SS-0.0-0.5 SL -165-SA5DN-SS-0.0-0.5 SL -170-SA5DN-SS-0.0-0.5 SL -171-SA5DN-SS-0.0-0.5 SL -172-SA5DN-SS-0.0-0.5 SL -173-SA5DN-SS-0.0-0.5 SL -174-SA5DN-SS-0.0-0.5 SL -175-SA5DN-SS-0.0-0.5 SL -176-SA5DN-SS-0.0-0.5 SL -179-SA5DN-SS-0.0-0.5 SL -180-SA5DN-SS-0.0-0.5 SL -181-SA5DN-SS-0.0-0.5 SL -182-SA5DN-SS-0.0-0.5 SL -183-SA5DN-SS-0.0-0.5 SL -184-SA5DN-SS-0.0-0.5)	ANTIMONY	33	31	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-002-SA8N-SB-4.0-5.0MS **SL-002-SA8N-SB-4.0-5.0MSD** (DUP09-SA8N-QC-052611 SL -002-SA8N-SB-4.0-5.0 SL -002-SA8N-SB-9.0-10.0 SL -008-SA8N-SB-4.0-5.0 SL -008-SA8N-SB-9.0-10.0 SL -164-SA5DN-SS-0.0-0.5 SL -165-SA5DN-SS-0.0-0.5 SL -170-SA5DN-SS-0.0-0.5 SL -171-SA5DN-SS-0.0-0.5 SL -172-SA5DN-SS-0.0-0.5 SL -173-SA5DN-SS-0.0-0.5 SL -174-SA5DN-SS-0.0-0.5 SL -175-SA5DN-SS-0.0-0.5 SL -176-SA5DN-SS-0.0-0.5 SL -179-SA5DN-SS-0.0-0.5 SL -180-SA5DN-SS-0.0-0.5 SL -181-SA5DN-SS-0.0-0.5 SL -182-SA5DN-SS-0.0-0.5 SL -183-SA5DN-SS-0.0-0.5 SL -184-SA5DN-SS-0.0-0.5)	BARIUM	207	213	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-173-SA5DN-SS-0.0-0.5DUP (SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5)	Nitrate-NO3	24	20.00	No Qual, OK by difference
SL-002-SA8N-SB-4.0-5.0DUP (DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5)	FLUORIDE	26	20.00	No Qual, OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-002-SA8N-SB-4.0-5.0DUP (DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5)	CADMIUM SILVER	22 22	20.00 20.00	No Qual, OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-002-SA8N-SB-4.0-5.0DUP (DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5)	HEXAVALENT CHROMIUM	36	20.00	No Qual, OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11473AQ240711A P11473AY240724A (EB09-SA5DN-SS-052611)	4,4'-DDT ENDOSULFAN I HEPTACHLOR	133 130 130	129 - -	53.00-126.00 68.00-128.00 57.00-126.00	- - -	4,4'-DDT ENDOSULFAN I HEPTACHLOR	J (all detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11518AQ241052A P11518AY241134A (EB09-SA5DN-SS-052611)	2,4,6-TRINITROTOLUENE PETN	110 121	110 121	76.00-109.00 80.00-120.00	- -	2,4,6-TRINITROTOLUENE PETN	J(all detects)

Method: 8151A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11516AQ241612A (EB09-SA5DN-SS-052611)	MCPP	140	-	67.00-137.00	-	MCPP	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1WFLCSY260101 (EB09-SA5DN-SS-052611 EB11-SA8N-SB-052611)	BENZOIC ACID	-	-	10.00-69.00	83 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1WHLCSQ261112 P1WHLCSY261144 (EB09-SA5DN-SS-052611 EB11-SA8N-SB-052611)	ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(K)FLUORANTHENE DIBENZO(A,H)ANTHRACENE Di-n-octylphthalate INDENO(1,2,3-CD)PYRENE N-NITROSODIMETHYLAMINE	- 136 139 146 138 - 134 90	112 141 142 146 141 147 136 -	66.00-111.00 60.00-127.00 69.00-123.00 59.00-130.00 55.00-134.00 57.00-145.00 69.00-124.00 36.00-89.00	- - - - - - - -	ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(K)FLUORANTHENE DIBENZO(A,H)ANTHRACENE Di-n-octylphthalate INDENO(1,2,3-CD)PYRENE N-NITROSODIMETHYLAMINE	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7470A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15213DY222331 (EB09-SA5DN-SS-052611 EB11-SA8N-SB-052611)	MERCURY	-	89	90.00-115.00	-	MERCURY	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11545AQ240431A (SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5)	4,4'-DDT METHOXYCHLOR	131 139	- -	54.00-130.00 59.00-125.00	- -	4,4'-DDT METHOXYCHLOR	J(all detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11587AQ320825A (SL-179-SA5DN-SS-0.0-0.5)	EFH (C15-C20) EFH (C30-C40)	115 114	- -	66.00-113.00 66.00-113.00	- -	EFH (C15-C20) EFH (C30-C40)	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15208EQ220144 (DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5)	ALUMINUM	78	-	80.00-120.00	-	ALUMINUM	No Qual, SRM within QC limits

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15826FQ222351A (DUP09-SA8N-QC-052611 SL-002-SA8N-SB-4.0-5.0 SL-002-SA8N-SB-9.0-10.0 SL-008-SA8N-SB-4.0-5.0 SL-008-SA8N-SB-9.0-10.0 SL-164-SA5DN-SS-0.0-0.5 SL-165-SA5DN-SS-0.0-0.5 SL-170-SA5DN-SS-0.0-0.5 SL-171-SA5DN-SS-0.0-0.5 SL-172-SA5DN-SS-0.0-0.5 SL-173-SA5DN-SS-0.0-0.5 SL-174-SA5DN-SS-0.0-0.5 SL-175-SA5DN-SS-0.0-0.5 SL-176-SA5DN-SS-0.0-0.5 SL-179-SA5DN-SS-0.0-0.5 SL-180-SA5DN-SS-0.0-0.5 SL-181-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-183-SA5DN-SS-0.0-0.5 SL-184-SA5DN-SS-0.0-0.5)	ANTIMONY	67	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-164-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	49	50.00-130.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-171-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	184	20.00-120.00	All Target Analytes	J(all detects)
SL-172-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	125	20.00-120.00	All Target Analytes	J(all detects)
SL-172-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	45	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-173-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	132	20.00-120.00	All Target Analytes	J(all detects)
SL-180-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	130	20.00-120.00	All Target Analytes	J(all detects)
SL-181-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	130	20.00-120.00	All Target Analytes	J(all detects)
SL-183-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	1024	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-173-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	39	45.00-120.00	All Target Analytes	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-002-SA8N-SB-4.0-5.0	DUP09-SA8N-QC-052611			
MOISTURE	16.3	15.3	6		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-002-SA8N-SB-4.0-5.0	DUP09-SA8N-QC-052611			
FLUORIDE	4.6	4.3	7	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-002-SA8N-SB-4.0-5.0	DUP09-SA8N-QC-052611			
ALUMINUM	28300	28700	1	50.00	No Qualifiers Applied
BORON	11.3	10.8	5	50.00	
CALCIUM	14300	10100	34	50.00	
IRON	35600	36000	1	50.00	
LITHIUM	26.0	27.3	5	50.00	
MAGNESIUM	7900	8080	2	50.00	
MANGANESE	430	303	35	50.00	
PHOSPHORUS	299	294	2	50.00	
POTASSIUM	3770	3730	1	50.00	
SODIUM	119	124	4	50.00	
STRONTIUM	51.1	50.0	2	50.00	
TIN	2.72	2.64	3	50.00	
TITANIUM	1460	1380	6	50.00	
Zirconium	4.41	3.92	12	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-002-SA8N-SB-4.0-5.0	DUP09-SA8N-QC-052611			
ANTIMONY	0.140	0.129	8	50.00	No Qualifiers Applied
ARSENIC	6.98	6.89	1	50.00	
BARIUM	113	129	13	50.00	
BERYLLIUM	0.842	0.889	5	50.00	
CADMIUM	0.229	0.284	21	50.00	
CHROMIUM	31.8	33.6	6	50.00	
COBALT	10.6	13.6	25	50.00	
COPPER	16.9	18.5	9	50.00	
LEAD	10.2	11.7	14	50.00	
MOLYBDENUM	0.327	0.396	19	50.00	
NICKEL	23.0	28.5	21	50.00	
SELENIUM	0.147	0.140	5	50.00	
SILVER	0.0264	0.0304	14	50.00	
THALLIUM	0.334	0.378	12	50.00	
VANADIUM	63.9	68.6	7	50.00	
ZINC	70.3	78.9	12	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: PrepDE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-002-SA8N-SB-4.0-5.0	DUP09-SA8N-QC-052611			
HEXAVALENT CHROMIUM	0.49	0.38	25	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-002-SA8N-SB-4.0-5.0	DUP09-SA8N-QC-052611			
ACETONE	9.7	9.8	1	50.00	No Qualifiers Applied
METHYLENE CHLORIDE	1.9	1.6	17	50.00	
TOLUENE	0.11	4.5 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-002-SA8N-SB-4.0-5.0	DUP09-SA8N-QC-052611			
BIS(2-ETHYLHEXYL)PHTHALATE	22 U	12	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-002-SA8N-SB-4.0-5.0	DUP09-SA8N-QC-052611			
PH	8.19	8.15	0	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB09-SA5DN-SS-052611	LEAD	J	0.000071	0.0010	PQL	mg/L	J (all detects)
EB11-SA8N-SB-052611	LEAD	J	0.000062	0.0010	PQL	mg/L	J (all detects)

Method: 8015M

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB09-SA5DN-SS-052611	EFH (C8-C11)	J	0.40	1.3	PQL	mg/L	J (all detects)

Method: 8081A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB09-SA5DN-SS-052611	HEPTACHLOR	J	0.0088	0.010	PQL	ug/L	J (all detects)

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB11-SA8N-SB-052611	BENZENE	J	1	5	PQL	ug/L	J (all detects)
	TOLUENE	J	0.7	5	PQL	ug/L	

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB09-SA5DN-SS-052611	1-METHYLNAPHTHALENE	J	0.032	0.049	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.032	0.049	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.059	0.98	PQL	ug/L	
	Di-n-butylphthalate	J	0.065	0.98	PQL	ug/L	
EB11-SA8N-SB-052611	1-METHYLNAPHTHALENE	J	0.033	0.048	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.034	0.048	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.058	0.97	PQL	ug/L	
	Di-n-butylphthalate	J	0.065	0.97	PQL	ug/L	

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB09-SA5DN-SS-052611	RDX	J	0.58	0.60	PQL	ug/L	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-171-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	1.3	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA8N-QC-052611	TIN	J	2.64	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.92	5.79	PQL	mg/Kg	
SL-002-SA8N-SB-4.0-5.0	TIN	J	2.72	11.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.41	5.97	PQL	mg/Kg	
SL-002-SA8N-SB-9.0-10.0	TIN	J	2.44	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.57	5.84	PQL	mg/Kg	
SL-008-SA8N-SB-4.0-5.0	TIN	J	2.53	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.48	5.72	PQL	mg/Kg	
SL-008-SA8N-SB-9.0-10.0	BORON	J	5.46	5.65	PQL	mg/Kg	J (all detects)
	TIN	J	2.65	11.3	PQL	mg/Kg	
	Zirconium	J	2.78	5.65	PQL	mg/Kg	
SL-164-SA5DN-SS-0.0-0.5	SODIUM	J	67.9	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	10.8	PQL	mg/Kg	
	Zirconium	J	3.03	5.39	PQL	mg/Kg	
SL-165-SA5DN-SS-0.0-0.5	SODIUM	J	75.2	105	PQL	mg/Kg	J (all detects)
	TIN	J	2.37	10.5	PQL	mg/Kg	
	Zirconium	J	2.07	5.27	PQL	mg/Kg	
SL-170-SA5DN-SS-0.0-0.5	BORON	J	3.06	5.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	56.5	100	PQL	mg/Kg	
	TIN	J	2.23	10.0	PQL	mg/Kg	
	Zirconium	J	0.906	5.00	PQL	mg/Kg	
SL-171-SA5DN-SS-0.0-0.5	BORON	J	3.71	5.21	PQL	mg/Kg	J (all detects)
	SODIUM	J	82.3	104	PQL	mg/Kg	
	TIN	J	2.24	10.4	PQL	mg/Kg	
SL-172-SA5DN-SS-0.0-0.5	BORON	J	4.94	5.24	PQL	mg/Kg	J (all detects)
	SODIUM	J	91.7	105	PQL	mg/Kg	
	TIN	J	2.17	10.5	PQL	mg/Kg	
	Zirconium	J	3.31	5.24	PQL	mg/Kg	
SL-173-SA5DN-SS-0.0-0.5	BORON	J	2.90	5.10	PQL	mg/Kg	J (all detects)
	SODIUM	J	63.1	102	PQL	mg/Kg	
	TIN	J	2.37	10.2	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-174-SA5DN-SS-0.0-0.5	BORON	J	2.86	5.10	PQL	mg/Kg	J (all detects)
	TIN	J	2.34	10.2	PQL	mg/Kg	
	Zirconium	J	1.27	5.10	PQL	mg/Kg	
SL-175-SA5DN-SS-0.0-0.5	BORON	J	3.38	5.21	PQL	mg/Kg	J (all detects)
	SODIUM	J	66.4	104	PQL	mg/Kg	
	TIN	J	2.16	10.4	PQL	mg/Kg	
	Zirconium	J	1.33	5.21	PQL	mg/Kg	
SL-176-SA5DN-SS-0.0-0.5	BORON	J	2.60	5.01	PQL	mg/Kg	J (all detects)
	SODIUM	J	61.7	100	PQL	mg/Kg	
	TIN	J	4.84	10.0	PQL	mg/Kg	
	Zirconium	J	1.06	5.01	PQL	mg/Kg	
SL-179-SA5DN-SS-0.0-0.5	BORON	J	3.23	5.24	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.2	105	PQL	mg/Kg	
	TIN	J	2.39	10.5	PQL	mg/Kg	
	Zirconium	J	1.76	5.24	PQL	mg/Kg	
SL-180-SA5DN-SS-0.0-0.5	BORON	J	3.69	5.12	PQL	mg/Kg	J (all detects)
	SODIUM	J	84.5	102	PQL	mg/Kg	
	TIN	J	2.40	10.2	PQL	mg/Kg	
	Zirconium	J	1.67	5.12	PQL	mg/Kg	
SL-181-SA5DN-SS-0.0-0.5	BORON	J	4.59	5.13	PQL	mg/Kg	J (all detects)
	SODIUM	J	82.8	103	PQL	mg/Kg	
	TIN	J	2.27	10.3	PQL	mg/Kg	
	Zirconium	J	1.90	5.13	PQL	mg/Kg	
SL-182-SA5DN-SS-0.0-0.5	BORON	J	3.95	5.15	PQL	mg/Kg	J (all detects)
	SODIUM	J	96.7	103	PQL	mg/Kg	
	TIN	J	2.15	10.3	PQL	mg/Kg	
	Zirconium	J	1.92	5.15	PQL	mg/Kg	
SL-183-SA5DN-SS-0.0-0.5	BORON	J	3.11	4.98	PQL	mg/Kg	J (all detects)
	TIN	J	2.44	9.96	PQL	mg/Kg	
SL-184-SA5DN-SS-0.0-0.5	BORON	J	3.51	5.10	PQL	mg/Kg	J (all detects)
	SODIUM	J	78.2	102	PQL	mg/Kg	
	TIN	J	2.19	10.2	PQL	mg/Kg	
	Zirconium	J	1.87	5.10	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA8N-QC-052611	ANTIMONY	J	0.129	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.140	0.450	PQL	mg/Kg	
	SILVER	J	0.0304	0.112	PQL	mg/Kg	
SL-002-SA8N-SB-4.0-5.0	ANTIMONY	J	0.140	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.147	0.455	PQL	mg/Kg	
	SILVER	J	0.0264	0.114	PQL	mg/Kg	
SL-002-SA8N-SB-9.0-10.0	ANTIMONY	J	0.139	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0898	0.467	PQL	mg/Kg	
	SILVER	J	0.0453	0.117	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA8N-SB-4.0-5.0	ANTIMONY	J	0.128	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.125	0.457	PQL	mg/Kg	
	SILVER	J	0.0372	0.114	PQL	mg/Kg	
SL-008-SA8N-SB-9.0-10.0	ANTIMONY	J	0.0814	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0529	0.447	PQL	mg/Kg	
	SILVER	J	0.0394	0.112	PQL	mg/Kg	
SL-164-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.179	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.221	0.427	PQL	mg/Kg	
	SILVER	J	0.0410	0.107	PQL	mg/Kg	
SL-165-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0721	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.128	0.418	PQL	mg/Kg	
	SILVER	J	0.0647	0.104	PQL	mg/Kg	
SL-170-SA5DN-SS-0.0-0.5	CADMIUM	J	0.0683	0.0981	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0474	0.392	PQL	mg/Kg	
SL-171-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0646	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0725	0.417	PQL	mg/Kg	
SL-172-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0818	0.205	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.256	0.411	PQL	mg/Kg	
	SILVER	J	0.0272	0.103	PQL	mg/Kg	
SL-173-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0902	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.228	0.404	PQL	mg/Kg	
	SILVER	J	0.0392	0.101	PQL	mg/Kg	
SL-174-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.111	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.180	0.412	PQL	mg/Kg	
	SILVER	J	0.0761	0.103	PQL	mg/Kg	
SL-175-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0802	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.129	0.413	PQL	mg/Kg	
	SILVER	J	0.0421	0.103	PQL	mg/Kg	
SL-176-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0871	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.178	0.401	PQL	mg/Kg	
SL-179-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.102	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.120	0.415	PQL	mg/Kg	
	SILVER	J	0.0498	0.104	PQL	mg/Kg	
SL-180-SA5DN-SS-0.0-0.5	SELENIUM	J	0.0911	0.418	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0495	0.104	PQL	mg/Kg	
SL-181-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0858	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.126	0.414	PQL	mg/Kg	
	SILVER	J	0.0466	0.104	PQL	mg/Kg	
SL-182-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.136	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.112	0.416	PQL	mg/Kg	
	SILVER	J	0.0367	0.104	PQL	mg/Kg	
SL-183-SA5DN-SS-0.0-0.5	SELENIUM	J	0.142	0.406	PQL	mg/Kg	J (all detects)
SL-184-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.133	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.252	0.416	PQL	mg/Kg	
	SILVER	J	0.0547	0.104	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA8N-QC-052611	HEXAVALENT CHROMIUM	J	0.38	1.2	PQL	mg/Kg	J (all detects)
SL-002-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.49	1.2	PQL	mg/Kg	J (all detects)
SL-008-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.55	1.2	PQL	mg/Kg	J (all detects)
SL-165-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.85	1.1	PQL	mg/Kg	J (all detects)
SL-171-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.1	PQL	mg/Kg	J (all detects)
SL-173-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.83	1.1	PQL	mg/Kg	J (all detects)
SL-174-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.34	1.0	PQL	mg/Kg	J (all detects)
SL-175-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-176-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.31	1.0	PQL	mg/Kg	J (all detects)
SL-179-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.0	PQL	mg/Kg	J (all detects)
SL-180-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.0	PQL	mg/Kg	J (all detects)
SL-181-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-182-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-184-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA8N-SB-9.0-10.0	MERCURY	J	0.0059	0.113	PQL	mg/Kg	J (all detects)
SL-164-SA5DN-SS-0.0-0.5	MERCURY	J	0.0128	0.107	PQL	mg/Kg	J (all detects)
SL-165-SA5DN-SS-0.0-0.5	MERCURY	J	0.0070	0.103	PQL	mg/Kg	J (all detects)
SL-170-SA5DN-SS-0.0-0.5	MERCURY	J	0.0068	0.0972	PQL	mg/Kg	J (all detects)
SL-171-SA5DN-SS-0.0-0.5	MERCURY	J	0.0150	0.105	PQL	mg/Kg	J (all detects)
SL-172-SA5DN-SS-0.0-0.5	MERCURY	J	0.0172	0.104	PQL	mg/Kg	J (all detects)
SL-173-SA5DN-SS-0.0-0.5	MERCURY	J	0.0207	0.101	PQL	mg/Kg	J (all detects)
SL-174-SA5DN-SS-0.0-0.5	MERCURY	J	0.0143	0.0999	PQL	mg/Kg	J (all detects)
SL-175-SA5DN-SS-0.0-0.5	MERCURY	J	0.0151	0.103	PQL	mg/Kg	J (all detects)
SL-176-SA5DN-SS-0.0-0.5	MERCURY	J	0.0050	0.0968	PQL	mg/Kg	J (all detects)
SL-179-SA5DN-SS-0.0-0.5	MERCURY	J	0.0083	0.104	PQL	mg/Kg	J (all detects)
SL-184-SA5DN-SS-0.0-0.5	MERCURY	J	0.0344	0.0997	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-175-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.0	13	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5DN-SS-0.0-0.5	BETA-BHC	J	0.12	0.18	PQL	ug/Kg	J (all detects)
	Chlordane	J	2.5	3.7	PQL	ug/Kg	
	ENDOSULFAN II	J	0.10	0.37	PQL	ug/Kg	
SL-165-SA5DN-SS-0.0-0.5	Chlordane	J	2.1	3.7	PQL	ug/Kg	J (all detects)
	HEPTACHLOR EPOXIDE	J	0.053	0.18	PQL	ug/Kg	
SL-171-SA5DN-SS-0.0-0.5	Chlordane	J	1.2	3.6	PQL	ug/Kg	J (all detects)
	gamma-BHC (Lindane)	J	0.041	0.18	PQL	ug/Kg	
SL-173-SA5DN-SS-0.0-0.5	Chlordane	J	2.3	3.6	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.067	0.17	PQL	ug/Kg	
SL-180-SA5DN-SS-0.0-0.5	ALDRIN	J	0.11	0.17	PQL	ug/Kg	J (all detects)
SL-184-SA5DN-SS-0.0-0.5	4,4'-DDE	J	0.23	0.36	PQL	ug/Kg	J (all detects)
	Chlordane	J	1.6	3.6	PQL	ug/Kg	
	ENDRIN KETONE	J	0.11	0.36	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.051	0.18	PQL	ug/Kg	
	MIREX	J	0.25	0.36	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.4	1.9	PQL	ug/Kg	J (all detects)
SL-165-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	0.45	1.8	PQL	ug/Kg	J (all detects)
SL-170-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.7	1.8	PQL	ug/Kg	J (all detects)
SL-172-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.8	3.6	PQL	ug/Kg	
SL-173-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.0	3.5	PQL	ug/Kg	J (all detects)
SL-174-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.1	1.8	PQL	ug/Kg	J (all detects)
SL-175-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.9	3.5	PQL	ug/Kg	
SL-179-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.2	1.8	PQL	ug/Kg	J (all detects)
SL-180-SA5DN-SS-0.0-0.5	AROCLOR 1254	J	0.86	1.8	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.52	1.8	PQL	ug/Kg	
	Aroclor 5460	J	1.5	3.4	PQL	ug/Kg	
SL-182-SA5DN-SS-0.0-0.5	AROCLOR 1254	J	0.74	1.8	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.83	1.8	PQL	ug/Kg	
	Aroclor 5460	J	2.7	3.5	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-184-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.2	3.5	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5DN-SS-0.0-0.5	MCPA	J	230	270	PQL	ug/Kg	J (all detects)
SL-170-SA5DN-SS-0.0-0.5	MCPA	J	160	260	PQL	ug/Kg	J (all detects)
SL-172-SA5DN-SS-0.0-0.5	MCPA	J	220	270	PQL	ug/Kg	J (all detects)
SL-180-SA5DN-SS-0.0-0.5	MCPA	J	210	260	PQL	ug/Kg	J (all detects)
SL-181-SA5DN-SS-0.0-0.5	2,4-DB	J	1.2	1.8	PQL	ug/Kg	J (all detects)
SL-182-SA5DN-SS-0.0-0.5	MCPP	J	160	260	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA8N-QC-052611	METHYLENE CHLORIDE	J	1.6	4.5	PQL	ug/Kg	J (all detects)
SL-002-SA8N-SB-4.0-5.0	ACETONE	J	9.7	9.9	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.9	5.0	PQL	ug/Kg	
	TOLUENE	J	0.11	5.0	PQL	ug/Kg	
SL-008-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.6	4.6	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	370	PQL	ug/Kg	J (all detects)
SL-170-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	340	PQL	ug/Kg	J (all detects)
SL-171-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	35	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	31	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	39	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	23	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	24	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	350	PQL	ug/Kg	
	CHRYSENE	J	40	180	PQL	ug/Kg	
	FLUORANTHENE	J	43	180	PQL	ug/Kg	
	PYRENE	J	44	180	PQL	ug/Kg	
SL-172-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	360	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-173-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	31	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	23	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	34	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	21	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	350	PQL	ug/Kg	
	CHRYSENE	J	35	180	PQL	ug/Kg	
	FLUORANTHENE	J	69	180	PQL	ug/Kg	
	PHENANTHRENE	J	45	180	PQL	ug/Kg	
	PYRENE	J	55	180	PQL	ug/Kg	
SL-174-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	350	PQL	ug/Kg	J (all detects)
SL-175-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	360	PQL	ug/Kg	J (all detects)
SL-176-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	350	PQL	ug/Kg	J (all detects)
SL-179-SA5DN-SS-0.0-0.5	ANTHRACENE	J	62	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	160	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	100	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	100	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	350	PQL	ug/Kg	
	CARBAZOLE	J	27	170	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	32	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	94	170	PQL	ug/Kg	
SL-180-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	26	170	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	31	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	350	PQL	ug/Kg	
	DIBENZOFURAN	J	150	170	PQL	ug/Kg	
	NAPHTHALENE	J	37	170	PQL	ug/Kg	
SL-181-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	350	PQL	ug/Kg	J (all detects)
SL-182-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	350	PQL	ug/Kg	J (all detects)
SL-183-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	340	PQL	ug/Kg	J (all detects)
SL-184-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	350	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA8N-QC-052611	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	21	PQL	ug/Kg	J (all detects)
SL-008-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.8	21	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.47	2.0	PQL	ug/Kg	
SL-008-SA8N-SB-9.0-10.0	BENZO(B)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	21	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE166 **Laboratory: LL**

EDD Filename: DE166_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.77	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.83	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	6.9	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
SL-165-SA5DN-SS-0.0-0.5	ANTHRACENE	J	2.5	9.0	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	64	97	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	5.8	9.0	PQL	ug/Kg	
SL-172-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	3.7	9.0	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	4.9	9.0	PQL	ug/Kg	
	CHRYSENE	J	4.7	9.0	PQL	ug/Kg	
	FLUORANTHENE	J	4.9	9.0	PQL	ug/Kg	
	PYRENE	J	7.1	9.0	PQL	ug/Kg	
SL-173-SA5DN-SS-0.0-0.5	ANTHRACENE	J	2.9	8.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	7.4	8.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	4.3	8.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	7.9	8.8	PQL	ug/Kg	
SL-174-SA5DN-SS-0.0-0.5	CHRYSENE	J	1.8	8.7	PQL	ug/Kg	J (all detects)
SL-175-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.79	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.83	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.88	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.79	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
SL-176-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.97	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.87	1.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.7	PQL	ug/Kg	
SL-182-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.80	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	6.9	19	PQL	ug/Kg	
	CHRYSENE	J	0.80	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.89	1.8	PQL	ug/Kg	
	PYRENE	J	0.96	1.8	PQL	ug/Kg	
SL-183-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	0.87	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.81	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.0	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.82	1.7	PQL	ug/Kg	
	PYRENE	J	0.92	1.7	PQL	ug/Kg	
SL-184-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	4.4	8.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	3.3	8.8	PQL	ug/Kg	
	FLUORANTHENE	J	3.8	8.8	PQL	ug/Kg	
	PYRENE	J	4.4	8.8	PQL	ug/Kg	

LDC #: 26275X4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE166 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn >4X
VII.	Duplicate Sample Analysis	A	cd, Ag, <5X
VIII.	Laboratory Control Samples (LCS)	A	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ba, Cr, Pb, V.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	FB=21, 2W (No hits >5X)

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

Validated Samples:

1	SL-002-SA8N-SB-4.0-5.0	11	SL-173-SA5DN-SS-0.0-0.5	21	EB09-SA5DN-SS-052611	31	
2	SL-002-SA8N-SB-9.0-10.0	12	SL-174-SA5DN-SS-0.0-0.5	22	EB11-SA8N-SB-052611	32	
3	SL-008-SA8N-SB-4.0-5.0	13	SL-175-SA5DN-SS-0.0-0.5	23	SL-002-SA8N-SB-4.0-5.0MS	33	
4	SL-008-SA8N-SB-9.0-10.0	14	SL-176-SA5DN-SS-0.0-0.5	24	SL-002-SA8N-SB-4.0-5.0MSD	34	
5	DUP09-SA8N-QC-052611	15	SL-179-SA5DN-SS-0.0-0.5	25	SL-002-SA8N-SB-4.0-5.0DUP	35	
6	SL-164-SA5DN-SS-0.0-0.5	16	SL-180-SA5DN-SS-0.0-0.5	26		36	
7	SL-165-SA5DN-SS-0.0-0.5	17	SL-181-SA5DN-SS-0.0-0.5	27		37	
8W	SL-170-SA5DN-SS-0.0-0.5	18	SL-182-SA5DN-SS-0.0-0.5	28		38	
9	SL-171-SA5DN-SS-0.0-0.5	19	SL-183-SA5DN-SS-0.0-0.5	29		39	
10	SL-172-SA5DN-SS-0.0-0.5	20	SL-184-SA5DN-SS-0.0-0.5	30		40	

Notes: _____

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE166
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6300336BKG Matrix Spike Lab Sample ID: 6300337MS Matrix Spike Duplicate Lab Sample ID: 6300338MSD
% Solids for Sample: 83.7
Batch Id(s): P15208E, P15826F, P15211D, P15708A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		28327.6523		37652.5733		37251.9047		231.9890	229.7583	MG/KG	4020		3884		1			20	P
Antimony	121	0.1399	B	0.5960		0.5756		1.3785	1.4195	MG/KG	33	N	31	N	3		75 - 125	20	MS
Arsenic	75	6.9750		9.8520		10.5563		2.2976	2.3658	MG/KG	125		151	N	7		75 - 125	20	MS
Barium	137	113.3072		137.0508		138.4956		11.4879	11.8291	MG/KG	207		213		1			20	MS
Beryllium	9	0.8422		1.7103		1.7479		0.9190	0.9463	MG/KG	94		96		2		75 - 125	20	MS
Boron		11.3190		236.6925		233.6182		231.9890	229.7583	MG/KG	97		97		1		84 - 115	20	P
Cadmium	111	0.2289		1.3574		1.4720		1.1488	1.1829	MG/KG	98		105		8		75 - 125	20	MS
Calcium		14293.6368		15651.6025		15434.4948		463.9779	459.5166	MG/KG	293		248		1			20	P
Chromium	52	31.8143		46.0665		47.3166		11.4879	11.8291	MG/KG	124		131	N	3		75 - 125	20	MS
Cobalt	59	10.6207		69.6397		70.9985		57.4396	59.1457	MG/KG	103		102		2		75 - 125	20	MS
Copper	63	16.9358		31.3161		31.6311		11.4879	11.8291	MG/KG	125		124		1		75 - 125	20	MS
Iron		35643.3453		37102.8233		36757.5533		115.9945	114.8791	MG/KG	1258		970		1			20	P
Lead	208	10.1724		12.8848		15.3661		3.4464	3.5487	MG/KG	79		146	N	18		75 - 125	20	MS
Lithium		26.0084		149.8196		146.6306		115.9945	114.8791	MG/KG	107		105		2		82 - 114	20	P
Magnesium		7900.1386		9243.9457		9037.9894		231.9890	229.7583	MG/KG	579		495		2			20	P
Manganese		430.4504		451.8797		441.3852		57.9972	57.4396	MG/KG	37		19		2			20	P
Mercury		0.0035	U	0.1717		0.1822		0.1914	0.1968	MG/KG	90		93		6		65 - 135	20	CV
Molybdenum	98	0.3272		10.2334		10.0453		11.4879	11.8291	MG/KG	86		82		2		75 - 125	20	MS
Nickel	60	22.9846		38.7372		40.9998		11.4879	11.8291	MG/KG	137	N	152	N	6		75 - 125	20	MS
Phosphorus		298.7993		429.1726		407.7612		115.9945	114.8791	MG/KG	112		95		5		75 - 125	20	P
Potassium		3772.9988		5344.6788		5247.2624		1159.9448	1148.7915	MG/KG	135	N	128	N	2		75 - 125	20	P
Selenium	78	0.1473	B	2.1080		2.0559		2.2976	2.3658	MG/KG	85		81		3		75 - 125	20	MS
Silver	107	0.0264	B	10.8928		10.9467		11.4879	11.8291	MG/KG	95		92		0		75 - 125	20	MS
Sodium		118.9546	B	1256.0659		1218.7046		1159.9448	1148.7915	MG/KG	98		96		3		75 - 125	20	P
Strontium		51.0932		167.7269		163.6499		115.9945	114.8791	MG/KG	101		98		2		75 - 115	20	P
Thallium	203	0.3338		0.7724		0.7866		0.4595	0.4732	MG/KG	95		96		2		75 - 125	20	MS
Tin		2.7180	B	401.6738		394.9384		463.9779	459.5166	MG/KG	86		85		2		80 - 110	20	P
Titanium		1459.8484		1754.1474		1767.5498		115.9945	117.1317	MG/KG	254		263		1			20	P
Vanadium	51	63.8562		83.2414		86.6839		11.4879	11.8291	MG/KG	169		193		4			20	MS
Zinc	66	70.3192		92.6385		93.0480		11.4879	11.8291	MG/KG	194		192		0			20	MS
Zirconium		4.4098	B	117.2542		114.4288		115.9945	114.8791	MG/KG	97		96		2		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE166.
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6300336BKG Serial Dilution Lab Sample ID: 6300336L
Batch ID(s): P15208E, P15826F, P15708A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		237102.4500		228228.8000		4		P
Antimony	121	0.6147	B	1.5000	U	100		MS
Arsenic	75	30.6500		33.5400		9		MS
Barium	137	497.9000		570.5000		15	E	MS
Beryllium	9	3.7010		8.6100		133		MS
Boron		94.7400		47.1000	B	50		P
Cadmium	111	1.0060		1.8180	B	81		MS
Calcium		119637.7400		121137.1000		1		P
Chromium	52	139.8000		178.2000		27	E	MS
Cobalt	59	46.6700		49.0500		5		MS
Copper	63	74.4200		77.9500		5		MS
Iron		59666.9600		60155.3500		1		P
Lead	208	44.7000		54.5000		22	E	MS
Lithium		217.6900		217.7000		0		P
Magnesium		66124.1600		65942.2500		0		P
Manganese		3602.8700		3799.6000		5		P
Molybdenum	98	1.4380		2.2085	B	54		MS
Nickel	60	101.0000		103.8000		3		MS
Phosphorus		2500.9500		2491.7500		0		P
Potassium		31580.0000		31353.8000		1		P
Selenium	78	0.6473	B	1.0000	U	100		MS
Silver	107	0.1162	B	0.3000	U	100		MS
Sodium		995.6500	B	1865.0000	U	100		P
Strontium		427.6500		435.4500		2		P
Thallium	203	1.4670		1.6910	B	15		MS
Tin		22.7500	B	50.0000	U	100		P
Titanium		12463.3100		13174.1500		6		P
Vanadium	51	280.6000		336.7000		20	E	MS
Zinc	66	309.0000		326.7000		6		MS
Zirconium		36.9100	B	44.7000	B	21		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE166 7154
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE167

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-May-2011	TB-052711	6301487	TB	5030B	8260B	III
27-May-2011	TB-052711	6301487	TB	5030B	8260B SIM	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	3050B	6010B	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	3050B	6020	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	3060A	7199	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	3550B	8081A	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	3550B	8082	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	3550B	8151A	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	3550B	8270C	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	3550B	8270C SIM	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	METHOD	300.0	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	METHOD	314.0	III
27-May-2011	SL-071-SA5DN-SS-0.0-0.5	6301472	N	METHOD	7471A	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	3050B	6010B	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	3050B	6020	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	3060A	7199	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	3550B	8081A	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	3550B	8082	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	3550B	8151A	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	3550B	8270C	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	3550B	8270C SIM	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	METHOD	300.0	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	METHOD	314.0	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	METHOD	6850	III
27-May-2011	SL-091-SA5DN-SS-0.0-0.5	6301473	N	METHOD	7471A	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	3050B	6020	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	3060A	7199	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	3550B	8082	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	3550B	8270C	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	3550B	8270C SIM	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	5035	8260B	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	5035	8260B SIM	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	METHOD	300.0	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	METHOD	314.0	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	METHOD	7471A	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0	6301485	N	METHOD	8015M	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0DUP	P301485D271900B	DUP	METHOD	314.0	III
27-May-2011	SL-003-SA8N-SB-4.0-5.0MS	P301485R271923B	MS	METHOD	314.0	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	3050B	6010B	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	3050B	6020	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	3060A	7199	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	3550B	8081A	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	3550B	8082	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	3550B	8151A	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	3550B	8270C	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	3550B	8270C SIM	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	METHOD	300.0	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	METHOD	314.0	III
27-May-2011	SL-122-SA5DN-SS-0.0-0.5	6301483	N	METHOD	7471A	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	3050B	6010B	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	3060A	7199	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	3550B	8082	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	3550B	8270C	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	3550B	8270C SIM	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	METHOD	300.0	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	METHOD	314.0	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	METHOD	6850	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	METHOD	7471A	III
27-May-2011	SL-003-SA8N-SB-9.0-10.0	6301486	N	METHOD	8015M	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	3050B	6010B	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	3050B	6020	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	3060A	7199	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	3550B	8081A	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	3550B	8082	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	3550B	8151A	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	3550B	8270C	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	3550B	8270C SIM	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	METHOD	300.0	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	METHOD	314.0	III
27-May-2011	SL-092-SA5DN-SS-0.0-0.5	6301474	N	METHOD	7471A	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	3050B	6010B	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	3050B	6020	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	3060A	7199	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	3550B	8081A	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	3550B	8082	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	3550B	8270C	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	3550B	8270C SIM	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	METHOD	300.0	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	METHOD	314.0	III
27-May-2011	SL-093-SA5DN-SS-0.0-0.5	6301475	N	METHOD	7471A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3050B	6010B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3050B	6020	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3060A	7199	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3546	1625C	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3550B	8015B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3550B	8015M	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3550B	8081A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3550B	8082	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3550B	8151A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3550B	8270C	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	3550B	8270C SIM	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	8330	8330A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	METHOD	300.0	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	METHOD	314.0	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	METHOD	7471A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	METHOD	8015B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	METHOD	8015M	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	METHOD	8315A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5	6301476	N	METHOD	9012B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3050B	6010B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3060A	7199	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3546	1625C	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3550B	8015B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3550B	8015M	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3550B	8081A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3550B	8082	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3550B	8151A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3550B	8270C	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	3550B	8270C SIM	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	8330	8330A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	METHOD	300.0	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	METHOD	314.0	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	METHOD	7471A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	METHOD	8015B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	METHOD	8015M	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	METHOD	8315A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5MS	6301477	MS	METHOD	9012B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5DU	6301479	DUP	3050B	6010B	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5DU	6301479	DUP	3050B	6020	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5DU	6301479	DUP	3060A	7199	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5DU	6301479	DUP	METHOD	300.0	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5DU	6301479	DUP	METHOD	314.0	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5DU	6301479	DUP	METHOD	7471A	III
27-May-2011	SL-117-SA5DN-SS-0.0-0.5DU	6301479	DUP	METHOD	9012B	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3050B	6010B	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3060A	7199	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3546	1625C	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3550B	8015B	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3550B	8015M	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3550B	8081A	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3550B	8082	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3550B	8151A	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3550B	8270C	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	3550B	8270C SIM	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	8330	8330A	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	METHOD	300.0	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	METHOD	314.0	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	METHOD	7471A	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	METHOD	8015B	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	METHOD	8015M	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	METHOD	8315A	III
27-May-2011	DUP09-SA5DN-QC-052711	6301484	FD	METHOD	9012B	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3050B	6010B	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3050B	6020	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3060A	7199	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3546	1625C	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3550B	8015B	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3550B	8015M	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3550B	8081A	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3550B	8082	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3550B	8270C	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	3550B	8270C SIM	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	8330	8330A	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	METHOD	300.0	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	METHOD	314.0	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	METHOD	7471A	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	METHOD	8015B	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	METHOD	8015M	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	METHOD	8315A	III
27-May-2011	SL-118-SA5DN-SS-0.0-0.5	6301480	N	METHOD	9012B	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3050B	6010B	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3050B	6020	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3060A	7199	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3546	1625C	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3550B	8015B	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3550B	8015M	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3550B	8081A	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3550B	8082	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3550B	8151A	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3550B	8270C	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	3550B	8270C SIM	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	8330	8330A	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	METHOD	300.0	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	METHOD	314.0	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	METHOD	7471A	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	METHOD	8015M	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	METHOD	8315A	III
27-May-2011	SL-120-SA5DN-SS-0.0-0.5	6301482	N	METHOD	9012B	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3050B	6010B	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3050B	6020	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3060A	7199	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3546	1625C	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3550B	8015B	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3550B	8015M	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3550B	8081A	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3550B	8082	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3550B	8151A	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3550B	8270C	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	3550B	8270C SIM	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	8330	8330A	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	METHOD	300.0	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	METHOD	314.0	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	METHOD	7471A	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	METHOD	8015B	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	METHOD	8015M	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	METHOD	8315A	III
27-May-2011	SL-119-SA5DN-SS-0.0-0.5	6301481	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-122-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1	J	0.95	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	503		0.0829	MDL	0.531	PQL	mg/Kg	J	A
SODIUM	92.8	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.59	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.46	J	0.892	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SB-4.0-5.0 *Collected:* 5/27/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	442		0.0915	MDL	0.587	PQL	mg/Kg	J	A
TIN	2.76	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	2.43	J	0.985	MDL	5.87	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SB-9.0-10.0 *Collected:* 5/27/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	401		0.0964	MDL	0.618	PQL	mg/Kg	J	A
TIN	2.67	J	1.24	MDL	12.4	PQL	mg/Kg	U	B
Zirconium	4.26	J	1.04	MDL	6.18	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	347		0.0857	MDL	0.549	PQL	mg/Kg	J	A
TIN	2.56	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.11	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-091-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	463		0.0828	MDL	0.531	PQL	mg/Kg	J	A
SODIUM	95.2	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.72	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.34	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-092-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	449		0.0863	MDL	0.553	PQL	mg/Kg	J	A
SODIUM	89.2	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	2.66	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.92	J	0.929	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-093-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	452		0.0820	MDL	0.525	PQL	mg/Kg	J	A
SODIUM	92.0	J	39.2	MDL	105	PQL	mg/Kg	J	Z
TIN	2.64	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	3.78	J	0.883	MDL	5.25	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	464		0.0845	MDL	0.542	PQL	mg/Kg	J	A
SODIUM	101	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	2.75	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	4.09	J	0.910	MDL	5.42	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	484		0.0850	MDL	0.545	PQL	mg/Kg	J	A
SODIUM	95.6	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.65	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-118-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.47	J	0.915	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	463		0.0831	MDL	0.533	PQL	mg/Kg	J	A
SODIUM	87.5	J	39.8	MDL	107	PQL	mg/Kg	J	Z
TIN	2.59	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.94	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	488		0.0824	MDL	0.528	PQL	mg/Kg	J	A
SODIUM	92.5	J	39.4	MDL	106	PQL	mg/Kg	J	Z
TIN	2.79	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.04	J	0.888	MDL	5.28	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	473		0.0922	MDL	0.591	PQL	mg/Kg	J	A

Sample ID: SL-122-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	96.5	J	44.1	MDL	118	PQL	mg/Kg	J	Z
TIN	3.07	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	4.09	J	0.993	MDL	5.91	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP09-SA5DN-QC-052711 ***Collected:*** 5/27/2011 10:55:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.897		0.0175	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: DUP09-SA5DN-QC-052711 ***Collected:*** 5/27/2011 10:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.193	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: DUP09-SA5DN-QC-052711 ***Collected:*** 5/27/2011 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0656	MDL	0.219	PQL	mg/Kg	J	Z, Q, Q
LEAD	13.6		0.0114	MDL	0.219	PQL	mg/Kg	J	Q
SILVER	0.0556	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SB-4.0-5.0 ***Collected:*** 5/27/2011 9:10:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	1.03		0.0181	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA8N-SB-4.0-5.0 ***Collected:*** 5/27/2011 9:10:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SB-4.0-5.0 ***Collected:*** 5/27/2011 9:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.116	J	0.0677	MDL	0.226	PQL	mg/Kg	J	Z, Q, Q
LEAD	10.6		0.0117	MDL	0.226	PQL	mg/Kg	J	Q
SILVER	0.0394	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SB-9.0-10.0 ***Collected:*** 5/27/2011 9:30:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.842		0.0194	MDL	0.121	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-003-SA8N-SB-9.0-10.0 *Collected:* 5/27/2011 9:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.137	J	0.0485	MDL	0.485	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SB-9.0-10.0 *Collected:* 5/27/2011 9:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0916	J	0.0727	MDL	0.242	PQL	mg/Kg	J	Z, Q, Q
LEAD	9.79		0.0126	MDL	0.242	PQL	mg/Kg	J	Q
SILVER	0.0602	J	0.0145	MDL	0.121	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.712		0.0171	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q, Q
LEAD	11.1		0.0111	MDL	0.213	PQL	mg/Kg	J	Q
SILVER	0.0305	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-091-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:05:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.869		0.0170	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-091-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.161	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-091-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.171	J	0.0637	MDL	0.212	PQL	mg/Kg	J	Z, Q, Q
LEAD	12.3		0.0110	MDL	0.212	PQL	mg/Kg	J	Q
SILVER	0.0521	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-092-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:45:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.926		0.0179	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-092-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.171	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-092-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0839	J	0.0670	MDL	0.223	PQL	mg/Kg	J	Z, Q, Q
LEAD	12.1		0.0116	MDL	0.223	PQL	mg/Kg	J	Q
SILVER	0.0519	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-093-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:05:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.866		0.0170	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-093-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.214	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-093-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.126	J	0.0637	MDL	0.212	PQL	mg/Kg	J	Z, Q, Q
LEAD	12.7		0.0110	MDL	0.212	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-093-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0473	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:45:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.889		0.0173	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-117-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.195	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.135	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q, Q
LEAD	12.6		0.0113	MDL	0.217	PQL	mg/Kg	J	Q
SILVER	0.0643	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:05:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.808		0.0173	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-118-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.185	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.112	J	0.0647	MDL	0.216	PQL	mg/Kg	J	Z, Q, Q
LEAD	9.91		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
SILVER	0.0376	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-119-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:45:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.886		0.0172	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-119-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0646	MDL	0.215	PQL	mg/Kg	J	Z, Q, Q
LEAD	12.5		0.0112	MDL	0.215	PQL	mg/Kg	J	Q
SILVER	0.0569	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:25:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.803		0.0176	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-120-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.156	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:25:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, Q
LEAD	16.4		0.0114	MDL	0.220	PQL	mg/Kg	J	Q

Sample ID: SL-122-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:25:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	1.07		0.0182	MDL	0.114	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-122-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.213	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.130	J	0.0682	MDL	0.227	PQL	mg/Kg	J	Z, Q, Q
LEAD	14.4		0.0118	MDL	0.227	PQL	mg/Kg	J	Q
SILVER	0.0558	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.78	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: SL-003-SA8N-SB-4.0-5.0 *Collected:* 5/27/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SB-9.0-10.0 *Collected:* 5/27/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.77	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-091-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.59	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-093-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.95	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.5		0.22	MDL	1.1	PQL	mg/Kg	J	FD

Sample ID: SL-118-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.0	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.0	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.72	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0407	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 Laboratory: LL

EDD Filename: PrepDE167_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-003-SA8N-SB-4.0-5.0 ***Collected:*** 5/27/2011 9:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0032	U	0.0032	MDL	0.112	PQL	mg/Kg	UJ	E

Sample ID: SL-003-SA8N-SB-9.0-10.0 ***Collected:*** 5/27/2011 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0034	U	0.0034	MDL	0.120	PQL	mg/Kg	UJ	E

Sample ID: SL-071-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 8:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0036	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z, E

Sample ID: SL-091-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0351	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z, E

Sample ID: SL-092-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0048	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z, E

Sample ID: SL-093-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0127	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z, E

Sample ID: SL-117-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0644	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z, E

Sample ID: SL-118-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0247	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-119-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0644	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z, E

Sample ID: SL-120-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.461		0.0030	MDL	0.104	PQL	mg/Kg	J	E

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-119-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	252	J	184	MDL	368	PQL	ng/Kg	J	Z

Sample ID: SL-120-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	320	J	183	MDL	366	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	30		0.88	MDL	2.7	PQL	mg/Kg	J	FD
EFH (C30-C40)	72		0.88	MDL	2.7	PQL	mg/Kg	J	FD

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.5	U	5.5	MDL	11	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.5	U	5.5	MDL	11	PQL	mg/Kg	UJ	Q
Propylene glycol	5.5	U	5.5	MDL	11	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	67		2.2	MDL	6.6	PQL	mg/Kg	J	FD
EFH (C30-C40)	210		2.2	MDL	6.6	PQL	mg/Kg	J	FD

Sample ID: SL-119-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:45:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	12	J	4.4	MDL	13	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S
4,4'-DDE	0.47		0.073	MDL	0.38	PQL	ug/Kg	J	S
4,4'-DDT	0.97		0.073	MDL	0.38	PQL	ug/Kg	J	S
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	2.1	J	0.88	MDL	3.8	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.14	U	0.14	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.049	U	0.049	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.090	U	0.090	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.061	U	0.061	MDL	0.18	PQL	ug/Kg	UJ	S, FD
METHOXYCHLOR	0.38	U	0.38	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.26	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z, S, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 Laboratory: LL

EDD Filename: PrepDE167_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	S

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.23	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-091-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.3	J	0.87	MDL	3.7	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.050	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.7	J	0.89	MDL	3.8	PQL	ug/Kg	J	Z
ENDOSULFAN SULFATE	0.27	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-093-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.4	J	0.87	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.52		0.073	MDL	0.38	PQL	ug/Kg	J	S
4,4'-DDT	1.1		0.073	MDL	0.38	PQL	ug/Kg	J	S
Chlordane	2.3	J	0.88	MDL	3.8	PQL	ug/Kg	J	Z, S
HEPTACHLOR EPOXIDE	0.095	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z, S, FD
MIREX	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-118-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.076	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z
4,4'-DDE	0.19	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z
4,4'-DDT	0.16	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z
MIREX	0.31	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-119-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.31	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z, S
4,4'-DDT	1.4		0.073	MDL	0.38	PQL	ug/Kg	J	S
Chlordane	5.6		0.89	MDL	3.8	PQL	ug/Kg	J	S
DELTA-BHC	0.086	J	0.040	MDL	0.18	PQL	ug/Kg	J	Z, S

Sample ID: SL-120-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDE	0.39		0.073	MDL	0.37	PQL	ug/Kg	J	S
4,4'-DDT	1.4		0.073	MDL	0.37	PQL	ug/Kg	J	S
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	9.3		0.88	MDL	3.7	PQL	ug/Kg	J	S
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	2.9	U	2.9	MDL	2.9	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.19	U	0.19	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.12	U	0.12	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.19	U	0.19	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 Laboratory: LL

EDD Filename: PrepDE167_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-120-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	S

Sample ID: SL-122-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.50		0.078	MDL	0.40	PQL	ug/Kg	J	S
4,4'-DDT	1.3		0.078	MDL	0.40	PQL	ug/Kg	J	S
Chlordane	3.0	J	0.95	MDL	4.0	PQL	ug/Kg	J	Z, S

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	5.0		1.1	MDL	3.6	PQL	ug/Kg	J	FD

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.6	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-093-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.9	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.9	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-119-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.1	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-120-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:25:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	12	J	5.5	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-122-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.9	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	400		83	MDL	270	PQL	ug/Kg	J	FD

Sample ID: SL-091-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.10	J	0.082	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.16	J	0.083	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-093-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.15	J	0.082	MDL	0.18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	490	U	490	MDL	490	PQL	ug/Kg	UJ	FD

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L

Sample ID: SL-003-SA8N-SB-4.0-5.0 *Collected:* 5/27/2011 9:10:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA8N-SB-9.0-10.0 *Collected:* 5/27/2011 9:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	410	U	410	MDL	1200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	20	MDL	410	PQL	ug/Kg	J	Z

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	43	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-091-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:05:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	56	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	58	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	68	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-091-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	27	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	43	J	18	MDL	360	PQL	ug/Kg	J	Z
Butylbenzylphthalate	24	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	78	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	120	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	76	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:45:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	40	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-093-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:05:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	R	Q
BIS(2-ETHYLHEXYL)PHTHALATE	51	J	18	MDL	370	PQL	ug/Kg	J	Z
CHRYSENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-118-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:05:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-118-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	40	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	41	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-119-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:45:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-120-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 11:25:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BENZO(A)PYRENE	26	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z
Di-n-butylphthalate	66	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	48	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	41	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	46	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-122-SA5DN-SS-0.0-0.5 ***Collected:*** 5/27/2011 9:25:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	L
ANTHRACENE	43	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	140	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	170	J	20	MDL	200	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	48	J	20	MDL	390	PQL	ug/Kg	J	Z
CARBAZOLE	28	J	20	MDL	200	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	43	J	20	MDL	200	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	180	J	20	MDL	200	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	5.0	J	1.8	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	47		3.7	MDL	9.2	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	40		3.7	MDL	9.2	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	67		3.7	MDL	9.2	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	13		3.7	MDL	9.2	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	36		3.7	MDL	9.2	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	68	J	33	MDL	99	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	5.3	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	96		3.7	MDL	9.2	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	14		3.7	MDL	9.2	PQL	ug/Kg	J	FD
PHENANTHRENE	25		3.7	MDL	9.2	PQL	ug/Kg	J	FD
PYRENE	76		3.7	MDL	9.2	PQL	ug/Kg	J	FD

Sample ID: SL-071-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 8:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	5.1	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	8.7	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
CHRYSENE	2.7	J	1.8	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-091-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	3.5	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.8	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	7.5	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	8.0	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
FLUORENE	6.0	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-093-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	4.9	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
CHRYSENE	5.6	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
FLUORANTHENE	7.8	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
PHENANTHRENE	4.8	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
PYRENE	7.0	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	4.5	J	1.8	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	6.7	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	7.2	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	13		3.7	MDL	9.2	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	7.6	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	6.0	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	3.7	U	3.7	MDL	9.2	PQL	ug/Kg	UJ	FD
FLUORANTHENE	10		3.7	MDL	9.2	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	3.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	4.8	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z, FD
PYRENE	13		3.7	MDL	9.2	PQL	ug/Kg	J	FD

Sample ID: SL-118-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.6	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-120-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	3.5	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	7.5	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	3.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: PrepDE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA **Method:** 8015B **Matrix:** SO

Sample ID: DUP09-SA5DN-QC-052711 *Collected:* 5/27/2011 10:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
p-Terphenyl	1.7	J	1.7	MDL	3.9	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 10:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
p-Terphenyl	2.2	J	1.7	MDL	3.9	PQL	mg/Kg	J	Z, Q, Q

Sample ID: SL-119-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:45:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
p-Terphenyl	12	J	8.3	MDL	19	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5DN-SS-0.0-0.5 *Collected:* 5/27/2011 11:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
p-Terphenyl	6.6	J	3.3	MDL	7.7	PQL	mg/Kg	J	Z

Method Category: VOA **Method:** 8260B **Matrix:** AQ

Sample ID: TB-052711 *Collected:* 5/27/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	1	J	0.5	MDL	5	PQL	ug/L	J	Z
TOLUENE	0.7	J	0.7	MDL	5	PQL	ug/L	J	Z

Method Category: VOA **Method:** 8260B **Matrix:** SO

Sample ID: SL-003-SA8N-SB-4.0-5.0 *Collected:* 5/27/2011 9:10:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	11		7.4	MDL	8.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.1	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167

Laboratory: LL

EDD Filename: PrepDE167_v1

eQAPP Name: CDM_SSFL_110509

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: PrepDE167_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE167

Method Blank Outlier Report

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15708DB221712	6/7/2011 5:12:00 PM	CALCIUM PHOSPHORUS TIN	6.72 mg/Kg 1.29 mg/Kg 1.55 mg/Kg	DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP09-SA5DN-QC-052711(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-003-SA8N-SB-4.0-5.0(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-003-SA8N-SB-9.0-10.0(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-071-SA5DN-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-091-SA5DN-SS-0.0-0.5(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-092-SA5DN-SS-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-093-SA5DN-SS-0.0-0.5(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-117-SA5DN-SS-0.0-0.5(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-118-SA5DN-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-119-SA5DN-SS-0.0-0.5(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-120-SA5DN-SS-0.0-0.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-122-SA5DN-SS-0.0-0.5(RES)	TIN	3.07 mg/Kg	3.07U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15726HB222324A	6/10/2011 11:24:00 PM	LEAD	0.0194 mg/Kg	DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE167 **Laboratory:** LL

EDD Filename: DE167_v1 **eQAPP Name:** CDM_SSFL_110509

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P57571AB322158A	6/7/2011 9:58:00 PM	EFH (C8-C11)	0.40 mg/Kg	DUP09-SA5DN-QC-052711 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5

Method: **8151A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P57576AB240515A	6/9/2011 5:15:00 AM	MCPP	84 ug/Kg	DUP09-SA5DN-QC-052711 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB72B211210A	6/1/2011 12:10:00 PM	ACETONE METHYLENE CHLORIDE	8.6 ug/Kg 1.4 ug/Kg	SL-003-SA8N-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-003-SA8N-SB-4.0-5.0(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-003-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.4U ug/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN -SS-0.0-0.5MS SL-117-SA5DN -SS-0.0-0.5MSD (SL-117-SA5DN -SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	45 - -	40 57 62	59.00-109.00 63.00-107.00 63.00-107.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN -SS-0.0-0.5MS SL-117-SA5DN -SS-0.0-0.5MSD (SL-117-SA5DN -SS-0.0-0.5)	p-Terphenyl	28	63	75.00-125.00	21 (20.00)	p-Terphenyl	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN -SS-0.0-0.5MS SL-117-SA5DN -SS-0.0-0.5MSD (SL-117-SA5DN -SS-0.0-0.5)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	0 -196 -889 -226 0	0 -43 -1432 -1853 0	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	- 26 (20.00) 31 (20.00) 25 (20.00) -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	No Qual Diluted Out

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN -SS-0.0-0.5MS SL-117-SA5DN -SS-0.0-0.5MSD (SL-117-SA5DN -SS-0.0-0.5)	N-NITROSODIMETHYLAMINE	157	136	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN -SS-0.0-0.5MSD (SL-117-SA5DN -SS-0.0-0.5)	3,3'-DICHLOROBENZIDINE HEXACHLOROCYCLOPENTADI	- -	- -	16.00-119.00 10.00-153.00	33 (30.00) 79 (30.00)	3,3'-DICHLOROBENZIDINE HEXACHLOROCYCLOPENTAD	J(all detects)
SL-117-SA5DN -SS-0.0-0.5MS SL-117-SA5DN -SS-0.0-0.5MSD (SL-117-SA5DN -SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN-SS-0.0-0.5MS SL-117-SA5DN-SS-0.0-0.5MSD (SL-117-SA5DN-SS-0.0-0.5)	BENZO(A)ANTHRACENE	142	-	59.00-128.00	47 (30.00)	BENZO(A)ANTHRACENE	No Qual, Diluted Out
	BENZO(A)PYRENE	156	-	45.00-138.00	57 (30.00)	BENZO(A)PYRENE	
	BENZO(B)FLUORANTHENE	166	-	43.00-155.00	57 (30.00)	BENZO(B)FLUORANTHENE	
	BENZO(G,H,I)PERYLENE	-	-	33.00-141.00	33 (30.00)	BENZO(G,H,I)PERYLENE	
	BENZO(K)FLUORANTHENE	-	-	42.00-144.00	50 (30.00)	BENZO(K)FLUORANTHENE	
	FLUORANTHENE	221	-	26.00-166.00	83 (30.00)	FLUORANTHENE	
	INDENO(1,2,3-CD)PYRENE	-	-	21.00-143.00	40 (30.00)	INDENO(1,2,3-CD)PYRENE	
	PHENANTHRENE	167	-	12.00-165.00	66 (30.00)	PHENANTHRENE	
	PYRENE	188	-	15.00-153.00	72 (30.00)	PYRENE	
SL-117-SA5DN-SS-0.0-0.5MS SL-117-SA5DN-SS-0.0-0.5MSD (SL-117-SA5DN-SS-0.0-0.5)	CHRYSENE	-	-4	48.00-134.00	37 (30.00)	CHRYSENE	No Qual Diluted Out
	Diethylphthalate	-	0	70.00-136.00	200 (30.00)	Diethylphthalate	
	Dimethylphthalate	0	0	74.00-118.00	-	Dimethylphthalate	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN-SS-0.0-0.5MS (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)	LEAD	143	-	75.00-125.00	-	LEAD	J(all detects)
SL-117-SA5DN-SS-0.0-0.5MS SL-117-SA5DN-SS-0.0-0.5MSD (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)	ANTIMONY	28	32	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike=102%
SL-117-SA5DN-SS-0.0-0.5MS (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)	BERYLLIUM	62	-	75.00-125.00	-	BERYLLIUM	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN-SS-0.0-0.5MSD (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)	BARIUM	-	134	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-117-SA5DN-SS-0.0-0.5MS	ALUMINUM	1015	1227	75.00-125.00	-	ALUMINUM	
SL-117-SA5DN-SS-0.0-0.5MSD	POTASSIUM	137	126	75.00-125.00	-	POTASSIUM	
(DUP09-SA5DN-QC-052711	TITANIUM	182	226	75.00-125.00	-	TITANIUM	
SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)							No Qual, >4x
SL-117-SA5DN-SS-0.0-0.5MS	IRON	438	-2108	75.00-125.00	-	IRON	
SL-117-SA5DN-SS-0.0-0.5MSD	MANGANESE	-	-18	75.00-125.00	-	MANGANESE	
(DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)							No Qual, >4x

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-117-SA5DN-SS-0.0-0.5DUP (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)	SILVER	36	20.00	No Qual, OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-117-SA5DN-SS-0.0-0.5DUP (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)	HEXAVALENT CHROMIUM	30	20.00	No Qual, OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-117-SA5DN-SS-0.0-0.5DUP (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5)	MERCURY	1.4942	0.208	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE167 Laboratory: LL

EDD Filename: DE167_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3LFLCSQ260356 (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)	2,4-DINITROPHENOL	35	-	37.00-120.00	-	2,4-DINITROPHENOL	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15726HQ222327A (DUP09-SA5DN-QC-052711 SL-003-SA8N-SB-4.0-5.0 SL-003-SA8N-SB-9.0-10.0 SL-071-SA5DN-SS-0.0-0.5 SL-091-SA5DN-SS-0.0-0.5 SL-092-SA5DN-SS-0.0-0.5 SL-093-SA5DN-SS-0.0-0.5 SL-117-SA5DN-SS-0.0-0.5 SL-118-SA5DN-SS-0.0-0.5 SL-119-SA5DN-SS-0.0-0.5 SL-120-SA5DN-SS-0.0-0.5 SL-122-SA5DN-SS-0.0-0.5)	ANTIMONY	64	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
DUP09-SA5DN-QC-052711	TETRACHLORO-M-XYLENE	48	50.00-130.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-117-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	135	20.00-120.00	All Target Analytes	J(all detects)
SL-119-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	173	20.00-120.00	All Target Analytes	J(all detects)
SL-120-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	48	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-122-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	146	20.00-120.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE167 Laboratory: LL

EDD Filename: DE167_v1 eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-117-SA5DN-SS-0.0-0.5	DUP09-SA5DN-QC-052711			
MOISTURE	9.5	9.5	0		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-117-SA5DN-SS-0.0-0.5	DUP09-SA5DN-QC-052711			
FLUORIDE	1.6	2.0	22	50.00	No Qualifiers Applied
Nitrate-NO3	2.4	3.0	22	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-117-SA5DN-SS-0.0-0.5	DUP09-SA5DN-QC-052711			
ALUMINUM	30100	30000	0	50.00	No Qualifiers Applied
CALCIUM	5500	5290	4	50.00	
IRON	31800	32300	2	50.00	
LITHIUM	24.1	23.2	4	50.00	
MAGNESIUM	6580	6500	1	50.00	
MANGANESE	464	503	8	50.00	
PHOSPHORUS	387	396	2	50.00	
POTASSIUM	5780	5660	2	50.00	
SODIUM	101	92.8	8	50.00	
STRONTIUM	31.7	30.6	4	50.00	
TIN	2.75	2.59	6	50.00	
TITANIUM	1420	1350	5	50.00	
Zirconium	4.09	3.46	17	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-117-SA5DN-SS-0.0-0.5	DUP09-SA5DN-QC-052711			
ANTIMONY	0.135	0.101	29	50.00	No Qualifiers Applied
ARSENIC	5.24	5.39	3	50.00	
BARIUM	138	134	3	50.00	
BERYLLIUM	0.889	0.897	1	50.00	
CADMIUM	0.500	0.489	2	50.00	
CHROMIUM	31.0	29.3	6	50.00	
COBALT	9.33	9.49	2	50.00	
COPPER	16.4	16.6	1	50.00	
LEAD	12.6	13.6	8	50.00	
MOLYBDENUM	0.536	0.519	3	50.00	
NICKEL	21.1	21.0	0	50.00	
SELENIUM	0.195	0.193	1	50.00	
SILVER	0.0643	0.0556	15	50.00	
THALLIUM	0.362	0.354	2	50.00	
VANADIUM	56.6	54.9	3	50.00	
ZINC	80.2	78.8	2	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE167 Laboratory: LL

EDD Filename: DE167_v1 eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-117-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP09-SA5DN-QC-052711	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.5	0.78	63	50.00	J(all detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-117-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP09-SA5DN-QC-052711	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0644	0.0407	45	50.00	No Qualifiers Applied

Method: 8015B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-117-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP09-SA5DN-QC-052711	Sample RPD	eQAPP RPD	Flag
p-Terphenyl	2.2	1.7	26	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-117-SA5DN-SS-0.0-0.5	Concentration (mg/Kg) DUP09-SA5DN-QC-052711	Sample RPD	eQAPP RPD	Flag
EFH (C15-C20)	9.8	9.8	0	50.00	No Qualifiers Applied
EFH (C21-C30) EFH (C30-C40)	67 210	30 72	76 98	50.00 50.00	J(all detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-117-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP09-SA5DN-QC-052711	Sample RPD	eQAPP RPD	Flag
4,4'-DDE 4,4'-DDT Chlordane	0.52 1.1 2.3	0.47 0.97 2.1	10 13 9	50.00 50.00 50.00	No Qualifiers Applied
HEPTACHLOR EPOXIDE MIREX	0.095 0.38 U	0.18 U 0.26	200 200	50.00 50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-117-SA5DN-SS-0.0-0.5	Concentration (ug/Kg) DUP09-SA5DN-QC-052711	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	4.0	6.1	42	50.00	No Qualifiers Applied
Aroclor 5460	1.9	5.0	90	50.00	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-117-SA5DN-SS-0.0-0.5	DUP09-SA5DN-QC-052711			
MCPA	490 U	400	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-117-SA5DN-SS-0.0-0.5	DUP09-SA5DN-QC-052711			
ANTHRACENE	4.5	5.0	11	50.00	No Qualifiers Applied
BENZO(A)ANTHRACENE	6.7	47	150	50.00	
BENZO(A)PYRENE	7.2	40	139	50.00	
BENZO(B)FLUORANTHENE	13	67	135	50.00	
BENZO(G,H,I)PERYLENE	7.6	13	52	50.00	
BENZO(K)FLUORANTHENE	6.0	36	143	50.00	J(all detects)
DIBENZO(A,H)ANTHRACENE	9.2 U	5.3	200	50.00	UJ(all non-detects)
FLUORANTHENE	10	96	162	50.00	
INDENO(1,2,3-CD)PYRENE	3.9	14	113	50.00	
PHENANTHRENE	4.8	25	136	50.00	
PYRENE	13	76	142	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-117-SA5DN-SS-0.0-0.5	DUP09-SA5DN-QC-052711			
PH	6.85	6.84	0	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TB-052711	BENZENE	J	1	5	PQL	ug/L	J (all detects)
	TOLUENE	J	0.7	5	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-119-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	252	368	PQL	ng/Kg	J (all detects)
SL-120-SA5DN-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	320	366	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-122-SA5DN-SS-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5DN-QC-052711	SODIUM	J	92.8	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.59	10.6	PQL	mg/Kg	
	Zirconium	J	3.46	5.31	PQL	mg/Kg	
SL-003-SA8N-SB-4.0-5.0	TIN	J	2.76	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.43	5.87	PQL	mg/Kg	
SL-003-SA8N-SB-9.0-10.0	TIN	J	2.67	12.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.26	6.18	PQL	mg/Kg	
SL-071-SA5DN-SS-0.0-0.5	TIN	J	2.56	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.11	5.49	PQL	mg/Kg	
SL-091-SA5DN-SS-0.0-0.5	SODIUM	J	95.2	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.72	10.6	PQL	mg/Kg	
	Zirconium	J	3.34	5.31	PQL	mg/Kg	
SL-092-SA5DN-SS-0.0-0.5	SODIUM	J	89.2	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.66	11.1	PQL	mg/Kg	
	Zirconium	J	3.92	5.53	PQL	mg/Kg	
SL-093-SA5DN-SS-0.0-0.5	SODIUM	J	92.0	105	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	10.5	PQL	mg/Kg	
	Zirconium	J	3.78	5.25	PQL	mg/Kg	
SL-117-SA5DN-SS-0.0-0.5	SODIUM	J	101	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.75	10.8	PQL	mg/Kg	
	Zirconium	J	4.09	5.42	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-118-SA5DN-SS-0.0-0.5	SODIUM	J	95.6	109	PQL	mg/Kg	
	TIN	J	2.65	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.47	5.45	PQL	mg/Kg	
SL-119-SA5DN-SS-0.0-0.5	SODIUM	J	87.5	107	PQL	mg/Kg	
	TIN	J	2.59	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.94	5.33	PQL	mg/Kg	
SL-120-SA5DN-SS-0.0-0.5	SODIUM	J	92.5	106	PQL	mg/Kg	
	TIN	J	2.79	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.04	5.28	PQL	mg/Kg	
SL-122-SA5DN-SS-0.0-0.5	SODIUM	J	96.5	118	PQL	mg/Kg	
	TIN	J	3.07	11.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.09	5.91	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5DN-QC-052711	ANTIMONY	J	0.101	0.219	PQL	mg/Kg	
	SELENIUM	J	0.193	0.438	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0556	0.109	PQL	mg/Kg	
SL-003-SA8N-SB-4.0-5.0	ANTIMONY	J	0.116	0.226	PQL	mg/Kg	
	SELENIUM	J	0.140	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0394	0.113	PQL	mg/Kg	
SL-003-SA8N-SB-9.0-10.0	ANTIMONY	J	0.0916	0.242	PQL	mg/Kg	
	SELENIUM	J	0.137	0.485	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0602	0.121	PQL	mg/Kg	
SL-071-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.136	0.213	PQL	mg/Kg	
	SELENIUM	J	0.177	0.427	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0305	0.107	PQL	mg/Kg	
SL-091-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.171	0.212	PQL	mg/Kg	
	SELENIUM	J	0.161	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0521	0.106	PQL	mg/Kg	
SL-092-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0839	0.223	PQL	mg/Kg	
	SELENIUM	J	0.171	0.447	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0519	0.112	PQL	mg/Kg	
SL-093-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.126	0.212	PQL	mg/Kg	
	SELENIUM	J	0.214	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0473	0.106	PQL	mg/Kg	
SL-117-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.135	0.217	PQL	mg/Kg	
	SELENIUM	J	0.195	0.433	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0643	0.108	PQL	mg/Kg	
SL-118-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.112	0.216	PQL	mg/Kg	
	SELENIUM	J	0.185	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0376	0.108	PQL	mg/Kg	
SL-119-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.123	0.215	PQL	mg/Kg	
	SELENIUM	J	0.184	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0569	0.108	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-120-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.136	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.156	0.440	PQL	mg/Kg	
SL-122-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.130	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.213	0.455	PQL	mg/Kg	
	SILVER	J	0.0558	0.114	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5DN-QC-052711	HEXAVALENT CHROMIUM	J	0.78	1.1	PQL	mg/Kg	J (all detects)
SL-003-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.31	1.2	PQL	mg/Kg	J (all detects)
SL-003-SA8N-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.40	1.2	PQL	mg/Kg	J (all detects)
SL-071-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.77	1.1	PQL	mg/Kg	J (all detects)
SL-091-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.1	PQL	mg/Kg	J (all detects)
SL-093-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.95	1.1	PQL	mg/Kg	J (all detects)
SL-118-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.0	1.1	PQL	mg/Kg	J (all detects)
SL-119-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.0	1.1	PQL	mg/Kg	J (all detects)
SL-122-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.72	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5DN-QC-052711	MERCURY	J	0.0407	0.106	PQL	mg/Kg	J (all detects)
SL-071-SA5DN-SS-0.0-0.5	MERCURY	J	0.0036	0.109	PQL	mg/Kg	J (all detects)
SL-091-SA5DN-SS-0.0-0.5	MERCURY	J	0.0351	0.105	PQL	mg/Kg	J (all detects)
SL-092-SA5DN-SS-0.0-0.5	MERCURY	J	0.0048	0.106	PQL	mg/Kg	J (all detects)
SL-093-SA5DN-SS-0.0-0.5	MERCURY	J	0.0127	0.107	PQL	mg/Kg	J (all detects)
SL-117-SA5DN-SS-0.0-0.5	MERCURY	J	0.0644	0.104	PQL	mg/Kg	J (all detects)
SL-118-SA5DN-SS-0.0-0.5	MERCURY	J	0.0247	0.110	PQL	mg/Kg	J (all detects)
SL-119-SA5DN-SS-0.0-0.5	MERCURY	J	0.0644	0.107	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5DN-QC-052711	p-Terphenyl	J	1.7	3.9	PQL	mg/Kg	J (all detects)
SL-117-SA5DN-SS-0.0-0.5	p-Terphenyl	J	2.2	3.9	PQL	mg/Kg	J (all detects)
SL-119-SA5DN-SS-0.0-0.5	p-Terphenyl	J	12	19	PQL	mg/Kg	J (all detects)
SL-120-SA5DN-SS-0.0-0.5	p-Terphenyl	J	6.6	7.7	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-119-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	12	13	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5DN-QC-052711	Chlordane MIREX	J J	2.1 0.26	3.8 0.38	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-071-SA5DN-SS-0.0-0.5	ENDRIN KETONE	J	0.23	0.37	PQL	ug/Kg	J (all detects)
SL-091-SA5DN-SS-0.0-0.5	Chlordane HEPTACHLOR EPOXIDE	J J	2.3 0.050	3.7 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-092-SA5DN-SS-0.0-0.5	Chlordane ENDOSULFAN SULFATE	J J	2.7 0.27	3.8 0.38	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-093-SA5DN-SS-0.0-0.5	Chlordane	J	2.4	3.7	PQL	ug/Kg	J (all detects)
SL-117-SA5DN-SS-0.0-0.5	Chlordane HEPTACHLOR EPOXIDE	J J	2.3 0.095	3.8 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-118-SA5DN-SS-0.0-0.5	4,4'-DDD 4,4'-DDE 4,4'-DDT MIREX	J J J J	0.076 0.19 0.16 0.31	0.37 0.37 0.37 0.37	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-119-SA5DN-SS-0.0-0.5	4,4'-DDE DELTA-BHC	J J	0.31 0.086	0.38 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-122-SA5DN-SS-0.0-0.5	Chlordane	J	3.0	4.0	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA5DN-SS-0.0-0.5	Aroclor 5460	J	1.6	3.6	PQL	ug/Kg	J (all detects)
SL-093-SA5DN-SS-0.0-0.5	Aroclor 5460	J	1.9	3.6	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-117-SA5DN-SS-0.0-0.5	Aroclor 5460	J	1.9	3.6	PQL	ug/Kg	J (all detects)
SL-119-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.7 2.1	1.9 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-120-SA5DN-SS-0.0-0.5	Aroclor 5460	J	12	18	PQL	ug/Kg	J (all detects)
SL-122-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.9	2.0	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.10	0.19	PQL	ug/Kg	J (all detects)
SL-092-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.16	0.19	PQL	ug/Kg	J (all detects)
SL-093-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.15	0.18	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.1	4.4	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	390	PQL	ug/Kg	J (all detects)
SL-003-SA8N-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	410	PQL	ug/Kg	J (all detects)
SL-071-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	43	360	PQL	ug/Kg	J (all detects)
SL-091-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(K)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate CHRYSENE FLUORANTHENE PHENANTHRENE PYRENE	J J J J J J J J J J	56 58 68 27 43 24 78 120 76 130	180 180 180 180 360 180 180 180 180 180	PQL PQL PQL PQL PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-092-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	40	370	PQL	ug/Kg	J (all detects)
SL-093-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	360	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-117-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	51	370	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	130	180	PQL	ug/Kg	
SL-118-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	23	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	25	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	360	PQL	ug/Kg	
	FLUORANTHENE	J	40	180	PQL	ug/Kg	
	PHENANTHRENE	J	24	180	PQL	ug/Kg	
	PYRENE	J	41	180	PQL	ug/Kg	
SL-119-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	370	PQL	ug/Kg	J (all detects)
SL-120-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	26	180	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	130	180	PQL	ug/Kg	
	Di-n-butylphthalate	J	66	180	PQL	ug/Kg	
	FLUORANTHENE	J	48	180	PQL	ug/Kg	
	PHENANTHRENE	J	41	180	PQL	ug/Kg	
	PYRENE	J	46	180	PQL	ug/Kg	
SL-122-SA5DN-SS-0.0-0.5	ANTHRACENE	J	43	200	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	140	200	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	170	200	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	48	390	PQL	ug/Kg	
	CARBAZOLE	J	28	200	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	43	200	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	180	200	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5DN-QC-052711	ANTHRACENE	J	5.0	9.2	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	68	99	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	5.3	9.2	PQL	ug/Kg	
SL-071-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	5.1	9.2	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	8.7	9.2	PQL	ug/Kg	
	CHRYSENE	J	2.7	9.2	PQL	ug/Kg	
SL-091-SA5DN-SS-0.0-0.5	ANTHRACENE	J	3.5	9.0	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	3.8	9.0	PQL	ug/Kg	
SL-092-SA5DN-SS-0.0-0.5	ACENAPHTHENE	J	7.5	9.3	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	8.0	9.3	PQL	ug/Kg	
	FLUORENE	J	6.0	9.3	PQL	ug/Kg	
SL-093-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	4.9	9.0	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	5.6	9.0	PQL	ug/Kg	
	FLUORANTHENE	J	7.8	9.0	PQL	ug/Kg	
	PHENANTHRENE	J	4.8	9.0	PQL	ug/Kg	
	PYRENE	J	7.0	9.0	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE167 **Laboratory: LL**

EDD Filename: DE167_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-117-SA5DN-SS-0.0-0.5	ANTHRACENE	J	4.5	9.2	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	6.7	9.2	PQL	ug/Kg	
	BENZO(A)PYRENE	J	7.2	9.2	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	7.6	9.2	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	6.0	9.2	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	3.9	9.2	PQL	ug/Kg	
	PHENANTHRENE	J	4.8	9.2	PQL	ug/Kg	
SL-118-SA5DN-SS-0.0-0.5	ANTHRACENE	J	1.6	1.8	PQL	ug/Kg	J (all detects)
SL-120-SA5DN-SS-0.0-0.5	ANTHRACENE	J	3.5	9.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	7.5	9.0	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	7.7	9.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	3.7	9.0	PQL	ug/Kg	

LDC #: 26275Y4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE167 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
2nd Reviewer: CR

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No final
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	J N SW	Ag, Ba, Fe, Mn, K, Ti; > 4X
VII.	Duplicate Sample Analysis	SW N	Ag < 5X,
VIII.	Laboratory Control Samples (LCS)	N A	SRM,
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Mn.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-071-SA5DN-SS-0.0-0.5	11	SL-003-SA8N-SB-4.0-5.0	21		31	
2	SL-091-SA5DN-SS-0.0-0.5	12	SL-003-SA8N-SB-9.0-10.0	22		32	
3	SL-092-SA5DN-SS-0.0-0.5	13	SL-117-SA5DN-SS-0.0-0.5MS	23		33	
4	SL-093-SA5DN-SS-0.0-0.5	14	SL-117-SA5DN-SS-0.0-0.5MSD	24		34	
5	SL-117-SA5DN-SS-0.0-0.5	15	SL-117-SA5DN-SS-0.0-0.5DUP	25		35	
6	SL-118-SA5DN-SS-0.0-0.5	16		26		36	
7	SL-119-SA5DN-SS-0.0-0.5	17		27		37	
8	SL-120-SA5DN-SS-0.0-0.5	18		28		38	
9	SL-122-SA5DN-SS-0.0-0.5	19		29		39	
10	DUP09-SA5DN-QC-052711	20		30		40	

Notes: # Sb J/UJ - post spike 10x%

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE167
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6301476BKG Matrix Spike Lab Sample ID: 6301477MS Matrix Spike Duplicate Lab Sample ID: 6301478MSD
% Solids for Sample: 90.5
Batch Id(s): P15708D, P15726H, P15911B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		30141.1776		32318.3146		32852.4541		214.5577	220.9945	MG/KG	1015		1227		2			20	P
Antimony	121	0.1354	B	0.5050		0.5646		1.3128	1.3260	MG/KG	28	N	32	N	11		75 - 125	20	MS
Arsenic	75	5.2389		7.6823		7.6177		2.1881	2.2099	MG/KG	112		108		1		75 - 125	20	MS
Barium	137	137.8616		149.6855		152.6630		10.9403	11.0497	MG/KG	108		134		2			20	MS
Beryllium	9	0.8885		1.4312		1.7266		0.8752	0.8840	MG/KG	62	N	95		19		75 - 125	20	MS
Boron		0.9641	U	203.3042		213.4983		214.5577	220.9945	MG/KG	95		97		5		84 - 115	20	P
Cadmium	111	0.5003		1.5299		1.6223		1.0940	1.1050	MG/KG	94		102		6		75 - 125	20	MS
Calcium		5495.2725		5856.2195		5912.2818		429.1155	441.9890	MG/KG	84		94		1			20	P
Chromium	52	31.0259		40.8949		41.7901		10.9403	11.0497	MG/KG	90		97		2		75 - 125	20	MS
Cobalt	59	9.3251		61.6596		61.9669		54.7016	55.2486	MG/KG	96		95		0		75 - 125	20	MS
Copper	63	16.4294		26.4975		27.2707		10.9403	11.0497	MG/KG	92		98		3		75 - 125	20	MS
Iron		31761.4235		32230.9982		29432.5171		107.2789	110.4972	MG/KG	438		-2108		9			20	P
Lead	208	12.6292		17.3295		15.9978		3.2821	3.3149	MG/KG	143	N	102		8		75 - 125	20	MS
Lithium		24.0711		127.5460		131.2066		107.2789	110.4972	MG/KG	96		97		3		82 - 114	20	P
Magnesium		6578.9611		6836.6604		6792.2519		214.5577	220.9945	MG/KG	120		97		1			20	P
Manganese		463.7948		517.2912		453.7293		53.6394	55.2486	MG/KG	100		-18		13			20	P
Mercury		0.0644	B	0.2802		0.2598		0.1808	0.1767	MG/KG	119		111		8		65 - 135	20	CV
Molybdenum	98	0.5358		10.5487		10.2298		10.9403	11.0497	MG/KG	92		88		3		75 - 125	20	MS
Nickel	60	21.1461		31.9020		32.9282		10.9403	11.0497	MG/KG	98		107		3		75 - 125	20	MS
Phosphorus		387.4044		479.4593		475.7779		107.2789	110.4972	MG/KG	86		80		1		75 - 125	20	P
Potassium		5781.7452		7253.0805		7170.5845		1072.7887	1104.9724	MG/KG	137		126		1			20	P
Selenium	78	0.1948	B	2.2843		2.2762		2.1881	2.2099	MG/KG	95		94		0		75 - 125	20	MS
Silver	107	0.0643	B	11.0300		11.0232		10.9403	11.0497	MG/KG	100		99		0		75 - 125	20	MS
Sodium		101.3899	B	1097.7450		1163.6762		1072.7887	1104.9724	MG/KG	93		96		6		75 - 125	20	P
Strontium		31.7365		132.3682		136.0851		107.2789	110.4972	MG/KG	94		94		3		75 - 115	20	P
Thallium	203	0.3623		0.7785		0.7982		0.4376	0.4420	MG/KG	95		99		2		75 - 125	20	MS
Tin		2.7451	B	349.9941		367.7669		429.1155	441.9890	MG/KG	81		83		5		80 - 110	20	P
Titanium		1422.4580		1617.6731		1672.0663		107.2789	110.4972	MG/KG	182		226		3			20	P
Vanadium	51	56.6353		67.5674		69.9006		10.9403	11.0497	MG/KG	100		120		3			20	MS
Zinc	66	80.2080		89.9076		92.9282		10.9403	11.0497	MG/KG	89		115		3			20	MS
Zirconium		4.0906	B	99.9903		103.2077		107.2789	110.4972	MG/KG	89		90		3		75 - 125	20	P

METHODS:
P = ICP-Atomic Emission Spectrometer
MS = ICP-Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE167
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6301476BKG
% Solids for Duplicate: 90.2
Batch ID(s): P15708D, P15726H, P15911B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6301479DUP
% Solids for Sample: 90.5

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			30141.1776		29016.2734		4		P
Antimony	121		0.1354	B	0.1302	B	4		MS
Arsenic	75		5.2389		5.7459		9		MS
Barium	137		137.8616		138.4190		0		MS
Beryllium	9		0.8885		0.9180		3		MS
Boron			0.9641	U	0.9641	U			P
Cadmium	111	0.1	0.5003		0.5072		1		MS
Calcium			5495.2725		5246.8942		5		P
Chromium	52		31.0259		31.2155		1		MS
Cobalt	59		9.3251		9.9660		7		MS
Copper	63		16.4294		17.6307		7		MS
Iron			31761.4235		31597.3730		1		P
Lead	208		12.6292		13.3043		5		MS
Lithium			24.0711		25.6213		6		P
Magnesium			6578.9611		6532.5534		1		P
Manganese			463.7948		445.5519		4		P
Mercury			0.0644	B	1.5586		184	*	CV
Molybdenum	98	0.1	0.5358		0.5387		1		MS
Nickel	60		21.1461		21.7595		3		MS
Phosphorus			387.4044		417.8063		8		P
Potassium			5781.7452		5851.5459		1		P
Selenium	78		0.1948	B	0.2096	B	7		MS
Silver	107		0.0643	B	0.0448	B	36		MS
Sodium			101.3899	B	99.1019	B	2		P
Strontium			31.7365		29.9697		6		P
Thallium	203	0.1	0.3623		0.3553		2		MS
Tin			2.7451	B	2.8188	B	3		P
Titanium			1422.4580		1413.7764		1		P
Vanadium	51		56.6353		58.6910		4		MS
Zinc	66		80.2080		85.6991		7		MS
Zirconium			4.0906	B	4.9691	B	19		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

* Hg by difference 1,4-dioxane (≤ 0.208 mg/kg) U/nJ
(Qual 1-8, 10-12) (#9 batched with SDG DE171 4498 DE167)

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE168

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3050B	6010B	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3050B	6020	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3060A	7199	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3546	1625C	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3550B	8015B	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3550B	8015M	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3550B	8082	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3550B	8270C	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	3550B	8270C SIM	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	5035	8015M	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	5035	8260B	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	5035	8260B SIM	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	8330	8330A	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	Gen Prep	300.0	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	METHOD	314.0	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	METHOD	7471A	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	METHOD	8015B	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	METHOD	8015M	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	METHOD	8315A	III
31-May-2011	SL-013-SA5DN-SB-4.0-5.0	6302802	N	METHOD	9012B	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3050B	6010B	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3050B	6020	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3060A	7199	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3546	1625C	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3550B	8015B	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3550B	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3550B	8082	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3550B	8270C	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	3550B	8270C SIM	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	5035	8015M	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	5035	8260B	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	5035	8260B SIM	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	8330	8330A	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	Gen Prep	300.0	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	METHOD	314.0	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	METHOD	7471A	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	METHOD	8015B	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	METHOD	8015M	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	METHOD	8315A	III
31-May-2011	SL-013-SA5DN-SB-9.0-10.0	6302803	N	METHOD	9012B	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3050B	6010B	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3050B	6020	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3060A	7199	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3546	1625C	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3550B	8015B	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3550B	8015M	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3550B	8082	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3550B	8270C	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	3550B	8270C SIM	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	5035	8015M	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	5035	8260B	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	5035	8260B SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	8330	8330A	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	Gen Prep	300.0	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	METHOD	314.0	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	METHOD	7471A	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	METHOD	8015B	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	METHOD	8015M	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	METHOD	8315A	III
31-May-2011	DUP-10-SA5DN-QC-053111	6302801	FD	METHOD	9012B	III
31-May-2011	DUP-10-SA5DN-QC-053111MSD	P302801M240336A	MSD	METHOD	8315A	III
31-May-2011	DUP-10-SA5DN-QC-053111MS	P302801R240326A	MS	METHOD	8315A	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	3050B	6010B	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	3050B	6020	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	3060A	7199	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	3550B	8082	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	3550B	8270C	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	3550B	8270C SIM	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	5035	8260B	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	5035	8260B SIM	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	Gen Prep	300.0	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	METHOD	314.0	III
31-May-2011	SL-010-SA5DN-SB-4.0-5.0	6302799	N	METHOD	7471A	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	3050B	6010B	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	3050B	6020	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	3060A	7199	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	3550B	8082	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	3550B	8270C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	3550B	8270C SIM	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	Gen Prep	300.0	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	METHOD	314.0	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	METHOD	6850	III
31-May-2011	SL-010-SA5DN-SB-9.0-10.0	6302800	N	METHOD	7471A	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	3050B	6010B	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	3060A	7199	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	3550B	8082	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	3550B	8270C	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	3550B	8270C SIM	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	5035	8260B	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	5035	8260B SIM	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	Gen Prep	300.0	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	METHOD	314.0	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0	6302797	N	METHOD	7471A	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D220435A	DUP	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D220435B	DUP	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D220435C	DUP	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D220435D	DUP	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D221324	DUP	3050B	6010B	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D221409	DUP	METHOD	7471A	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D221805	DUP	3050B	6010B	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D271510A	DUP	Gen Prep	300.0	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0DU	P302797D272319A	DUP	METHOD	314.0	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R220438A	MS	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R220438B	MS	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R220438C	MS	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R220438D	MS	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R220555	MS	3050B	6010B	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R221410	MS	METHOD	7471A	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R221809	MS	3050B	6010B	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R260554	MS	3550B	8270C SIM	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R271525A	MS	Gen Prep	300.0	III
31-May-2011	SL-008-SA5DN-SB-4.0-5.0MS	P302797R272342A	MS	METHOD	314.0	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	3050B	6010B	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	3050B	6020	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	3060A	7199	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	3550B	8082	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	3550B	8270C	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	3550B	8270C SIM	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	Gen Prep	300.0	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	METHOD	314.0	III
31-May-2011	SL-008-SA5DN-SB-9.0-10.0	6302798	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE168 **Laboratory:** LL

EDD Filename: DE168_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-10-SA5DN-QC-053111 **Collected:** 5/31/2011 11:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q, FD
Nitrate-NO3	1.6	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5DN-SB-4.0-5.0 **Collected:** 5/31/2011 3:44:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.4		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5DN-SB-9.0-10.0 **Collected:** 5/31/2011 3:49:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-010-SA5DN-SB-4.0-5.0 **Collected:** 5/31/2011 2:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.4		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-010-SA5DN-SB-9.0-10.0 **Collected:** 5/31/2011 2:31:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	11.8		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-013-SA5DN-SB-4.0-5.0 **Collected:** 5/31/2011 10:11:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	11.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-013-SA5DN-SB-9.0-10.0 **Collected:** 5/31/2011 10:19:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.9		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE168 Laboratory: LL

EDD Filename: DE168_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	15.4		0.997	MDL	5.60	PQL	mg/Kg	J	FD

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	90600		34.3	MDL	112	PQL	mg/Kg	J	E, FD

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	273		0.0874	MDL	0.560	PQL	mg/Kg	J	E, E, FD
POTASSIUM	2930		20.2	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.65	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.36	J	0.941	MDL	5.60	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 3:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	33000		6.90	MDL	22.5	PQL	mg/Kg	J	E
MANGANESE	246		0.0877	MDL	0.562	PQL	mg/Kg	J	E, E
POTASSIUM	3070		20.2	MDL	56.2	PQL	mg/Kg	J	Q
TIN	2.87	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.20	J	0.945	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 3:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	8250		6.75	MDL	22.0	PQL	mg/Kg	J	E
MANGANESE	240		0.0859	MDL	0.551	PQL	mg/Kg	J	E, E
POTASSIUM	2510		19.8	MDL	55.1	PQL	mg/Kg	J	Q
TIN	2.95	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.68	J	0.925	MDL	5.51	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE168 **Laboratory:** LL

EDD Filename: DE168_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-010-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4020		6.76	MDL	22.1	PQL	mg/Kg	J	E
MANGANESE	272		0.0860	MDL	0.551	PQL	mg/Kg	J	E, E
POTASSIUM	3460		19.8	MDL	55.1	PQL	mg/Kg	J	Q
TIN	3.14	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.25	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 2:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6300		6.75	MDL	22.0	PQL	mg/Kg	J	E
MANGANESE	653		0.0859	MDL	0.551	PQL	mg/Kg	J	E, E
POTASSIUM	3000		19.8	MDL	55.1	PQL	mg/Kg	J	Q
TIN	3.15	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.03	J	0.925	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 10:11:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	9200		6.95	MDL	22.7	PQL	mg/Kg	J	E
MANGANESE	374		0.0884	MDL	0.567	PQL	mg/Kg	J	E, E
POTASSIUM	3340		20.4	MDL	56.7	PQL	mg/Kg	J	Q
TIN	3.04	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.37	J	0.952	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	21000		6.93	MDL	22.6	PQL	mg/Kg	J	E
MANGANESE	291		0.0882	MDL	0.565	PQL	mg/Kg	J	E, E
POTASSIUM	3470		20.3	MDL	56.5	PQL	mg/Kg	J	Q
TIN	2.87	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.52	J	0.949	MDL	5.65	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0452	U	0.0452	MDL	0.452	PQL	mg/Kg	UJ	FD

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.245		0.0679	MDL	0.226	PQL	mg/Kg	J	Q, FD
BERYLLIUM	0.863		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	31.9		0.136	MDL	0.452	PQL	mg/Kg	J	A
LEAD	10.6		0.0118	MDL	0.226	PQL	mg/Kg	J	Q, E
SILVER	0.0446	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, FD
VANADIUM	63.9		0.0249	MDL	0.113	PQL	mg/Kg	J	A

Sample ID: SL-008-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 3:44:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0523	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 3:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.177	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.807		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	27.2		0.134	MDL	0.446	PQL	mg/Kg	J	A
LEAD	9.71		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E
SILVER	0.0548	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	54.8		0.0245	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-008-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 3:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.616		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CADMIUM	0.0765	J	0.0428	MDL	0.107	PQL	mg/Kg	J	Z
CHROMIUM	17.5		0.128	MDL	0.428	PQL	mg/Kg	J	A
LEAD	5.23		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE168 Laboratory: LL

EDD Filename: DE168_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-008-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 3:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0255	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	36.7		0.0235	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: SL-010-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.143	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.754		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	22.0		0.136	MDL	0.454	PQL	mg/Kg	J	A
LEAD	5.77		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E
SILVER	0.0281	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	44.9		0.0250	MDL	0.114	PQL	mg/Kg	J	A

Sample ID: SL-010-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 2:31:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0526	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 2:31:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.227	J	0.0687	MDL	0.229	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.918		0.0183	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	27.3		0.137	MDL	0.458	PQL	mg/Kg	J	A
LEAD	9.45		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E
SILVER	0.0223	J	0.0137	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	52.8		0.0252	MDL	0.115	PQL	mg/Kg	J	A

Sample ID: SL-013-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 10:11:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0862	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE168 Laboratory: LL

EDD Filename: DE168_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-013-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 10:11:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.270		0.0680	MDL	0.227	PQL	mg/Kg	J	Q
BERYLLIUM	0.949		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	32.9		0.136	MDL	0.453	PQL	mg/Kg	J	A
LEAD	9.50		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E
SILVER	0.0532	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	60.3		0.0249	MDL	0.113	PQL	mg/Kg	J	A

Sample ID: SL-013-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 10:19:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0588	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 10:19:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.258		0.0665	MDL	0.222	PQL	mg/Kg	J	Q
BERYLLIUM	0.763		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	29.1		0.133	MDL	0.443	PQL	mg/Kg	J	A
LEAD	9.33		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
SILVER	0.0420	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	58.1		0.0244	MDL	0.111	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: SL-010-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 2:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE168 Laboratory: LL

EDD Filename: DE168_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-013-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 10:11:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

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

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0067	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z, FD

Sample ID: SL-010-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 2:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0056	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0038	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Method Category: SVOA **Method:** 1625C **Matrix:** SO

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	68.1		18.9	MDL	37.7	PQL	ng/Kg	J	FD

Method Category: SVOA **Method:** 6850 **Matrix:** SO

Sample ID: SL-010-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 2:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	2.4	J	2.4	MDL	5.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 6850 **Matrix:** SO

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.45	U	0.45	MDL	1.4	PQL	mg/Kg	UJ	FD

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

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.8	MDL	20	PQL	ug/Kg	UJ	B, FD
Di-n-butylphthalate	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-008-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 3:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-008-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 3:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: SL-010-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE168 **Laboratory:** LL

EDD Filename: DE168_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-010-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 2:31:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-013-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 10:11:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.8	U	6.8	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-013-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 10:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	190	J	110	MDL	570	PQL	ug/Kg	J	Z, FD

Sample ID: SL-013-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 10:11:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	330	J	120	MDL	580	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE168 Laboratory: LL

EDD Filename: DE168_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP-10-SA5DN-QC-053111 *Collected:* 5/31/2011 11:45:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.0		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.8	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-008-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 3:44:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	12		7.3	MDL	8.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-010-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.5		7.0	MDL	8.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.4	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-013-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 10:11:00 *Analysis Type:* RES *Dilution:* 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.2		6.5	MDL	7.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.8	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-013-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 10:19:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.3		7.1	MDL	8.5	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.1	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE168

Method Blank Outlier Report

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15808BB220530	6/8/2011 5:30:00 AM	PHOSPHORUS TIN	1.09 mg/Kg 1.28 mg/Kg	DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-10-SA5DN-QC-053111(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-008-SA5DN-SB-4.0-5.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-008-SA5DN-SB-9.0-10.0(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-010-SA5DN-SB-4.0-5.0(RES)	TIN	3.14 mg/Kg	3.14U mg/Kg
SL-010-SA5DN-SB-9.0-10.0(RES)	TIN	3.15 mg/Kg	3.15U mg/Kg
SL-013-SA5DN-SB-4.0-5.0(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-013-SA5DN-SB-9.0-10.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15826DB220423A	6/11/2011 4:23:00 AM	COPPER LEAD	0.152 mg/Kg 0.0660 mg/Kg	DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB76B210344A	6/7/2011 3:44:00 AM	ACETONE METHYLENE CHLORIDE	8.4 ug/Kg 1.4 ug/Kg	DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-10-SA5DN-QC-053111(RES)	ACETONE	9.0 ug/Kg	9.0U ug/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-10-SA5DN-QC-053111(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.1U ug/Kg
SL-008-SA5DN-SB-4.0-5.0(RES)	ACETONE	12 ug/Kg	12U ug/Kg
SL-008-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.3U ug/Kg
SL-010-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.5 ug/Kg	9.5U ug/Kg
SL-010-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.4 ug/Kg	4.2U ug/Kg
SL-013-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.2 ug/Kg	8.2U ug/Kg
SL-013-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	3.9U ug/Kg
SL-013-SA5DN-SB-9.0-10.0(RES)	ACETONE	9.3 ug/Kg	9.3U ug/Kg
SL-013-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.1 ug/Kg	4.3U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA15B260133	6/21/2011 1:33:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	7.8 ug/Kg	DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-10-SA5DN-QC-053111(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	12 ug/Kg	20U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE168 Laboratory: LL

EDD Filename: DE168_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SB-4.0-5.0MS SL-008-SA5DN-SB-4.0-5.0MSD (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	ANTIMONY BERYLLIUM LEAD ZINC	58 - - -	55 72 57 69	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ANTIMONY BERYLLIUM LEAD ZINC	J (all detects) UJ (all non-detects) Zn No Qual, >4x
SL-008-SA5DN-SB-4.0-5.0MS SL-008-SA5DN-SB-4.0-5.0MSD (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	BARIUM	139	37	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SB-4.0-5.0MS SL-008-SA5DN-SB-4.0-5.0MSD (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	MAGNESIUM POTASSIUM	- 149	198 151	75.00-125.00 75.00-125.00	- -	MAGNESIUM POTASSIUM	J(all detects) Mg No Qual, >4x
SL-008-SA5DN-SB-4.0-5.0MS SL-008-SA5DN-SB-4.0-5.0MSD (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	CALCIUM IRON	- -1141	-2118 854	75.00-125.00 75.00-125.00	35 (20.00) -	CALCIUM IRON	J(all detects) UJ(all non-detects) No Qual based on %R, >4x
SL-008-SA5DN-SB-4.0-5.0MS SL-008-SA5DN-SB-4.0-5.0MSD (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	MANGANESE	204	378	75.00-125.00	24 (20.00)	MANGANESE	J(all detects) UJ(all non-detects) No Qual based on %R, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SB-4.0-5.0MS SL-008-SA5DN-SB-4.0-5.0MSD (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	ALUMINUM TITANIUM	1002 360	704 310	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5DN-SB-4.0-5.0MS (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	FLUORIDE	43	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-008-SA5DN-SB-4.0-5.0DUP (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	MANGANESE	36	20.00	J (all detects) UJ (all non-detects) Zr No Qual, OK by difference
	Zirconium	52	20.00	

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-008-SA5DN-SB-4.0-5.0DUP (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	LEAD	27	20.00	J(all detects) UJ(all non-detects) Se, Ag No Qual, OK by difference
	SELENIUM	200	20.00	
	SILVER	21	20.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P5LALCSQ260206 (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	Diethylphthalate	235	-	68.00-125.00	-	Diethylphthalate	J (all detects)
P5LALCSQ260206 (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	Di-n-butylphthalate FLUORANTHENE	79 71	- -	84.00-132.00 78.00-120.00	- -	Di-n-butylphthalate FLUORANTHENE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15826DQ220426A (DUP-10-SA5DN-QC-053111 SL-008-SA5DN-SB-4.0-5.0 SL-008-SA5DN-SB-9.0-10.0 SL-010-SA5DN-SB-4.0-5.0 SL-010-SA5DN-SB-9.0-10.0 SL-013-SA5DN-SB-4.0-5.0 SL-013-SA5DN-SB-9.0-10.0)	ANTIMONY	132	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Field Duplicate RPD Report

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
MOISTURE	12.300000000	11.6	6		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
N-NITROSODIMETHYLAMINE	21.400000000	68.1	104	50.00	J(all detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
FLUORIDE	18.200000000	7.5	83	50.00	J(all detects) No Qual for NO3 within limits
Nitrate-NO3	1.600000000	1.6	0	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
ALUMINUM	30300.000000000	38900	25	50.00	J(all detects) UJ(all non-detects) Al, Fe, Li, Mg, P, K, Na, Sr, Sn, Ti, Zr No Qual, within limits
BORON	5.540000000 U	15.4	200	50.00	
CALCIUM	6810.000000000	90600	172	50.00	
IRON	34300.000000000	28600	18	50.00	
LITHIUM	28.500000000	25.3	12	50.00	
MAGNESIUM	6890.000000000	6400	7	50.00	
MANGANESE	1370.000000000	273	134	50.00	
PHOSPHORUS	169.000000000	174	3	50.00	
POTASSIUM	2520.000000000	2930	15	50.00	
SODIUM	741.000000000	597	22	50.00	
STRONTIUM	49.700000000	69.4	33	50.00	
TIN	2.930000000	2.65	10	50.00	
TITANIUM	963.000000000	1410	38	50.00	
Zirconium	2.090000000	3.36	47	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
ANTIMONY	0.135000000	0.245	58	50.00	J(all detects) UJ(all non-detects) As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Tl, V, Zn No Qual, within limits
ARSENIC	5.630000000	7.25	25	50.00	
BARIUM	148.000000000	142	4	50.00	
BERYLLIUM	0.867000000	0.863	0	50.00	
CADMIUM	0.148000000	0.115	25	50.00	
CHROMIUM	26.900000000	31.9	17	50.00	
COBALT	12.600000000	13.1	4	50.00	
COPPER	13.500000000	14.7	9	50.00	
LEAD	9.750000000	10.6	8	50.00	
MOLYBDENUM	0.311000000	0.481	43	50.00	
NICKEL	18.200000000	20.0	9	50.00	
SELENIUM	0.064000000	0.452 U	200	50.00	
SILVER	0.084700000	0.0446	62	50.00	
THALLIUM	0.301000000	0.305	1	50.00	
VANADIUM	42.900000000	63.9	39	50.00	
ZINC	59.700000000	59.5	0	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
HEXAVALENT CHROMIUM	1.200000000	0.32	116	50.00	J(all detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
MERCURY	0.111000000 U	0.0067	200	50.00	J (all detects) UJ (all non-detects)

Method: 8015B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
METHANOL	570.000000000 U	190	200	50.00	J (all detects) UJ (all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
EFH (C30-C40)	0.710000000	1.4 U	200	50.00	J (all detects) UJ (all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.190000000	4.1 U	200	50.00	J (all detects) UJ (all non-detects)
ACETONE	8.200000000	9.0	9	50.00	Acetone, Methylene Chloride No Qual, within limits
METHYLENE CHLORIDE	2.100000000	1.8	15	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
BIS(2-ETHYLHEXYL)PHTHALATE	20.000000000 U	12	200	50.00	J (all detects) UJ (all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
PH	8.950000000	8.62	4	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-10-SA5DN-QC-053111	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-10-SA5DN-QC-053111	TIN Zirconium	J J	2.65 3.36	11.2 5.60	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-008-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.87 3.20	11.2 5.62	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-008-SA5DN-SB-9.0-10.0	TIN Zirconium	J J	2.95 1.68	11.0 5.51	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-010-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	3.14 2.25	11.0 5.51	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-010-SA5DN-SB-9.0-10.0	TIN Zirconium	J J	3.15 3.03	11.0 5.51	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-013-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	3.04 3.37	11.3 5.67	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-013-SA5DN-SB-9.0-10.0	TIN Zirconium	J J	2.87 2.52	11.3 5.65	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-10-SA5DN-QC-053111	SILVER	J	0.0446	0.113	PQL	mg/Kg	J (all detects)
SL-008-SA5DN-SB-4.0-5.0	ANTIMONY SELENIUM SILVER	J J J	0.177 0.0523 0.0548	0.223 0.446 0.111	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-008-SA5DN-SB-9.0-10.0	ANTIMONY CADMIUM SILVER	J J J	0.139 0.0765 0.0255	0.214 0.107 0.107	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-010-SA5DN-SB-4.0-5.0	ANTIMONY SILVER	J J	0.143 0.0281	0.227 0.114	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-010-SA5DN-SB-9.0-10.0	ANTIMONY SELENIUM SILVER	J J J	0.227 0.0526 0.0223	0.229 0.458 0.115	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-013-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0862 0.0532	0.453 0.113	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-013-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.0588 0.0420	0.443 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA5DN-SB-9.0-10.0	PERCHLORATE	J	2.4	5.7	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-10-SA5DN-QC-053111	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-010-SA5DN-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-013-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.37	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-10-SA5DN-QC-053111	MERCURY	J	0.0067	0.108	PQL	mg/Kg	J (all detects)
SL-010-SA5DN-SB-9.0-10.0	MERCURY	J	0.0056	0.112	PQL	mg/Kg	J (all detects)
SL-013-SA5DN-SB-9.0-10.0	MERCURY	J	0.0038	0.114	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-10-SA5DN-QC-053111	METHANOL	J	190	570	PQL	ug/Kg	J (all detects)
SL-013-SA5DN-SB-4.0-5.0	METHANOL	J	330	580	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-10-SA5DN-QC-053111	METHYLENE CHLORIDE	J	1.8	4.1	PQL	ug/Kg	J (all detects)
SL-008-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.6	4.3	PQL	ug/Kg	J (all detects)
SL-010-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.4	4.2	PQL	ug/Kg	J (all detects)
SL-013-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.8	3.9	PQL	ug/Kg	J (all detects)
SL-013-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	2.1	4.3	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE168 **Laboratory: LL**

EDD Filename: DE168_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
DUP-10-SA5DN-QC-053111	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	20	PQL	ug/Kg	J (all detects)

LDC #: 26275Z4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE168 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
2nd Reviewer: DL

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

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

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

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

Validated Samples:

1	SL-008-SA5DN-SB-4.0-5.0	11		21		31	
2	SL-008-SA5DN-SB-9.0-10.0	12		22		32	
3	SL-010-SA5DN-SB-4.0-5.0	13		23		33	
4	SL-010-SA5DN-SB-9.0-10.0	14		24		34	
5	DUP-10-SA5DN-QC-053111	15		25		35	
6	SL-013-SA5DN-SB-4.0-5.0	16		26		36	
7	SL-013-SA5DN-SB-9.0-10.0	17		27		37	
8	#1 MS	18		28		38	
9	↓ MSD	19		29		39	
10	↓ Dup	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE168
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6302797BKG Matrix Spike Lab Sample ID: 6302797MS Matrix Spike Duplicate Lab Sample ID: 6302797MSD
% Solids for Sample: 86.3
Batch Id(s): P15908B, P15826D, P15808B, P15811C

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		29938.9396		32237.0019		31523.9231		229.4552	224.9997	MG/KG	1002		704		2			20	P
Antimony	121	0.1772	B	0.9613		0.9211		1.3632	1.3632	MG/KG	58	N	55	N	4		75 - 125	20	MS
Arsenic	75	6.5380		9.1791		8.4339		2.2721	2.2721	MG/KG	116		83		8		75 - 125	20	MS
Barium	137	131.2060		146.9793		135.4145		11.3603	11.3603	MG/KG	139		37		8			20	MS
Beryllium	9	0.8069		1.4846		1.4607		0.9088	0.9088	MG/KG	75		72	N	2		75 - 125	20	MS
Boron		17.4544		245.4593		248.9583		227.2056	227.2056	MG/KG	100		102		1		84 - 115	20	P
Cadmium	111	0.1282		1.3775		1.3026		1.1360	1.1360	MG/KG	110		103		6		75 - 125	20	MS
Calcium		32981.5534		33407.9885		23358.0783		454.4112	454.4112	MG/KG	94		-2118		35	*		20	P
Chromium	52	27.1637		37.5116		36.5119		11.3603	11.3603	MG/KG	91		82		3		75 - 125	20	MS
Cobalt	59	9.1162		63.9584		62.6633		56.8014	56.8014	MG/KG	97		94		2		75 - 125	20	MS
Copper	63	12.7997		24.1747		23.5158		11.3603	11.3603	MG/KG	100		94		3		75 - 125	20	MS
Iron		29226.2350		27929.6606		30196.2136		113.6028	113.6028	MG/KG	-1141		854		8			20	P
Lead	208	9.7067		13.1620		11.6329		3.4081	3.4081	MG/KG	101		57	N	12		75 - 125	20	MS
Lithium		24.2381		139.6201		140.6834		113.6028	113.6028	MG/KG	102		103		1		82 - 114	20	P
Magnesium		6332.8916		6591.9649		6781.8156		227.2056	227.2056	MG/KG	114		198		3			20	P
Manganese		246.4433		362.4759		461.3955		56.8014	56.8014	MG/KG	204		378		24	*		20	P
Mercury		0.0034	U	0.2029		0.2115		0.1914	0.1888	MG/KG	106		112		4		65 - 135	20	CV
Molybdenum	98	0.2839		11.5057		11.0036		11.3603	11.3603	MG/KG	99		94		4		75 - 125	20	MS
Nickel	60	17.9829		30.7864		30.0820		11.3603	11.3603	MG/KG	113		107		2		75 - 125	20	MS
Phosphorus		277.6542		373.6453		396.4215		113.6028	113.6028	MG/KG	84		105		6		75 - 125	20	P
Potassium		3066.4537		4763.6471		4781.3498		1136.0280	1136.0280	MG/KG	149	N	151	N	0		75 - 125	20	P
Selenium	78	0.0523	B	2.2253		2.3357		2.2721	2.2721	MG/KG	96		100		5		75 - 125	20	MS
Silver	107	0.0548	B	11.7511		11.3535		11.3603	11.3603	MG/KG	103		99		3		75 - 125	20	MS
Sodium		736.5715		1836.1825		1864.9990		1136.0280	1136.0280	MG/KG	97		99		2		75 - 125	20	P
Strontium		44.5106		155.7812		154.3601		113.6028	113.6028	MG/KG	98		97		1		75 - 115	20	P
Thallium	203	0.2808		0.7661		0.6771		0.4544	0.4544	MG/KG	107		87		12		75 - 125	20	MS
Tin		2.8732	B	397.2610		403.6591		454.4112	454.4112	MG/KG	87		88		2		80 - 110	20	P
Titanium		1172.9033		1585.7830		1521.7057		114.7276	112.4999	MG/KG	360		310		4			20	P
Vanadium	51	54.7509		66.6394		65.7760		11.3603	11.3603	MG/KG	105		97		1			20	MS
Zinc	66	52.3665		63.2540		60.2095		11.3603	11.3603	MG/KG	96		69		5			20	MS
Zirconium		3.2029	B	113.8948		114.7786		113.6028	113.6028	MG/KG	97		98		1		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE168
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6302797BKG
% Solids for Duplicate: 86.3
Batch ID(s): P15908B, P15826D, P15808B, P15811C
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6302797DUP
% Solids for Sample: 86.3

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			29938.9396		28578.2477		5		P
Antimony	121		0.1772	B	0.1727	B	3		MS
Arsenic	75		6.5380		5.5941		16		MS
Barium	137		131.2060		122.1849		7		MS
Beryllium	9		0.8069		0.7382		9		MS
Boron		5.6	17.4544		15.9601		9		P
Cadmium	111	0.1	0.1282		0.1366		6		MS
Calcium			32981.5534		34062.0101		3		P
Chromium	52		27.1637		26.7545		2		MS
Cobalt	59		9.1162		9.6325		6		MS
Copper	63		12.7997		12.7577		0		MS
Iron			29226.2350		27645.0537		6		P
Lead	208		9.7067		7.4252		27	*	MS
Lithium			24.2381		22.4331		8		P
Magnesium			6332.8916		5928.0928		7		P
Manganese			246.4433		355.9744		36	*	P
Mercury			0.0034	U	0.0034	U			CV
Molybdenum	98	0.1	0.2839		0.2632		8		MS
Nickel	60		17.9829		17.5028		3		MS
Phosphorus			277.6542		282.4268		2		P
Potassium			3066.4537		3015.4466		2		P
Selenium	78		0.0523	B	0.0459	U	200		MS
Silver	107		0.0548	B	0.0445	B	21		MS
Sodium			736.5715		688.4114		7		P
Strontium			44.5106		41.2185		8		P
Thallium	203	0.1	0.2808		0.2721		3		MS
Tin			2.8732	B	2.8264	B	2		P
Titanium			1172.9033		1338.6804		13		P
Vanadium	51		54.7509		50.5719		8		MS
Zinc	66		52.3665		50.2966		4		MS
Zirconium			3.2029	B	5.4734	B	52		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE169

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	3050B	6010B	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	3050B	6020	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	3060A	7199	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	3550B	8081A	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	3550B	8082	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	3550B	8151A	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	3550B	8270C	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	3550B	8270C SIM	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	METHOD	300.0	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	METHOD	314.0	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5	6302754	N	METHOD	7471A	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5MS	P302754R241550A	MS	3550B	8151A	III
31-May-2011	SL-094-SA5DN-SS-0.0-0.5MS	P302754R242028A	MS	3550B	8081A	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	3050B	6010B	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	3050B	6020	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	3060A	7199	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	3550B	8081A	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	3550B	8082	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	3550B	8151A	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	3550B	8270C	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	3550B	8270C SIM	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	METHOD	300.0	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	METHOD	314.0	III
31-May-2011	SL-095-SA5DN-SS-0.0-0.5	6302755	N	METHOD	7471A	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3050B	6010B	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3060A	7199	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3546	1625C	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3550B	8015B	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3550B	8015M	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3550B	8081A	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3550B	8082	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3550B	8151A	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3550B	8270C	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	3550B	8270C SIM	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	8330	8330A	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	METHOD	300.0	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	METHOD	314.0	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	METHOD	6850	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	METHOD	7471A	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	METHOD	8015B	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	METHOD	8015M	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	METHOD	8315A	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5	6302756	N	METHOD	9012B	III
31-May-2011	SL-097-SA5DN-SS-0.0-0.5MS	P302756R241238A	MS	METHOD	6850	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3050B	6010B	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3050B	6020	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3060A	7199	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3546	1625C	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3550B	8015B	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3550B	8015M	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3550B	8082	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3550B	8151A	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3550B	8270C	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	3550B	8270C SIM	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	8330	8330A	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	METHOD	300.0	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	METHOD	314.0	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	METHOD	7471A	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	METHOD	8015B	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	METHOD	8015M	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	METHOD	8315A	III
31-May-2011	SL-098-SA5DN-SS-0.0-0.5	6302757	N	METHOD	9012B	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3050B	6010B	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3050B	6020	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3060A	7199	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3546	1625C	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3550B	8015B	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3550B	8015M	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3550B	8081A	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3550B	8082	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3550B	8151A	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3550B	8270C	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	3550B	8270C SIM	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	8330	8330A	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	METHOD	300.0	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	METHOD	7471A	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	METHOD	8015B	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	METHOD	8015M	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	METHOD	8315A	III
31-May-2011	SL-125-SA5DN-SS-0.0-0.5	6302769	N	METHOD	9012B	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3050B	6010B	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3050B	6020	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3060A	7199	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3546	1625C	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3550B	8015B	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3550B	8015M	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3550B	8081A	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3550B	8082	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3550B	8151A	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3550B	8270C	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	3550B	8270C SIM	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	8330	8330A	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	METHOD	300.0	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	METHOD	314.0	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	METHOD	7471A	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	METHOD	8015B	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	METHOD	8015M	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	METHOD	8315A	III
31-May-2011	SL-121-SA5DN-SS-0.0-0.5	6302768	N	METHOD	9012B	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3050B	6010B	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3060A	7199	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3546	1625C	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3550B	8015B	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3550B	8015M	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3550B	8081A	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3550B	8082	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3550B	8151A	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3550B	8270C	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	3550B	8270C SIM	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	8330	8330A	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	METHOD	300.0	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	METHOD	314.0	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	METHOD	7471A	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	METHOD	8015B	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	METHOD	8015M	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	METHOD	8315A	III
31-May-2011	SL-103-SA5DN-SS-0.0-0.5	6302761	N	METHOD	9012B	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3050B	6010B	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3050B	6020	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3060A	7199	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3546	1625C	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3550B	8015B	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3550B	8015M	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3550B	8081A	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3550B	8082	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3550B	8270C	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	3550B	8270C SIM	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	8330	8330A	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	METHOD	300.0	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	METHOD	314.0	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	METHOD	7471A	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	METHOD	8015B	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	METHOD	8015M	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	METHOD	8315A	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5	6302762	N	METHOD	9012B	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5DU	P302762D270524B	DUP	METHOD	300.0	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5DU	P302762D271128B	DUP	METHOD	314.0	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5DU	P302762D272302B	DUP	METHOD	300.0	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5MS	P302762R270539B	MS	METHOD	300.0	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5MS	P302762R271151B	MS	METHOD	314.0	III
31-May-2011	SL-104-SA5DN-SS-0.0-0.5MS	P302762R272315B	MS	METHOD	300.0	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3050B	6010B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3050B	6020	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3060A	7199	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3546	1625C	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3550B	8015B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3550B	8015M	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3550B	8082	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3550B	8270C	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	3550B	8270C SIM	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	5035	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	5035	8260B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	5035	8260B SIM	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	8330	8330A	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	METHOD	300.0	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	METHOD	314.0	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	METHOD	7471A	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	METHOD	8015B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	METHOD	8015M	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	METHOD	8315A	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0	6302747	N	METHOD	9012B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	3060A	7199	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	3550B	8015B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	3550B	8015M	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	3550B	8082	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	3550B	8270C	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	3550B	8270C SIM	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	5035	8015M	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	5035	8260B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	5035	8260B SIM	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	8330	8330A	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	METHOD	300.0	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	METHOD	314.0	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	METHOD	8015B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	METHOD	8015M	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	METHOD	8315A	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302748	MS	METHOD	9012B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302749	MS	3050B	6010B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302749	MS	3050B	6020	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302749	MS	3546	1625C	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0MS	6302749	MS	METHOD	7471A	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0DU	6302750	DUP	3050B	6010B	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0DU	6302750	DUP	3050B	6020	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0DU	6302750	DUP	3060A	7199	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0DU	6302750	DUP	METHOD	300.0	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0DU	6302750	DUP	METHOD	314.0	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0DU	6302750	DUP	METHOD	7471A	III
31-May-2011	SL-014-SA5DN-SB-4.0-5.0DU	6302750	DUP	METHOD	9012B	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3050B	6010B	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3050B	6020	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3060A	7199	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3546	1625C	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3550B	8015B	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3550B	8015M	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3550B	8082	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3550B	8270C	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	3550B	8270C SIM	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	5035	8015M	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	5035	8260B	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	5035	8260B SIM	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	8330	8330A	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	METHOD	300.0	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	METHOD	7471A	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	METHOD	8015B	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	METHOD	8015M	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	METHOD	8315A	III
31-May-2011	SL-014-SA5DN-SB-9.0-10.0	6302751	N	METHOD	9012B	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3005A	6010B	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3020A	6020	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3510C	8015B	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3510C	8015M	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3510C	8081A	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3510C	8082	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3510C	8270C	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3510C	8270C SIM	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	3520C	1625C	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	8330	8330A	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	Gen Prep	300.0	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	Gen Prep	314.0	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	Gen Prep	7199	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	Gen Prep	8015B	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	Gen Prep	8015M	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	METHOD	7470A	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	METHOD	8151A	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	METHOD	8315A	III
31-May-2011	EB10-SA5DN-SS-053111	6302770	EB	METHOD	9012B	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	3005A	6010B	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	3020A	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	3510C	8081A	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	3510C	8082	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	3510C	8270C	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	3510C	8270C SIM	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	5030B	8260B	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	5030B	8260B SIM	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	Gen Prep	300.0	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	Gen Prep	314.0	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	Gen Prep	7199	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	METHOD	7470A	III
31-May-2011	EB11-SA5DN-SB-053111	6302752	EB	METHOD	8151A	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3050B	6010B	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3050B	6020	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3060A	7199	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3546	1625C	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3550B	8015B	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3550B	8015M	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3550B	8081A	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3550B	8082	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3550B	8151A	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3550B	8270C	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	3550B	8270C SIM	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	8330	8330A	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	METHOD	300.0	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	METHOD	314.0	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	METHOD	7471A	III

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	METHOD	8015B	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	METHOD	8015M	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	METHOD	8315A	III
31-May-2011	SL-102-SA5DN-SS-0.0-0.5	6302760	N	METHOD	9012B	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3050B	6010B	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3050B	6020	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3060A	7199	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3546	1625C	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3550B	8015B	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3550B	8015M	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3550B	8081A	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3550B	8082	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3550B	8151A	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3550B	8270C	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	3550B	8270C SIM	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	8330	8330A	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	METHOD	300.0	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	METHOD	314.0	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	METHOD	6850	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	METHOD	7471A	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	METHOD	8015B	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	METHOD	8015M	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	METHOD	8315A	III
31-May-2011	SL-111-SA5DN-SS-0.0-0.5	6302764	N	METHOD	9012B	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3050B	6010B	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3050B	6020	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3060A	7199	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3546	1625C	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3550B	8015B	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3550B	8015M	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3550B	8081A	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3550B	8082	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3550B	8151A	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3550B	8270C	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	3550B	8270C SIM	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	8330	8330A	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	METHOD	300.0	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	METHOD	314.0	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	METHOD	7471A	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	METHOD	8015B	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	METHOD	8015M	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	METHOD	8315A	III
31-May-2011	SL-099-SA5DN-SS-0.0-0.5	6302758	N	METHOD	9012B	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3050B	6010B	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3050B	6020	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3060A	7199	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3546	1625C	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3550B	8015B	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3550B	8015M	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3550B	8081A	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3550B	8082	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3550B	8270C	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	3550B	8270C SIM	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	8330	8330A	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	METHOD	300.0	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	METHOD	314.0	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	METHOD	7471A	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	METHOD	8015B	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	METHOD	8015M	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	METHOD	8315A	III
31-May-2011	SL-113-SA5DN-SS-0.0-0.5	6302766	N	METHOD	9012B	III
31-May-2011	TB-053111	6302753	TB	5030B	8015M	III
31-May-2011	TB-053111	6302753	TB	5030B	8260B	III
31-May-2011	TB-053111	6302753	TB	5030B	8260B SIM	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3050B	6010B	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3050B	6020	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3060A	7199	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3546	1625C	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3550B	8015B	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3550B	8015M	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3550B	8081A	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3550B	8082	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3550B	8151A	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3550B	8270C	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	3550B	8270C SIM	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	8330	8330A	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	METHOD	314.0	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	METHOD	7471A	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	METHOD	8015B	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	METHOD	8015M	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	METHOD	8315A	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5	6302765	N	METHOD	9012B	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5DU	P302765D270937B	DUP	METHOD	9012B	III
31-May-2011	SL-112-SA5DN-SS-0.0-0.5MS	P302765R270938B	MS	METHOD	9012B	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3050B	6010B	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3050B	6020	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3060A	7199	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3546	1625C	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3550B	8081A	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3550B	8082	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3550B	8151A	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3550B	8270C	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	3550B	8270C SIM	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	METHOD	300.0	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	METHOD	314.0	III
31-May-2011	SL-114-SA5DN-SS-0.0-0.5	6302767	N	METHOD	7471A	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	3050B	6010B	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	3050B	6020	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	3060A	7199	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	3550B	8081A	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	3550B	8082	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	3550B	8270C	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	3550B	8270C SIM	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	METHOD	300.0	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	METHOD	314.0	III
31-May-2011	SL-101-SA5DN-SS-0.0-0.5	6302759	N	METHOD	7471A	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3050B	6010B	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3050B	6020	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3060A	7199	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3546	1625C	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3550B	8015B	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3550B	8015M	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3550B	8081A	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3550B	8082	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3550B	8151A	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3550B	8270C	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	3550B	8270C SIM	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	8330	8330A	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	METHOD	300.0	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	METHOD	314.0	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	METHOD	7471A	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	METHOD	8015B	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	METHOD	8015M	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	METHOD	8315A	III
31-May-2011	SL-110-SA5DN-SS-0.0-0.5	6302763	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE169 Laboratory: LL

EDD Filename: PrepDE169_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	18.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q, FD
Nitrate-NO3	1.6	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.4		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-095-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-098-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-099-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.85	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-101-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.85	U	0.85	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-102-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-103-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-104-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-110-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:50:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-111-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-112-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-113-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.88	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6810		6.79	MDL	22.1	PQL	mg/Kg	J	E, FD
POTASSIUM	2520		19.9	MDL	55.4	PQL	mg/Kg	J	E
TIN	2.93	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.09	J	0.930	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.985	U	0.985	MDL	5.54	PQL	mg/Kg	UJ	FD

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	1370		0.173	MDL	1.11	PQL	mg/Kg	J	E, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-014-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6670		7.07	MDL	23.1	PQL	mg/Kg	J	E
MANGANESE	334		0.0900	MDL	0.577	PQL	mg/Kg	J	E
POTASSIUM	3010		20.8	MDL	57.7	PQL	mg/Kg	J	E
TIN	2.86	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.28	J	0.969	MDL	5.77	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5380		6.71	MDL	21.9	PQL	mg/Kg	J	E
MANGANESE	467		0.0853	MDL	0.547	PQL	mg/Kg	J	E
POTASSIUM	5710		19.7	MDL	54.7	PQL	mg/Kg	J	E
SODIUM	78.0	J	40.8	MDL	109	PQL	mg/Kg	J	Z
TIN	2.72	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.83	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4090		6.32	MDL	20.6	PQL	mg/Kg	J	E
MANGANESE	359		0.0804	MDL	0.515	PQL	mg/Kg	J	E
POTASSIUM	4590		18.6	MDL	51.5	PQL	mg/Kg	J	E
SODIUM	72.6	J	38.4	MDL	103	PQL	mg/Kg	J	Z
TIN	2.64	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.96	J	0.866	MDL	5.15	PQL	mg/Kg	J	Z

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5200		6.76	MDL	22.1	PQL	mg/Kg	J	E
MANGANESE	490		0.0860	MDL	0.551	PQL	mg/Kg	J	E
POTASSIUM	5620		19.9	MDL	55.1	PQL	mg/Kg	J	E
SODIUM	68.9	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.73	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.05	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-098-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 9:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5540		6.82	MDL	22.2	PQL	mg/Kg	J	E
MANGANESE	453		0.0868	MDL	0.556	PQL	mg/Kg	J	E
POTASSIUM	5430		20.0	MDL	55.6	PQL	mg/Kg	J	E
SODIUM	85.6	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	2.70	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.40	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-099-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6740		6.46	MDL	21.1	PQL	mg/Kg	J	E
MANGANESE	473		0.0822	MDL	0.527	PQL	mg/Kg	J	E
POTASSIUM	4480		19.0	MDL	52.7	PQL	mg/Kg	J	E
SODIUM	91.1	J	39.3	MDL	105	PQL	mg/Kg	J	Z
TIN	2.81	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	3.56	J	0.885	MDL	5.27	PQL	mg/Kg	J	Z

Sample ID: SL-101-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:30:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5420		6.48	MDL	21.2	PQL	mg/Kg	J	E
MANGANESE	370		0.0825	MDL	0.529	PQL	mg/Kg	J	E
POTASSIUM	4840		19.0	MDL	52.9	PQL	mg/Kg	J	E
SODIUM	96.9	J	39.5	MDL	106	PQL	mg/Kg	J	Z
TIN	2.87	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.03	J	0.889	MDL	5.29	PQL	mg/Kg	J	Z

Sample ID: SL-102-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 1:20:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5010		6.59	MDL	21.5	PQL	mg/Kg	J	E
MANGANESE	373		0.0838	MDL	0.537	PQL	mg/Kg	J	E
POTASSIUM	4010		19.3	MDL	53.7	PQL	mg/Kg	J	E
SODIUM	94.0	J	40.1	MDL	107	PQL	mg/Kg	J	Z
TIN	2.71	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-102-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:20:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.63	J	0.903	MDL	5.37	PQL	mg/Kg	J	Z

Sample ID: SL-103-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5260		6.71	MDL	21.9	PQL	mg/Kg	J	E
MANGANESE	391		0.0853	MDL	0.547	PQL	mg/Kg	J	E
POTASSIUM	4340		19.7	MDL	54.7	PQL	mg/Kg	J	E
TIN	2.74	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	4.15	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-104-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4790		6.41	MDL	20.9	PQL	mg/Kg	J	E
MANGANESE	374		0.0816	MDL	0.523	PQL	mg/Kg	J	E
POTASSIUM	3650		18.8	MDL	52.3	PQL	mg/Kg	J	E
SODIUM	96.2	J	39.0	MDL	105	PQL	mg/Kg	J	Z
TIN	2.68	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.35	J	0.879	MDL	5.23	PQL	mg/Kg	J	Z

Sample ID: SL-110-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5180		6.71	MDL	21.9	PQL	mg/Kg	J	E
MANGANESE	433		0.0854	MDL	0.548	PQL	mg/Kg	J	E
POTASSIUM	5270		19.7	MDL	54.8	PQL	mg/Kg	J	E
SODIUM	95.8	J	40.9	MDL	110	PQL	mg/Kg	J	Z
TIN	2.70	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.42	J	0.920	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4480		6.82	MDL	22.2	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-111-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	409		0.0868	MDL	0.556	PQL	mg/Kg	J	E
POTASSIUM	4660		20.0	MDL	55.6	PQL	mg/Kg	J	E
SODIUM	77.8	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	2.67	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.95	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4590		6.55	MDL	21.4	PQL	mg/Kg	J	E
MANGANESE	401		0.0834	MDL	0.535	PQL	mg/Kg	J	E
POTASSIUM	4430		19.2	MDL	53.5	PQL	mg/Kg	J	E
SODIUM	81.1	J	39.9	MDL	107	PQL	mg/Kg	J	Z
TIN	2.62	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.96	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5180		6.65	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	450		0.0847	MDL	0.543	PQL	mg/Kg	J	E
POTASSIUM	4820		19.5	MDL	54.3	PQL	mg/Kg	J	E
SODIUM	80.5	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	2.71	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.29	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5180		6.37	MDL	20.8	PQL	mg/Kg	J	E
MANGANESE	421		0.0810	MDL	0.519	PQL	mg/Kg	J	E
POTASSIUM	4610		18.7	MDL	51.9	PQL	mg/Kg	J	E
SODIUM	71.8	J	38.7	MDL	104	PQL	mg/Kg	J	Z
TIN	2.56	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.34	J	0.872	MDL	5.19	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4600		6.45	MDL	21.0	PQL	mg/Kg	J	E
MANGANESE	393		0.0820	MDL	0.526	PQL	mg/Kg	J	E
POTASSIUM	4260		18.9	MDL	52.6	PQL	mg/Kg	J	E
SODIUM	75.1	J	39.2	MDL	105	PQL	mg/Kg	J	Z
TIN	2.74	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.43	J	0.884	MDL	5.26	PQL	mg/Kg	J	Z

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5500		6.76	MDL	22.1	PQL	mg/Kg	J	E
MANGANESE	499		0.0860	MDL	0.551	PQL	mg/Kg	J	E
POTASSIUM	5400		19.8	MDL	55.1	PQL	mg/Kg	J	E
SODIUM	82.0	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.77	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.41	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: AQ**

Sample ID: EB11-SA5DN-SB-053111 *Collected:* 5/31/2011 12:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000062	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.135	J	0.0677	MDL	0.226	PQL	mg/Kg	J	Z, Q, FD
ARSENIC	5.63		0.0903	MDL	0.452	PQL	mg/Kg	J	Q
CHROMIUM	26.9		0.135	MDL	0.452	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	18.2		0.113	MDL	0.452	PQL	mg/Kg	J	Q, E
SILVER	0.0847	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, FD
VANADIUM	42.9		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, A

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0640	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z, FD

Sample ID: SL-014-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 11:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	6.92		0.0923	MDL	0.462	PQL	mg/Kg	J	Q
CHROMIUM	22.2		0.138	MDL	0.462	PQL	mg/Kg	J	Q, A
NICKEL	17.3		0.115	MDL	0.462	PQL	mg/Kg	J	Q, E
SILVER	0.0336	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	45.8		0.0254	MDL	0.115	PQL	mg/Kg	J	Q, A

Sample ID: SL-014-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 11:55:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0602	J	0.0462	MDL	0.462	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.246		0.0644	MDL	0.215	PQL	mg/Kg	J	Q
ARSENIC	6.17		0.0858	MDL	0.429	PQL	mg/Kg	J	Q
CHROMIUM	25.5		0.129	MDL	0.429	PQL	mg/Kg	J	Q, A
NICKEL	20.7		0.107	MDL	0.429	PQL	mg/Kg	J	Q, E
SILVER	0.0507	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	45.2		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.193	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.198	J	0.0630	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	5.23		0.0841	MDL	0.420	PQL	mg/Kg	J	Q
CHROMIUM	20.4		0.126	MDL	0.420	PQL	mg/Kg	J	Q, A
NICKEL	15.7		0.105	MDL	0.420	PQL	mg/Kg	J	Q, E
SILVER	0.0491	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	35.6		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, A

Sample ID: SL-095-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.239		0.0649	MDL	0.216	PQL	mg/Kg	J	Q
ARSENIC	6.41		0.0865	MDL	0.433	PQL	mg/Kg	J	Q
CHROMIUM	26.5		0.130	MDL	0.433	PQL	mg/Kg	J	Q, A
NICKEL	20.9		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E
SILVER	0.0492	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	46.7		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.188	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-098-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 9:45:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.232		0.0667	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	5.48		0.0890	MDL	0.445	PQL	mg/Kg	J	Q
CHROMIUM	29.3		0.133	MDL	0.445	PQL	mg/Kg	J	Q, A
NICKEL	23.1		0.111	MDL	0.445	PQL	mg/Kg	J	Q, E
SILVER	0.0504	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	43.5		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: SL-098-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 9:45:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.172	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-099-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.185	J	0.0614	MDL	0.205	PQL	mg/Kg	J	Z, Q
ARSENIC	5.87		0.0818	MDL	0.409	PQL	mg/Kg	J	Q
CHROMIUM	26.1		0.123	MDL	0.409	PQL	mg/Kg	J	Q, A
NICKEL	21.2		0.102	MDL	0.409	PQL	mg/Kg	J	Q, E
SILVER	0.0567	J	0.0123	MDL	0.102	PQL	mg/Kg	J	Z
VANADIUM	40.2		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, A

Sample ID: SL-099-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:05:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.156	J	0.0409	MDL	0.409	PQL	mg/Kg	J	Z

Sample ID: SL-101-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.440		0.0628	MDL	0.209	PQL	mg/Kg	J	Q
ARSENIC	5.28		0.0838	MDL	0.419	PQL	mg/Kg	J	Q
CHROMIUM	23.4		0.126	MDL	0.419	PQL	mg/Kg	J	Q, A
NICKEL	19.9		0.105	MDL	0.419	PQL	mg/Kg	J	Q, E
SILVER	0.0965	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-101-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	50.5		0.0230	MDL	0.105	PQL	mg/Kg	J	Q, A

Sample ID: SL-101-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:30:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.250	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z

Sample ID: SL-102-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 1:20:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.212		0.0633	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	7.45		0.0843	MDL	0.422	PQL	mg/Kg	J	Q
CHROMIUM	25.2		0.127	MDL	0.422	PQL	mg/Kg	J	Q, A
NICKEL	19.2		0.105	MDL	0.422	PQL	mg/Kg	J	Q, E
SILVER	0.0602	J	0.0127	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	40.5		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, A

Sample ID: SL-102-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 1:20:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.155	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-103-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 11:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.228		0.0650	MDL	0.217	PQL	mg/Kg	J	Q
ARSENIC	6.59		0.0867	MDL	0.433	PQL	mg/Kg	J	Q
CHROMIUM	25.0		0.130	MDL	0.433	PQL	mg/Kg	J	Q, A
NICKEL	21.5		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E
SILVER	0.0570	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	42.4		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-103-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 11:05:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-104-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 11:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.196	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q
ARSENIC	5.62		0.0829	MDL	0.414	PQL	mg/Kg	J	Q
CHROMIUM	22.7		0.124	MDL	0.414	PQL	mg/Kg	J	Q, A
NICKEL	18.8		0.104	MDL	0.414	PQL	mg/Kg	J	Q, E
SILVER	0.0659	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	39.7		0.0228	MDL	0.104	PQL	mg/Kg	J	Q, A

Sample ID: SL-104-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 11:25:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.165	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-110-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.193	J	0.0638	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	6.21		0.0851	MDL	0.425	PQL	mg/Kg	J	Q
CHROMIUM	25.2		0.128	MDL	0.425	PQL	mg/Kg	J	Q, A
NICKEL	20.7		0.106	MDL	0.425	PQL	mg/Kg	J	Q, E
SILVER	0.0487	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	44.0		0.0234	MDL	0.106	PQL	mg/Kg	J	Q, A

Sample ID: SL-110-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:50:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-111-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.185	J	0.0661	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	9.15		0.0881	MDL	0.441	PQL	mg/Kg	J	Q
CHROMIUM	24.4		0.132	MDL	0.441	PQL	mg/Kg	J	Q, A
NICKEL	18.8		0.110	MDL	0.441	PQL	mg/Kg	J	Q, E
SILVER	0.0509	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	42.5		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A

Sample ID: SL-111-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.150	J	0.0641	MDL	0.214	PQL	mg/Kg	J	Z, Q
ARSENIC	5.59		0.0855	MDL	0.428	PQL	mg/Kg	J	Q
CHROMIUM	24.1		0.128	MDL	0.428	PQL	mg/Kg	J	Q, A
NICKEL	18.7		0.107	MDL	0.428	PQL	mg/Kg	J	Q, E
SILVER	0.0409	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	41.1		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A

Sample ID: SL-112-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.167	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.413		0.0633	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	6.73		0.0843	MDL	0.422	PQL	mg/Kg	J	Q
CHROMIUM	25.8		0.127	MDL	0.422	PQL	mg/Kg	J	Q, A
NICKEL	22.0		0.105	MDL	0.422	PQL	mg/Kg	J	Q, E
SILVER	0.0625	J	0.0127	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-113-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	45.2		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, A

Sample ID: SL-113-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.186	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.156	J	0.0623	MDL	0.208	PQL	mg/Kg	J	Z, Q
ARSENIC	6.17		0.0831	MDL	0.415	PQL	mg/Kg	J	Q
CHROMIUM	20.2		0.125	MDL	0.415	PQL	mg/Kg	J	Q, A
NICKEL	16.2		0.104	MDL	0.415	PQL	mg/Kg	J	Q, E
SILVER	0.0636	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	37.3		0.0228	MDL	0.104	PQL	mg/Kg	J	Q, A

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.252		0.0619	MDL	0.206	PQL	mg/Kg	J	Q
ARSENIC	6.03		0.0825	MDL	0.413	PQL	mg/Kg	J	Q
CHROMIUM	70.8		0.124	MDL	0.413	PQL	mg/Kg	J	Q, A
NICKEL	46.7		0.103	MDL	0.413	PQL	mg/Kg	J	Q, E
SILVER	0.0813	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	39.9		0.0227	MDL	0.103	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0413	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.269		0.0655	MDL	0.218	PQL	mg/Kg	J	Q
ARSENIC	5.18		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
CHROMIUM	26.2		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
NICKEL	20.1		0.109	MDL	0.437	PQL	mg/Kg	J	Q, E
SILVER	0.0469	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	45.8		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, A

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.2		0.23	MDL	1.1	PQL	mg/Kg	J	FD

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-101-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.98	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-102-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 1:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.64	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-104-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 11:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.99	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-110-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.64	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 1:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.81	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.53	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.82	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-114-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.83	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-125-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 10:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Method Category: METALS

Method: 7470A **Matrix: AQ**

Sample ID: EB10-SA5DN-SS-053111 *Collected:* 5/31/2011 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000046	U	0.000046	MDL	0.00020	PQL	mg/L	UJ	L

Sample ID: EB11-SA5DN-SB-053111 *Collected:* 5/31/2011 12:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000046	U	0.000046	MDL	0.00020	PQL	mg/L	UJ	L

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0032	U	0.0032	MDL	0.111	PQL	mg/Kg	UJ	FD

Sample ID: SL-014-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0037	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0319	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0626	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 Laboratory: LL

EDD Filename: PrepDE169_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0586	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-101-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0090	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Method Category: SVOA **Method:** 1625C **Matrix:** AQ

Sample ID: EB10-SA5DN-SS-053111 *Collected:* 5/31/2011 12:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	1.18		0.531	MDL	1.06	PQL	ng/L	UJ	B, S

Method Category: SVOA **Method:** 1625C **Matrix:** SO

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	21.4	J	19.0	MDL	38.0	PQL	ng/Kg	J	Z, FD

Method Category: SVOA **Method:** 6850 **Matrix:** SO

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	3.5	J	2.4	MDL	5.6	PQL	ug/Kg	J	Z

Sample ID: SL-111-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	3.7	J	2.3	MDL	5.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 Laboratory: LL

EDD Filename: PrepDE169_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 6850 **Matrix:** SO

Method Category: SVOA **Method:** 8015M **Matrix:** AQ

Sample ID: EB10-SA5DN-SS-053111 *Collected:* 5/31/2011 12:15:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.095	U	0.095	MDL	0.57	PQL	mg/L	UJ	H
EFH (C15-C20)	0.095	U	0.095	MDL	0.57	PQL	mg/L	UJ	H
EFH (C21-C30)	0.095	U	0.095	MDL	0.57	PQL	mg/L	UJ	H
EFH (C30-C40)	0.095	U	0.095	MDL	0.57	PQL	mg/L	UJ	H
EFH (C8-C11)	0.095	U	0.095	MDL	0.57	PQL	mg/L	UJ	H

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q
Propylene glycol	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.71	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z, FD

Sample ID: SL-014-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.54	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* REA2 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	9.3	J	4.5	MDL	13	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-098-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 9:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.6	J	2.2	MDL	6.7	PQL	mg/Kg	J	Z

Sample ID: SL-099-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.0	J	2.1	MDL	6.3	PQL	mg/Kg	J	Z

Sample ID: SL-104-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 11:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	12	J	4.2	MDL	13	PQL	mg/Kg	J	Z

Sample ID: SL-110-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:50:00 ***Analysis Type:*** REA2 ***Dilution:*** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	23	J	8.8	MDL	26	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 1:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.5	J	0.89	MDL	2.7	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.0	J	4.4	MDL	13	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 10:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.3	J	4.3	MDL	13	PQL	mg/Kg	J	Z

Sample ID: SL-125-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 10:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.9	J	2.2	MDL	6.6	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Method Category: SVOA **Method:** 8081A **Matrix:** AQ

Sample ID: EB10-SA5DN-SS-053111 *Collected:* 5/31/2011 12:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.0088	J	0.0026	MDL	0.010	PQL	ug/L	J	Z

Sample ID: EB11-SA5DN-SB-053111 *Collected:* 5/31/2011 12:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.0084	J	0.0027	MDL	0.010	PQL	ug/L	J	Z

Method Category: SVOA **Method:** 8081A **Matrix:** SO

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.68		0.073	MDL	0.38	PQL	ug/Kg	J	Q
4,4'-DDT	2.0		0.073	MDL	0.38	PQL	ug/Kg	J	Q, Q, Q
Chlordane	2.0	J	0.88	MDL	3.8	PQL	ug/Kg	J	Z
ENDRIN	0.49	U	0.49	MDL	0.49	PQL	ug/Kg	R	Q
ENDRIN KETONE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	R	Q

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.4	J	0.90	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-098-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	3.1		0.074	MDL	0.38	PQL	ug/Kg	J	S
4,4'-DDT	2.4		0.074	MDL	0.38	PQL	ug/Kg	J	S
ALPHA-BHC	0.045	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.090	J	0.040	MDL	0.19	PQL	ug/Kg	J	Z, S
DIELDRIN	0.49		0.074	MDL	0.38	PQL	ug/Kg	J	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-098-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 9:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.15	J	0.067	MDL	0.19	PQL	ug/Kg	J	Z, S

Sample ID: SL-099-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.8		0.070	MDL	0.36	PQL	ug/Kg	J	S
Chlordane	4.2		0.85	MDL	3.6	PQL	ug/Kg	J	S
DIELDRIN	0.82		0.070	MDL	0.36	PQL	ug/Kg	J	S
HEPTACHLOR EPOXIDE	0.19		0.036	MDL	0.18	PQL	ug/Kg	J	S

Sample ID: SL-101-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.4		0.071	MDL	0.36	PQL	ug/Kg	J	S
4,4'-DDT	2.6		0.071	MDL	0.36	PQL	ug/Kg	J	S
Chlordane	5.7		0.85	MDL	3.6	PQL	ug/Kg	J	S
gamma-BHC (Lindane)	0.11	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z, S
HEPTACHLOR	0.28		0.064	MDL	0.18	PQL	ug/Kg	J	S

Sample ID: SL-102-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 1:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	2.5		0.072	MDL	0.37	PQL	ug/Kg	J	S
4,4'-DDT	2.1		0.072	MDL	0.37	PQL	ug/Kg	J	S
Chlordane	3.0	J	0.88	MDL	3.7	PQL	ug/Kg	J	Z, S
DIELDRIN	0.46		0.072	MDL	0.37	PQL	ug/Kg	J	S

Sample ID: SL-104-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 11:25:00 ***Analysis Type:*** DL-BASE/NEUTRAL ***Dilution:*** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	3.7	J	1.4	MDL	7.3	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-104-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 11:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	2.2	U	2.2	MDL	2.2	PQL	ug/Kg	R	S
ALDRIN	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	R	S
ALPHA-BHC	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	R	S
BETA-BHC	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	R	S
Chlordane	0.85	U	0.85	MDL	3.6	PQL	ug/Kg	R	S
DELTA-BHC	0.087	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z, S
DIELDRIN	1.4	U	1.4	MDL	1.4	PQL	ug/Kg	R	S
ENDOSULFAN I	0.096	U	0.096	MDL	0.18	PQL	ug/Kg	R	S
ENDOSULFAN II	0.22	U	0.22	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.096	U	0.096	MDL	0.18	PQL	ug/Kg	R	S
HEPTACHLOR	0.096	U	0.096	MDL	0.18	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.18	U	0.18	MDL	0.18	PQL	ug/Kg	R	S
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	R	S

Sample ID: SL-110-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 3:50:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.0	J	0.88	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-111-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 1:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.35	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
Chlordane	2.5	J	0.89	MDL	3.8	PQL	ug/Kg	J	Z
DIELDRIN	0.29	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.11	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.10	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-112-SA5DN-SS-0.0-0.5 ***Collected:*** 5/31/2011 2:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.9		0.072	MDL	0.37	PQL	ug/Kg	J	S
Chlordane	2.2	J	0.87	MDL	3.7	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-113-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.7	J	0.88	MDL	3.7	PQL	ug/Kg	J	S

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.043	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.3		0.071	MDL	0.36	PQL	ug/Kg	J	S
Chlordane	4.6		0.86	MDL	3.6	PQL	ug/Kg	J	S
DELTA-BHC	0.076	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z, S
DIELDRIN	0.55		0.071	MDL	0.36	PQL	ug/Kg	J	S

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.9	J	0.88	MDL	3.7	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-095-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:05:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	12	J	5.4	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-099-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.5	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-101-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.8	J	2.1	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-102-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.8	J	2.1	MDL	9.3	PQL	ug/Kg	J	Z

Sample ID: SL-103-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	5.2	J	4.3	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-104-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	7.1	J	4.2	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-110-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	8.2	J	2.1	MDL	9.3	PQL	ug/Kg	J	Z
Aroclor 5460	6.6	J	5.5	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	5.8	J	5.3	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.4	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	7.6	J	2.1	MDL	9.4	PQL	ug/Kg	J	Z
Aroclor 5460	6.3	J	5.5	MDL	18	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.097	J	0.083	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-101-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	130	J	81	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-104-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.17	J	0.080	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-110-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.18	J	0.082	MDL	0.19	PQL	ug/Kg	J	Z
DICHLOROPROP	1.5	J	0.87	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-112-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.14	J	0.082	MDL	0.19	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.13	J	0.080	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.17	J	0.080	MDL	0.18	PQL	ug/Kg	J	Z
DICHLOROPROP	1.6	J	0.86	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	Q

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	18	MDL	370	PQL	ug/Kg	J	Z, L

Sample ID: SL-095-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	18	MDL	350	PQL	ug/Kg	J	Z, L

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	18	MDL	370	PQL	ug/Kg	J	Z, L

Sample ID: SL-098-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	130	J	19	MDL	190	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-098-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	370	PQL	ug/Kg	J	Z, L
CARBAZOLE	35	J	19	MDL	190	PQL	ug/Kg	J	Z, L
DIBENZO(A,H)ANTHRACENE	43	J	19	MDL	190	PQL	ug/Kg	J	Z, L
INDENO(1,2,3-CD)PYRENE	120	J	19	MDL	190	PQL	ug/Kg	J	Z, L

Sample ID: SL-103-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	41	J	18	MDL	360	PQL	ug/Kg	J	Z, L

Sample ID: SL-104-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	40	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BENZO(A)PYRENE	48	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BENZO(B)FLUORANTHENE	64	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	32	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BENZO(K)FLUORANTHENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	350	PQL	ug/Kg	J	Z, L
CHRYSENE	56	J	18	MDL	180	PQL	ug/Kg	J	Z, L
FLUORANTHENE	58	J	18	MDL	180	PQL	ug/Kg	J	Z, L
INDENO(1,2,3-CD)PYRENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z, L
PYRENE	64	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-110-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z, L
PYRENE	18	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-112-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	18	MDL	360	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-113-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	200		18	MDL	180	PQL	ug/Kg	J	L
BENZO(A)PYRENE	170	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BENZO(G,H,I)PERYLENE	93	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BENZO(K)FLUORANTHENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BIS(2-ETHYLHEXYL)PHTHALATE	50	J	18	MDL	360	PQL	ug/Kg	J	Z, L
CHRYSENE	190		18	MDL	180	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z, L
FLUORANTHENE	280		18	MDL	180	PQL	ug/Kg	J	L
INDENO(1,2,3-CD)PYRENE	85	J	18	MDL	180	PQL	ug/Kg	J	Z, L
PHENANTHRENE	68	J	18	MDL	180	PQL	ug/Kg	J	Z, L
PYRENE	300		18	MDL	180	PQL	ug/Kg	J	L

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	28	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	18	MDL	360	PQL	ug/Kg	J	Z, L
CHRYSENE	59	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BENZO(A)PYRENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BENZO(B)FLUORANTHENE	38	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	350	PQL	ug/Kg	J	Z, L
Butylbenzylphthalate	20	J	18	MDL	180	PQL	ug/Kg	J	Z, L
FLUORANTHENE	36	J	18	MDL	180	PQL	ug/Kg	J	Z, L
PYRENE	40	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	260	J	18	MDL	360	PQL	ug/Kg	J	Z, L
CHRYSENE	47	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB10-SA5DN-SS-053111 *Collected:* 5/31/2011 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.028	J	0.011	MDL	0.054	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.030	J	0.011	MDL	0.054	PQL	ug/L	J	Z
Dimethylphthalate	0.054	U	0.054	MDL	1.1	PQL	ug/L	UJ	E
Di-n-butylphthalate	0.062	J	0.054	MDL	1.1	PQL	ug/L	J	Z

Sample ID: EB11-SA5DN-SB-053111 *Collected:* 5/31/2011 12:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.023	J	0.011	MDL	0.053	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.024	J	0.011	MDL	0.053	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.082	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Dimethylphthalate	0.053	U	0.053	MDL	1.1	PQL	ug/L	UJ	E
Di-n-butylphthalate	0.070	J	0.053	MDL	1.1	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory:** LL

EDD Filename: PrepDE169_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-094-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.89	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.90	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-095-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.87	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.46	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.4	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.75	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-098-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.99	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.96	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.82	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-099-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.49	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
FLUORENE	0.75	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.80	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 Laboratory: LL

EDD Filename: PrepDE169_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-101-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.73	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	13	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.9	J	6.4	MDL	19	PQL	ug/Kg	J	Z
FLUORENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-102-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.42	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.8	J	6.6	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.88	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-103-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	4.2	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
NAPHTHALENE	4.4	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-104-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.5	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	5.1	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
PHENANTHRENE	8.6	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

Sample ID: SL-110-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	7.1	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	7.5	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-110-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	5.5	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	8.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	96	J	33	MDL	98	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.3	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
PHENANTHRENE	4.3	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-111-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	7.1	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	8.3	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	5.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	6.8	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.6	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-112-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	7.8	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	7.4	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	8.6	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.3	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
PHENANTHRENE	5.1	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-113-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	3.0	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	7.8	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	5.4	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	6.3	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 Laboratory: LL

EDD Filename: PrepDE169_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-114-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	6.0	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z
PYRENE	5.4	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.7	J	1.8	MDL	8.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.8	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	7.1	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.1	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	6.5	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.4	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-014-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	47	J	44	MDL	130	PQL	ug/Kg	J	Z

Sample ID: SL-097-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	58	J	45	MDL	130	PQL	ug/Kg	J	Z

Sample ID: SL-102-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	51	J	43	MDL	130	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-103-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 11:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	45	J	42	MDL	130	PQL	ug/Kg	J	Z

Sample ID: SL-110-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 3:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	53	J	43	MDL	130	PQL	ug/Kg	J	Z

Sample ID: SL-111-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	43	J	42	MDL	130	PQL	ug/Kg	J	Z

Sample ID: SL-125-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	51	J	44	MDL	130	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: AQ**

Sample ID: EB10-SA5DN-SS-053111 *Collected:* 5/31/2011 12:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	0.084	U	0.084	MDL	0.26	PQL	mg/L	UJ	L

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 Laboratory: LL

EDD Filename: PrepDE169_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA **Method:** 8015B **Matrix:** SO

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	110	U	110	MDL	570	PQL	ug/Kg	UJ	FD

Sample ID: SL-121-SA5DN-SS-0.0-0.5 *Collected:* 5/31/2011 10:40:00 *Analysis Type:* REA3 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
p-Terphenyl	28	J	16	MDL	38	PQL	mg/Kg	J	Z

Method Category: VOA **Method:** 8260B **Matrix:** AQ

Sample ID: EB11-SA5DN-SB-053111 *Collected:* 5/31/2011 12:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.9	J	0.5	MDL	5	PQL	ug/L	J	Z

Sample ID: TB-053111 *Collected:* 5/31/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.9	J	0.5	MDL	5	PQL	ug/L	J	Z

Method Category: VOA **Method:** 8260B **Matrix:** SO

Sample ID: SL-014-SA5DN-SB-4.0-5.0 *Collected:* 5/31/2011 11:40:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.19	J	0.11	MDL	4.0	PQL	ug/Kg	J	Z, FD
ACETONE	8.2		6.7	MDL	8.0	PQL	ug/Kg	U	B
Chlorotrifluoroethylene	0.50	U	0.50	MDL	5.0	PQL	ug/Kg	UJ	Q
METHYLENE CHLORIDE	2.1	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-014-SA5DN-SB-9.0-10.0 *Collected:* 5/31/2011 11:55:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.1		7.0	MDL	8.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-014-SA5DN-SB-9.0-10.0** ***Collected:*** **5/31/2011 11:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	2.0	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE169

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE169 **Laboratory: LL**
EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M **Preparation Method: 3510C**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB10-SA5DN-SS-053111 (REA3)	Sampling To Analysis	8.00	7.00	DAYS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI15B261718	6/21/2011 5:18:00 PM	N-NITROSODIMETHYLAMINE	12.1 ng/L	EB10-SA5DN-SS-053111

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB10-SA5DN-SS-053111(RES)	N-NITROSODIMETHYLAMINE	1.18 ng/L	1.18U ng/L

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16048CB221243	6/10/2011 12:43:00 PM	MAGNESIUM	0.0195 mg/L	EB10-SA5DN-SS-053111 EB11-SA5DN-SB-053111

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16008BB221041	6/10/2011 10:41:00 AM	PHOSPHORUS TIN	0.975 mg/Kg 1.07 mg/Kg	SL-014-SA5DN-SB-4.0-5.0 SL-014-SA5DN-SB-9.0-10.0 SL-094-SA5DN-SS-0.0-0.5 SL-095-SA5DN-SS-0.0-0.5 SL-097-SA5DN-SS-0.0-0.5 SL-098-SA5DN-SS-0.0-0.5 SL-099-SA5DN-SS-0.0-0.5 SL-101-SA5DN-SS-0.0-0.5 SL-102-SA5DN-SS-0.0-0.5 SL-103-SA5DN-SS-0.0-0.5 SL-104-SA5DN-SS-0.0-0.5 SL-110-SA5DN-SS-0.0-0.5 SL-111-SA5DN-SS-0.0-0.5 SL-112-SA5DN-SS-0.0-0.5 SL-113-SA5DN-SS-0.0-0.5 SL-114-SA5DN-SS-0.0-0.5 SL-121-SA5DN-SS-0.0-0.5 SL-125-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-014-SA5DN-SB-4.0-5.0(REA2)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-014-SA5DN-SB-9.0-10.0(REA2)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-094-SA5DN-SS-0.0-0.5(REA2)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-095-SA5DN-SS-0.0-0.5(REA2)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-097-SA5DN-SS-0.0-0.5(REA2)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-098-SA5DN-SS-0.0-0.5(REA2)	TIN	2.70 mg/Kg	2.70U mg/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-099-SA5DN-SS-0.0-0.5(REA2)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-101-SA5DN-SS-0.0-0.5(REA2)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-102-SA5DN-SS-0.0-0.5(REA2)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-103-SA5DN-SS-0.0-0.5(REA2)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-104-SA5DN-SS-0.0-0.5(REA2)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-110-SA5DN-SS-0.0-0.5(REA2)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-111-SA5DN-SS-0.0-0.5(REA2)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-112-SA5DN-SS-0.0-0.5(REA2)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-113-SA5DN-SS-0.0-0.5(REA2)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-114-SA5DN-SS-0.0-0.5(REA2)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-121-SA5DN-SS-0.0-0.5(REA2)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-125-SA5DN-SS-0.0-0.5(REA2)	TIN	2.77 mg/Kg	2.77U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB76B210344A	6/7/2011 3:44:00 AM	ACETONE METHYLENE CHLORIDE	8.4 ug/Kg 1.4 ug/Kg	SL-014-SA5DN-SB-4.0-5.0 SL-014-SA5DN-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-014-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.2 ug/Kg	8.2U ug/Kg
SL-014-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.1 ug/Kg	4.0U ug/Kg
SL-014-SA5DN-SB-9.0-10.0(RES)	ACETONE	9.1 ug/Kg	9.1U ug/Kg
SL-014-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.0 ug/Kg	4.2U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE169 Laboratory: LL

EDD Filename: DE169_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0MS SL-014-SA5DN-SB-4.0-5.0MSD (SL-014-SA5DN-SB-4.0-5.0)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	42 - -	22 39 44	59.00-109.00 63.00-107.00 63.00-107.00	61 (20.00) 51 (20.00) 50 (20.00)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-094-SA5DN-SS-0.0-0.5MS SL-094-SA5DN-SS-0.0-0.5MSD (SL-094-SA5DN-SS-0.0-0.5)	DIELDRIN ENDOSULFAN II ENDRIN ALDEHYDE HEPTACHLOR EPOXIDE	274 - 439 276	- - - -	19.00-154.00 28.00-154.00 10.00-148.00 13.00-157.00	132 (50.00) 55 (50.00) 167 (35.00) 108 (50.00)	DIELDRIN ENDOSULFAN II ENDRIN ALDEHYDE HEPTACHLOR EPOXIDE	J(all detects)
SL-094-SA5DN-SS-0.0-0.5MS SL-094-SA5DN-SS-0.0-0.5MSD (SL-094-SA5DN-SS-0.0-0.5)	4,4'-DDT ENDRIN ENDRIN KETONE	1690 0 0	-67 - -	10.00-176.00 11.00-149.00 22.00-165.00	159 (50.00) 200 (50.00) 200 (50.00)	4,4'-DDT ENDRIN ENDRIN KETONE	J(all detects) R(all non-detects)
SL-094-SA5DN-SS-0.0-0.5MSD (SL-094-SA5DN-SS-0.0-0.5)	4,4'-DDE	-	9	18.00-161.00	-	4,4'-DDE	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-094-SA5DN-SS-0.0-0.5MSD (SL-094-SA5DN-SS-0.0-0.5)	2,4-DB DICAMBA	- -	- -	10.00-201.00 10.00-190.00	61 (50.00) 70 (50.00)	2,4-DB DICAMBA	J(all detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0MSD (SL-014-SA5DN-SB-4.0-5.0)	EFH (C21-C30)	-	125	49.00-123.00	30 (20.00)	EFH (C21-C30)	J(all detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0MSD (SL-014-SA5DN-SB-4.0-5.0)	m-Terphenyl	-	73	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0MS SL-014-SA5DN-SB-4.0-5.0MSD (SL-014-SA5DN-SB-4.0-5.0)	1,2,4-TRICHLOROBENZENE	124	121	72.00-115.00	-	1,2,4-TRICHLOROBENZENE	
	1,2-DICHLOROBENZENE	113	115	66.00-108.00	-	1,2-DICHLOROBENZENE	
	1,2-Diphenylhydrazine/Azobenzen	133	131	71.00-129.00	-	1,2-Diphenylhydrazine/Azobenz	
	1,3-DICHLOROBENZENE	111	113	63.00-109.00	-	1,3-DICHLOROBENZENE	
	1,4-DICHLOROBENZENE	112	114	70.00-100.00	-	1,4-DICHLOROBENZENE	
	1-METHYLNAPHTHALENE	125	125	73.00-112.00	-	1-METHYLNAPHTHALENE	
	2,4,5-TRICHLOROPHENOL	128	123	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4,6-TRICHLOROPHENOL	127	130	77.00-115.00	-	2,4,6-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	127	129	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	128	127	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	126	124	73.00-113.00	-	2,4-DINITROTOLUENE	
	2,6-DINITROTOLUENE	125	-	69.00-123.00	-	2,6-DINITROTOLUENE	
	2-CHLOROPHENOL	128	128	73.00-121.00	-	2-CHLOROPHENOL	
	2-METHYLNAPHTHALENE	118	118	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	121	123	75.00-111.00	-	2-METHYLPHENOL	
	2-NITROANILINE	131	126	67.00-125.00	-	2-NITROANILINE	
	2-NITROPHENOL	125	124	74.00-115.00	-	2-NITROPHENOL	
	4-CHLORO-3-METHYLPHENOL	125	127	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	125	124	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	119	119	71.00-111.00	-	4-METHYLPHENOL	
	ACENAPHTHENE	125	126	75.00-115.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	128	127	81.00-110.00	-	ACENAPHTHYLENE	
	ANILINE	98	-	35.00-95.00	-	ANILINE	
	ANTHRACENE	130	128	75.00-115.00	-	ANTHRACENE	
	BENZO(A)ANTHRACENE	130	124	65.00-122.00	-	BENZO(A)ANTHRACENE	
	BENZO(A)PYRENE	131	128	57.00-126.00	-	BENZO(A)PYRENE	
	BENZO(G,H,I)PERYLENE	146	142	59.00-127.00	-	BENZO(G,H,I)PERYLENE	J(all detects)
	BENZO(K)FLUORANTHENE	136	133	56.00-132.00	-	BENZO(K)FLUORANTHENE	
	BENZYL ALCOHOL	122	125	67.00-115.00	-	BENZYL ALCOHOL	
	BIS(2-CHLOROETHOXY)METHA	121	124	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	BIS(2-CHLOROETHYL) ETHER	-	119	60.00-116.00	-	BIS(2-CHLOROETHYL) ETHER	
	BIS(2-ETHYLHEXYL)PHTHALAT	135	130	63.00-122.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	136	-	73.00-134.00	-	Butylbenzylphthalate	
	CARBAZOLE	128	125	64.00-120.00	-	CARBAZOLE	
	CHRYSENE	131	-	62.00-128.00	-	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	144	141	65.00-125.00	-	DIBENZO(A,H)ANTHRACENE	
	DIBENZOFURAN	123	124	71.00-112.00	-	DIBENZOFURAN	
	Diethylphthalate	126	123	66.00-118.00	-	Diethylphthalate	
	Dimethylphthalate	124	125	64.00-118.00	-	Dimethylphthalate	
	Di-n-butylphthalate	129	125	67.00-123.00	-	Di-n-butylphthalate	
	Di-n-octylphthalate	140	137	56.00-126.00	-	Di-n-octylphthalate	
	FLUORANTHENE	132	126	73.00-112.00	-	FLUORANTHENE	
	FLUORENE	126	123	77.00-111.00	-	FLUORENE	
	HEXACHLOROBENZENE	129	123	77.00-114.00	-	HEXACHLOROBENZENE	
	HEXACHLOROBUTADIENE	-	122	62.00-120.00	-	HEXACHLOROBUTADIENE	
	HEXACHLOROETHANE	110	111	57.00-109.00	-	HEXACHLOROETHANE	
	INDENO(1,2,3-CD)PYRENE	144	142	61.00-126.00	-	INDENO(1,2,3-CD)PYRENE	
	ISOPHORONE	124	125	73.00-102.00	-	ISOPHORONE	
	NAPHTHALENE	120	121	72.00-116.00	-	NAPHTHALENE	
	NITROBENZENE	124	123	72.00-106.00	-	NITROBENZENE	
	N-NITROSODIMETHYLAMINE	-	118	47.00-116.00	-	N-NITROSODIMETHYLAMINE	
	N-NITROSO-DI-N-PROPYLAMIN	118	119	60.00-116.00	-	N-NITROSO-DI-N-PROPYLAMI	
	PYRENE	134	129	74.00-126.00	-	PYRENE	
SL-014-SA5DN-SB-4.0-5.0MS SL-014-SA5DN-SB-4.0-5.0MSD (SL-014-SA5DN-SB-4.0-5.0)	2,4-DINITROPHENOL	18	-	20.00-143.00	39 (30.00)	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 300.0**
***Matrix:* SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0MS (SL-014-SA5DN-SB-4.0-5.0 SL-014-SA5DN-SB-9.0-10.0 SL-094-SA5DN-SS-0.0-0.5 SL-095-SA5DN-SS-0.0-0.5 SL-097-SA5DN-SS-0.0-0.5 SL-098-SA5DN-SS-0.0-0.5 SL-099-SA5DN-SS-0.0-0.5 SL-101-SA5DN-SS-0.0-0.5 SL-102-SA5DN-SS-0.0-0.5 SL-103-SA5DN-SS-0.0-0.5)	FLUORIDE	40	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-104-SA5DN-SS-0.0-0.5MS (SL-104-SA5DN-SS-0.0-0.5 SL-110-SA5DN-SS-0.0-0.5 SL-111-SA5DN-SS-0.0-0.5 SL-112-SA5DN-SS-0.0-0.5 SL-113-SA5DN-SS-0.0-0.5 SL-114-SA5DN-SS-0.0-0.5 SL-121-SA5DN-SS-0.0-0.5 SL-125-SA5DN-SS-0.0-0.5)	FLUORIDE	67	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

***Method:* 6020**
***Matrix:* SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0MS	ARSENIC	158	169	75.00-125.00	-	ARSENIC	
SL-014-SA5DN-SB-4.0-	CHROMIUM	126	-	75.00-125.00	-	CHROMIUM	
5.0MSD	NICKEL	154	154	75.00-125.00	-	NICKEL	
(SL-014-SA5DN-SB-4.0-5.0	VANADIUM	210	210	75.00-125.00	-	VANADIUM	
SL-014-SA5DN-SB-9.0-10.0 SL-094-SA5DN-SS-0.0-0.5 SL-095-SA5DN-SS-0.0-0.5 SL-097-SA5DN-SS-0.0-0.5 SL-098-SA5DN-SS-0.0-0.5 SL-099-SA5DN-SS-0.0-0.5 SL-101-SA5DN-SS-0.0-0.5 SL-102-SA5DN-SS-0.0-0.5 SL-103-SA5DN-SS-0.0-0.5 SL-104-SA5DN-SS-0.0-0.5 SL-110-SA5DN-SS-0.0-0.5 SL-111-SA5DN-SS-0.0-0.5 SL-112-SA5DN-SS-0.0-0.5 SL-113-SA5DN-SS-0.0-0.5 SL-114-SA5DN-SS-0.0-0.5 SL-121-SA5DN-SS-0.0-0.5 SL-125-SA5DN-SS-0.0-0.5)							J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-014-SA5DN-SB-4.0-5.0MS **SL-014-SA5DN-SB-4.0-5.0MSD** (SL-014-SA5DN-SB-4.0-5.0 SL-014-SA5DN-SB-9.0-10.0 SL-094-SA5DN-SS-0.0-0.5 SL-095-SA5DN-SS-0.0-0.5 SL-097-SA5DN-SS-0.0-0.5 SL-098-SA5DN-SS-0.0-0.5 SL-099-SA5DN-SS-0.0-0.5 SL-101-SA5DN-SS-0.0-0.5 SL-102-SA5DN-SS-0.0-0.5 SL-103-SA5DN-SS-0.0-0.5 SL-104-SA5DN-SS-0.0-0.5 SL-110-SA5DN-SS-0.0-0.5 SL-111-SA5DN-SS-0.0-0.5 SL-112-SA5DN-SS-0.0-0.5 SL-113-SA5DN-SS-0.0-0.5 SL-114-SA5DN-SS-0.0-0.5 SL-121-SA5DN-SS-0.0-0.5 SL-125-SA5DN-SS-0.0-0.5)	ANTIMONY	57	54	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-014-SA5DN-SB-4.0-5.0MS (SL-014-SA5DN-SB-4.0-5.0 SL-014-SA5DN-SB-9.0-10.0 SL-094-SA5DN-SS-0.0-0.5 SL-095-SA5DN-SS-0.0-0.5 SL-097-SA5DN-SS-0.0-0.5 SL-098-SA5DN-SS-0.0-0.5 SL-099-SA5DN-SS-0.0-0.5 SL-101-SA5DN-SS-0.0-0.5 SL-102-SA5DN-SS-0.0-0.5 SL-103-SA5DN-SS-0.0-0.5 SL-104-SA5DN-SS-0.0-0.5 SL-110-SA5DN-SS-0.0-0.5 SL-111-SA5DN-SS-0.0-0.5 SL-112-SA5DN-SS-0.0-0.5 SL-113-SA5DN-SS-0.0-0.5 SL-114-SA5DN-SS-0.0-0.5 SL-121-SA5DN-SS-0.0-0.5 SL-125-SA5DN-SS-0.0-0.5)	BARIUM	188	-	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0MS SL-014-SA5DN-SB-4.0-5.0MSD (SL-014-SA5DN-SB-4.0-5.0 SL-014-SA5DN-SB-9.0-10.0 SL-094-SA5DN-SS-0.0-0.5 SL-095-SA5DN-SS-0.0-0.5 SL-097-SA5DN-SS-0.0-0.5 SL-098-SA5DN-SS-0.0-0.5 SL-099-SA5DN-SS-0.0-0.5 SL-101-SA5DN-SS-0.0-0.5 SL-102-SA5DN-SS-0.0-0.5 SL-103-SA5DN-SS-0.0-0.5 SL-104-SA5DN-SS-0.0-0.5 SL-110-SA5DN-SS-0.0-0.5 SL-111-SA5DN-SS-0.0-0.5 SL-112-SA5DN-SS-0.0-0.5 SL-113-SA5DN-SS-0.0-0.5 SL-114-SA5DN-SS-0.0-0.5 SL-121-SA5DN-SS-0.0-0.5 SL-125-SA5DN-SS-0.0-0.5)	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	1891 476 - 138 188	3229 385 1419 300 402	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	No Qual, >4x
SL-014-SA5DN-SB-4.0-5.0MS SL-014-SA5DN-SB-4.0-5.0MSD (SL-014-SA5DN-SB-4.0-5.0 SL-014-SA5DN-SB-9.0-10.0 SL-094-SA5DN-SS-0.0-0.5 SL-095-SA5DN-SS-0.0-0.5 SL-097-SA5DN-SS-0.0-0.5 SL-098-SA5DN-SS-0.0-0.5 SL-099-SA5DN-SS-0.0-0.5 SL-101-SA5DN-SS-0.0-0.5 SL-102-SA5DN-SS-0.0-0.5 SL-103-SA5DN-SS-0.0-0.5 SL-104-SA5DN-SS-0.0-0.5 SL-110-SA5DN-SS-0.0-0.5 SL-111-SA5DN-SS-0.0-0.5 SL-112-SA5DN-SS-0.0-0.5 SL-113-SA5DN-SS-0.0-0.5 SL-114-SA5DN-SS-0.0-0.5 SL-121-SA5DN-SS-0.0-0.5 SL-125-SA5DN-SS-0.0-0.5)	MANGANESE	-398	-610	75.00-125.00	-	MANGANESE	No Qual, >4x

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0MSD (SL-014-SA5DN-SB-4.0-5.0)	1,3,5-TRIMETHYLBENZENE 4-CHLOROTOLUENE HEXACHLOROBUTADIENE N-BUTYLBENZENE N-PROPYLBENZENE P-ISOPROPYLTOLUENE SEC-BUTYLBENZENE TERT-BUTYLBENZENE	- - - - - - - -	- - - - - - - -	38.00-150.00 39.00-145.00 10.00-155.00 30.00-146.00 39.00-157.00 29.00-152.00 33.00-157.00 41.00-152.00	31 (30.00) 31 (30.00) 32 (30.00) 35 (30.00) 32 (30.00) 33 (30.00) 32 (30.00) 31 (30.00)	1,3,5-TRIMETHYLBENZENE 4-CHLOROTOLUENE HEXACHLOROBUTADIENE N-BUTYLBENZENE N-PROPYLBENZENE P-ISOPROPYLTOLUENE SEC-BUTYLBENZENE TERT-BUTYLBENZENE	J(all detects)
SL-014-SA5DN-SB-4.0-5.0MS (SL-014-SA5DN-SB-4.0-5.0)	Chlorotrifluoroethylene	68	-	70.00-130.00	-	Chlorotrifluoroethylene	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-104-SA5DN-SS-0.0-0.5DUP (SL-104-SA5DN-SS-0.0-0.5 SL-110-SA5DN-SS-0.0-0.5 SL-111-SA5DN-SS-0.0-0.5 SL-112-SA5DN-SS-0.0-0.5 SL-113-SA5DN-SS-0.0-0.5 SL-114-SA5DN-SS-0.0-0.5 SL-121-SA5DN-SS-0.0-0.5 SL-125-SA5DN-SS-0.0-0.5)	FLUORIDE	65	20.00	No Qual, OK by difference
SL-014-SA5DN-SB-4.0-5.0DUP (SL-014-SA5DN-SB-4.0-5.0 SL-014-SA5DN-SB-9.0-10.0 SL-094-SA5DN-SS-0.0-0.5 SL-095-SA5DN-SS-0.0-0.5 SL-097-SA5DN-SS-0.0-0.5 SL-098-SA5DN-SS-0.0-0.5 SL-099-SA5DN-SS-0.0-0.5 SL-101-SA5DN-SS-0.0-0.5 SL-102-SA5DN-SS-0.0-0.5 SL-103-SA5DN-SS-0.0-0.5)	Nitrate-NO3	23	20.00	No Qual, OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-014-SA5DN-SB-4.0-5.0DUP	CALCIUM	36	20.00	J(all detects) UJ(all non-detects) Zr No Qual, OK by difference
(SL-014-SA5DN-SB-4.0-5.0	MANGANESE	94	20.00	
SL-014-SA5DN-SB-9.0-10.0	POTASSIUM	21	20.00	
SL-094-SA5DN-SS-0.0-0.5	Zirconium	62	20.00	
SL-095-SA5DN-SS-0.0-0.5				
SL-097-SA5DN-SS-0.0-0.5				
SL-098-SA5DN-SS-0.0-0.5				
SL-099-SA5DN-SS-0.0-0.5				
SL-101-SA5DN-SS-0.0-0.5				
SL-102-SA5DN-SS-0.0-0.5				
SL-103-SA5DN-SS-0.0-0.5				
SL-104-SA5DN-SS-0.0-0.5				
SL-110-SA5DN-SS-0.0-0.5				
SL-111-SA5DN-SS-0.0-0.5				
SL-112-SA5DN-SS-0.0-0.5				
SL-113-SA5DN-SS-0.0-0.5				
SL-114-SA5DN-SS-0.0-0.5				
SL-121-SA5DN-SS-0.0-0.5				
SL-125-SA5DN-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE169 Laboratory: LL

EDD Filename: DE169_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-014-SA5DN-SB-4.0-5.0DUP	ANTIMONY	42	20.00	
(SL-014-SA5DN-SB-4.0-5.0	CADMIUM	57	20.00	
SL-014-SA5DN-SB-9.0-10.0	NICKEL	21	20.00	
SL-094-SA5DN-SS-0.0-0.5	SELENIUM	23	20.00	
SL-095-SA5DN-SS-0.0-0.5	SILVER	23	20.00	
SL-097-SA5DN-SS-0.0-0.5				
SL-098-SA5DN-SS-0.0-0.5				
SL-099-SA5DN-SS-0.0-0.5				
SL-101-SA5DN-SS-0.0-0.5				
SL-102-SA5DN-SS-0.0-0.5				J(all detects) UJ(all non-detects) Sb, Cd, Se, Ag No Qual, OK by difference
SL-103-SA5DN-SS-0.0-0.5				
SL-104-SA5DN-SS-0.0-0.5				
SL-110-SA5DN-SS-0.0-0.5				
SL-111-SA5DN-SS-0.0-0.5				
SL-112-SA5DN-SS-0.0-0.5				
SL-113-SA5DN-SS-0.0-0.5				
SL-114-SA5DN-SS-0.0-0.5				
SL-121-SA5DN-SS-0.0-0.5				
SL-125-SA5DN-SS-0.0-0.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-014-SA5DN-SB-4.0-5.0DUP	HEXAVALENT CHROMIUM	107	20.00	
(SL-014-SA5DN-SB-4.0-5.0				
SL-014-SA5DN-SB-9.0-10.0				
SL-094-SA5DN-SS-0.0-0.5				
SL-095-SA5DN-SS-0.0-0.5				
SL-097-SA5DN-SS-0.0-0.5				
SL-098-SA5DN-SS-0.0-0.5				
SL-099-SA5DN-SS-0.0-0.5				
SL-101-SA5DN-SS-0.0-0.5				
SL-102-SA5DN-SS-0.0-0.5				No Qual, OK by difference
SL-103-SA5DN-SS-0.0-0.5				
SL-104-SA5DN-SS-0.0-0.5				
SL-110-SA5DN-SS-0.0-0.5				
SL-111-SA5DN-SS-0.0-0.5				
SL-112-SA5DN-SS-0.0-0.5				
SL-113-SA5DN-SS-0.0-0.5				
SL-114-SA5DN-SS-0.0-0.5				
SL-121-SA5DN-SS-0.0-0.5				
SL-125-SA5DN-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-014-SA5DN-SB-4.0-5.0DUP (SL-014-SA5DN-SB-4.0-5.0 SL -014-SA5DN-SB-9.0-10.0 SL -094-SA5DN-SS-0.0-0.5 SL -095-SA5DN-SS-0.0-0.5 SL -097-SA5DN-SS-0.0-0.5 SL -098-SA5DN-SS-0.0-0.5 SL -099-SA5DN-SS-0.0-0.5 SL -101-SA5DN-SS-0.0-0.5 SL -102-SA5DN-SS-0.0-0.5 SL -103-SA5DN-SS-0.0-0.5 SL -104-SA5DN-SS-0.0-0.5 SL -110-SA5DN-SS-0.0-0.5 SL -111-SA5DN-SS-0.0-0.5 SL -112-SA5DN-SS-0.0-0.5 SL -113-SA5DN-SS-0.0-0.5 SL -114-SA5DN-SS-0.0-0.5 SL -121-SA5DN-SS-0.0-0.5 SL -125-SA5DN-SS-0.0-0.5)	MERCURY	200	20.00	No Qual, OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11538AY321015A (EB10-SA5DN-SS-053111)	m-Terphenyl	-	71	75.00-125.00	-	m-Terphenyl	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11570AQ242021A P11570AY242034A (EB10-SA5DN-SS-053111 EB11-SA5DN-SB-053111)	4,4'-DDE ENDOSULFAN I	142 130	142 130	66.00-130.00 68.00-128.00	- -	4,4'-DDE ENDOSULFAN I	J(all detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11582AQ242115A P11582AY242158A (EB10-SA5DN-SS-053111)	3-NITROTOLUENE	110	110	69.00-107.00	-	3-NITROTOLUENE	J(all detects)

Method: 7470A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15213DY222331 (EB10-SA5DN-SS-053111 EB11-SA5DN-SB-053111)	MERCURY	-	89	90.00-115.00	-	MERCURY	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3WBLCSY262120 (EB10-SA5DN-SS-053111 EB11-SA5DN-SB-053111)	Dimethylphthalate	-	-	40.00-119.00	31 (30.00)	Dimethylphthalate	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7LDLCSQ262103	1,2,4-TRICHLOROBENZENE	130	-	73.00-108.00	-	1,2,4-TRICHLOROBENZENE	
(SL-014-SA5DN-SB-4.0-5.0	1,2-DICHLOROBENZENE	116	-	79.00-102.00	-	1,2-DICHLOROBENZENE	
SL-014-SA5DN-SB-9.0-10.0	1,2-Diphenylhydrazine/Azobenzen	139	-	77.00-111.00	-	1,2-Diphenylhydrazine/Azobenz	
SL-094-SA5DN-SS-0.0-0.5	1,3-DICHLOROBENZENE	117	-	70.00-98.00	-	1,3-DICHLOROBENZENE	
SL-095-SA5DN-SS-0.0-0.5	1,4-DICHLOROBENZENE	119	-	74.00-106.00	-	1,4-DICHLOROBENZENE	
SL-097-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	129	-	74.00-105.00	-	1-METHYLNAPHTHALENE	
SL-098-SA5DN-SS-0.0-0.5	2,4,5-TRICHLOROPHENOL	131	-	76.00-107.00	-	2,4,5-TRICHLOROPHENOL	
SL-099-SA5DN-SS-0.0-0.5	2,4,6-TRICHLOROPHENOL	136	-	78.00-111.00	-	2,4,6-TRICHLOROPHENOL	
SL-101-SA5DN-SS-0.0-0.5	2,4-DICHLOROPHENOL	130	-	75.00-111.00	-	2,4-DICHLOROPHENOL	
SL-102-SA5DN-SS-0.0-0.5	2,4-DIMETHYLPHENOL	132	-	72.00-111.00	-	2,4-DIMETHYLPHENOL	
SL-103-SA5DN-SS-0.0-0.5	2,4-DINITROPHENOL	131	-	37.00-120.00	-	2,4-DINITROPHENOL	
SL-104-SA5DN-SS-0.0-0.5	2,4-DINITROTOLUENE	130	-	73.00-115.00	-	2,4-DINITROTOLUENE	
SL-110-SA5DN-SS-0.0-0.5	2,6-DINITROTOLUENE	130	-	79.00-115.00	-	2,6-DINITROTOLUENE	
SL-111-SA5DN-SS-0.0-0.5	2-CHLOROPHENOL	129	-	72.00-112.00	-	2-CHLOROPHENOL	
SL-112-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	121	-	76.00-105.00	-	2-METHYLNAPHTHALENE	
SL-113-SA5DN-SS-0.0-0.5	2-METHYLPHENOL	122	-	66.00-110.00	-	2-METHYLPHENOL	
SL-114-SA5DN-SS-0.0-0.5	2-NITROANILINE	134	-	78.00-116.00	-	2-NITROANILINE	
SL-121-SA5DN-SS-0.0-0.5	2-NITROPHENOL	132	-	81.00-114.00	-	2-NITROPHENOL	
SL-125-SA5DN-SS-0.0-0.5)	3-NITROANILINE	127	-	62.00-109.00	-	3-NITROANILINE	
	4,6-DINITRO-2-METHYLPHENOL	141	-	53.00-110.00	-	4,6-DINITRO-2-METHYLPHEN	
	4-BROMOPHENYL-PHENYLETH	130	-	79.00-117.00	-	4-BROMOPHENYL-PHENYLET	
	4-CHLORO-3-METHYLPHENOL	128	-	74.00-119.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	126	-	79.00-110.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	118	-	66.00-117.00	-	4-METHYLPHENOL	
	ACENAPHTHENE	132	-	76.00-111.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	133	-	75.00-122.00	-	ACENAPHTHYLENE	
	ANILINE	110	-	34.00-94.00	-	ANILINE	
	ANTHRACENE	133	-	76.00-112.00	-	ANTHRACENE	
	BENZO(A)ANTHRACENE	130	-	73.00-112.00	-	BENZO(A)ANTHRACENE	
	BENZO(A)PYRENE	133	-	69.00-122.00	-	BENZO(A)PYRENE	
	BENZO(G,H,I)PERYLENE	147	-	65.00-122.00	-	BENZO(G,H,I)PERYLENE	J(all detects)
	BENZO(K)FLUORANTHENE	141	-	67.00-125.00	-	BENZO(K)FLUORANTHENE	
	BENZYL ALCOHOL	125	-	68.00-111.00	-	BENZYL ALCOHOL	
	BIS(2-CHLOROETHOXY)METHA	128	-	70.00-118.00	-	BIS(2-CHLOROETHOXY)METH	
	BIS(2-CHLOROETHYL) ETHER	119	-	70.00-104.00	-	BIS(2-CHLOROETHYL) ETHER	
	BIS(2-ETHYLHEXYL)PHTHALAT	138	-	75.00-117.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	140	-	75.00-115.00	-	Butylbenzylphthalate	
	CARBAZOLE	131	-	77.00-113.00	-	CARBAZOLE	
	CHRYSENE	130	-	76.00-113.00	-	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	145	-	70.00-128.00	-	DIBENZO(A,H)ANTHRACENE	
	DIBENZOFURAN	130	-	79.00-108.00	-	DIBENZOFURAN	
	Diethylphthalate	129	-	76.00-111.00	-	Diethylphthalate	
	Dimethylphthalate	131	-	77.00-109.00	-	Dimethylphthalate	
	Di-n-butylphthalate	134	-	79.00-112.00	-	Di-n-butylphthalate	
	Di-n-octylphthalate	148	-	68.00-130.00	-	Di-n-octylphthalate	
	FLUORANTHENE	133	-	78.00-116.00	-	FLUORANTHENE	
	FLUORENE	129	-	75.00-116.00	-	FLUORENE	
	HEXACHLOROBENZENE	133	-	78.00-116.00	-	HEXACHLOROBENZENE	
	HEXACHLOROBUTADIENE	132	-	70.00-112.00	-	HEXACHLOROBUTADIENE	
	HEXACHLOROCYCLOPENTADI	124	-	46.00-115.00	-	HEXACHLOROCYCLOPENTAD	
	HEXACHLOROETHANE	114	-	68.00-105.00	-	HEXACHLOROETHANE	
	INDENO(1,2,3-CD)PYRENE	145	-	64.00-119.00	-	INDENO(1,2,3-CD)PYRENE	
	ISOPHORONE	129	-	69.00-110.00	-	ISOPHORONE	
	NAPHTHALENE	126	-	73.00-106.00	-	NAPHTHALENE	
	NITROBENZENE	129	-	71.00-104.00	-	NITROBENZENE	
	N-NITROSODIMETHYLAMINE	111	-	60.00-106.00	-	N-NITROSODIMETHYLAMINE	
	N-NITROSO-DI-N-PROPYLAMIN	118	-	63.00-107.00	-	N-NITROSO-DI-N-PROPYLAMI	
	PENTACHLOROPHENOL	119	-	35.00-106.00	-	PENTACHLOROPHENOL	
	PHENANTHRENE	129	-	77.00-113.00	-	PHENANTHRENE	
	PYRENE	136	-	75.00-115.00	-	PYRENE	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: PrepDE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P16026AQ220155A (SL-014-SA5DN -SB-4.0-5.0 SL -014-SA5DN -SB-9.0-10.0 SL -094-SA5DN -SS-0.0-0.5 SL -095-SA5DN -SS-0.0-0.5 SL -097-SA5DN -SS-0.0-0.5 SL -098-SA5DN -SS-0.0-0.5 SL -099-SA5DN -SS-0.0-0.5 SL -101-SA5DN -SS-0.0-0.5 SL -102-SA5DN -SS-0.0-0.5 SL -103-SA5DN -SS-0.0-0.5 SL -104-SA5DN -SS-0.0-0.5 SL -110-SA5DN -SS-0.0-0.5 SL -111-SA5DN -SS-0.0-0.5 SL -112-SA5DN -SS-0.0-0.5 SL -113-SA5DN -SS-0.0-0.5 SL -114-SA5DN -SS-0.0-0.5 SL -121-SA5DN -SS-0.0-0.5 SL -125-SA5DN -SS-0.0-0.5)	ANTIMONY	127	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB10-SA5DN-SS-053111	N-Nitrosodimethylamine-d6	156	50.00-150.00	All Target Analytes	J (all detects)

Method: 1625C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-097-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1473	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-098-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1367	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-099-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1166	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-102-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	989	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-103-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1083	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-104-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1044	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-110-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1033	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-111-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	955	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-112-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1004	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-113-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1010	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-114-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1039	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-121-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	1021	50.00-150.00	All Target Analytes	No Qual, diluted out
SL-125-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine-d6	969	50.00-150.00	All Target Analytes	No Qual, diluted out

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-098-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	147	20.00-120.00	All Target Analytes	J(all detects)
SL-099-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	140	20.00-120.00	All Target Analytes	J(all detects)
SL-101-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	126	20.00-120.00	All Target Analytes	J(all detects)
SL-102-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	128	20.00-120.00	All Target Analytes	J(all detects)
SL-104-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-112-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	123	20.00-120.00	All Target Analytes	J(all detects)
SL-113-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	137	20.00-120.00	All Target Analytes	J(all detects)
SL-121-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	240	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-095-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	495 520	45.00-120.00 53.00-139.00	All Target Analytes	No Qual, diluted out
SL-104-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	No Qual, diluted out

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-101-SA5DN-SS-0.0-0.5	Terphenyl-d14	158	45.00-135.00	No Affected Compounds	J(all detects)

Method: 8315A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-014-SA5DN-SB-4.0-5.0	Butyraldehyde	138	64.00-126.00	All Target Analytes	J(all detects)
SL-014-SA5DN-SB-9.0-10.0	Butyraldehyde	135	64.00-126.00	All Target Analytes	J(all detects)
SL-097-SA5DN-SS-0.0-0.5	Butyraldehyde	143	64.00-126.00	All Target Analytes	J(all detects)
SL-098-SA5DN-SS-0.0-0.5	Butyraldehyde	130	64.00-126.00	All Target Analytes	J(all detects)
SL-099-SA5DN-SS-0.0-0.5	Butyraldehyde	138	64.00-126.00	All Target Analytes	J(all detects)
SL-102-SA5DN-SS-0.0-0.5	Butyraldehyde	150	64.00-126.00	All Target Analytes	J(all detects)
SL-103-SA5DN-SS-0.0-0.5	Butyraldehyde	141	64.00-126.00	All Target Analytes	J(all detects)
SL-104-SA5DN-SS-0.0-0.5	Butyraldehyde	135	64.00-126.00	All Target Analytes	J(all detects)
SL-110-SA5DN-SS-0.0-0.5	Butyraldehyde	129	64.00-126.00	All Target Analytes	J(all detects)
SL-112-SA5DN-SS-0.0-0.5	Butyraldehyde	130	64.00-126.00	All Target Analytes	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8315A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-113-SA5DN-SS-0.0-0.5	Butyraldehyde	141	64.00-126.00	All Target Analytes	J(all detects)
SL-121-SA5DN-SS-0.0-0.5	Butyraldehyde	130	64.00-126.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
MOISTURE	12.3	11.600000000	6		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
N-NITROSODIMETHYLAMINE	21.4	68.100000000	104	50.00	J (all detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
FLUORIDE	18.2	7.500000000	83	50.00	J(all detects) No Qual for NO3, within limits
Nitrate-NO3	1.6	1.600000000	0	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
ALUMINUM	30300	38900.000000000	25	50.00	J(all detects) UJ(all non-detects) Al, Fe, Li, Mg, P, K, Na, Sr, Sn, Ti, Zr No Qual, within limits
BORON	5.54 U	15.400000000	200	50.00	
CALCIUM	6810	90600.000000000	172	50.00	
IRON	34300	28600.000000000	18	50.00	
LITHIUM	28.5	25.300000000	12	50.00	
MAGNESIUM	6890	6400.000000000	7	50.00	
MANGANESE	1370	273.000000000	134	50.00	
PHOSPHORUS	169	174.000000000	3	50.00	
POTASSIUM	2520	2930.000000000	15	50.00	
SODIUM	741	597.000000000	22	50.00	
STRONTIUM	49.7	69.400000000	33	50.00	
TIN	2.93	2.650000000	10	50.00	
TITANIUM	963	1410.000000000	38	50.00	
Zirconium	2.09	3.360000000	47	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-014-SA5DN-SB-4.0-5.0	Concentration (mg/Kg) DUP-10-SA5DN-QC-053111	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.135	0.245000000	58	50.00	J(all detects) UJ(all non-detects) As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Tl, V, Zn No Qual, within limits
ARSENIC	5.63	7.250000000	25	50.00	
BARIUM	148	142.000000000	4	50.00	
BERYLLIUM	0.867	0.863000000	0	50.00	
CADMIUM	0.148	0.115000000	25	50.00	
CHROMIUM	26.9	31.900000000	17	50.00	
COBALT	12.6	13.100000000	4	50.00	
COPPER	13.5	14.700000000	9	50.00	
LEAD	9.75	10.600000000	8	50.00	
MOLYBDENUM	0.311	0.481000000	43	50.00	
NICKEL	18.2	20.000000000	9	50.00	
SELENIUM	0.0640	0.452000000 U	200	50.00	
SILVER	0.0847	0.044600000	62	50.00	
THALLIUM	0.301	0.305000000	1	50.00	
VANADIUM	42.9	63.900000000	39	50.00	
ZINC	59.7	59.500000000	0	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-014-SA5DN-SB-4.0-5.0	Concentration (mg/Kg) DUP-10-SA5DN-QC-053111	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.2	0.320000000	116	50.00	J(all detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-014-SA5DN-SB-4.0-5.0	Concentration (mg/Kg) DUP-10-SA5DN-QC-053111	Sample RPD	eQAPP RPD	Flag
MERCURY	0.111 U	0.006700000	200	50.00	J (all detects) UJ (all non-detects)

Method: 8015B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-014-SA5DN-SB-4.0-5.0	Concentration (ug/Kg) DUP-10-SA5DN-QC-053111	Sample RPD	eQAPP RPD	Flag
METHANOL	570 U	190.000000000	200	50.00	J (all detects) UJ (all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-014-SA5DN-SB-4.0-5.0	Concentration (mg/Kg) DUP-10-SA5DN-QC-053111	Sample RPD	eQAPP RPD	Flag
EFH (C30-C40)	0.71	1.400000000 U	200	50.00	J (all detects) UJ (all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.19	4.100000000 U	200	50.00	J (all detects) UJ (all non-detects)
ACETONE	8.2	9.000000000	9	50.00	Acetone, Methylene Chloride
METHYLENE CHLORIDE	2.1	1.800000000	15	50.00	No Qual, within limits

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
BIS(2-ETHYLHEXYL)PHTHALATE	20 U	12.000000000	200	50.00	J (all detects) UJ (all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-014-SA5DN-SB-4.0-5.0	DUP-10-SA5DN-QC-053111			
PH	8.95	8.620000000	4	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB11-SA5DN-SB-053111	LEAD	J	0.000062	0.0010	PQL	mg/L	J (all detects)

Method: 8081A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB10-SA5DN-SS-053111	HEPTACHLOR	J	0.0088	0.010	PQL	ug/L	J (all detects)
EB11-SA5DN-SB-053111	HEPTACHLOR	J	0.0084	0.010	PQL	ug/L	J (all detects)

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB11-SA5DN-SB-053111	BENZENE	J	0.9	5	PQL	ug/L	J (all detects)
TB-053111	BENZENE	J	0.9	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB10-SA5DN-SS-053111	1-METHYLNAPHTHALENE	J	0.028	0.054	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.030	0.054	PQL	ug/L	
	Di-n-butylphthalate	J	0.062	1.1	PQL	ug/L	
EB11-SA5DN-SB-053111	1-METHYLNAPHTHALENE	J	0.023	0.053	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.024	0.053	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.082	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.070	1.1	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	21.4	38.0	PQL	ng/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5DN-SB-4.0-5.0	TIN	J	2.93	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.09	5.54	PQL	mg/Kg	
SL-014-SA5DN-SB-9.0-10.0	TIN	J	2.86	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.28	5.77	PQL	mg/Kg	
SL-094-SA5DN-SS-0.0-0.5	SODIUM	J	78.0	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.72	10.9	PQL	mg/Kg	
	Zirconium	J	2.83	5.47	PQL	mg/Kg	
SL-095-SA5DN-SS-0.0-0.5	SODIUM	J	72.6	103	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	10.3	PQL	mg/Kg	
	Zirconium	J	1.96	5.15	PQL	mg/Kg	
SL-097-SA5DN-SS-0.0-0.5	SODIUM	J	68.9	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	11.0	PQL	mg/Kg	
	Zirconium	J	3.05	5.51	PQL	mg/Kg	
SL-098-SA5DN-SS-0.0-0.5	SODIUM	J	85.6	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.70	11.1	PQL	mg/Kg	
	Zirconium	J	3.40	5.56	PQL	mg/Kg	
SL-099-SA5DN-SS-0.0-0.5	SODIUM	J	91.1	105	PQL	mg/Kg	J (all detects)
	TIN	J	2.81	10.5	PQL	mg/Kg	
	Zirconium	J	3.56	5.27	PQL	mg/Kg	
SL-101-SA5DN-SS-0.0-0.5	SODIUM	J	96.9	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.87	10.6	PQL	mg/Kg	
	Zirconium	J	2.03	5.29	PQL	mg/Kg	
SL-102-SA5DN-SS-0.0-0.5	SODIUM	J	94.0	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	10.7	PQL	mg/Kg	
	Zirconium	J	2.63	5.37	PQL	mg/Kg	
SL-103-SA5DN-SS-0.0-0.5	TIN	J	2.74	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.15	5.47	PQL	mg/Kg	
SL-104-SA5DN-SS-0.0-0.5	SODIUM	J	96.2	105	PQL	mg/Kg	J (all detects)
	TIN	J	2.68	10.5	PQL	mg/Kg	
	Zirconium	J	2.35	5.23	PQL	mg/Kg	
SL-110-SA5DN-SS-0.0-0.5	SODIUM	J	95.8	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.70	11.0	PQL	mg/Kg	
	Zirconium	J	3.42	5.48	PQL	mg/Kg	
SL-111-SA5DN-SS-0.0-0.5	SODIUM	J	77.8	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.67	11.1	PQL	mg/Kg	
	Zirconium	J	2.95	5.56	PQL	mg/Kg	
SL-112-SA5DN-SS-0.0-0.5	SODIUM	J	81.1	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.62	10.7	PQL	mg/Kg	
	Zirconium	J	1.96	5.35	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-113-SA5DN-SS-0.0-0.5	SODIUM	J	80.5	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	10.9	PQL	mg/Kg	
	Zirconium	J	3.29	5.43	PQL	mg/Kg	
SL-114-SA5DN-SS-0.0-0.5	SODIUM	J	71.8	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	10.4	PQL	mg/Kg	
	Zirconium	J	2.34	5.19	PQL	mg/Kg	
SL-121-SA5DN-SS-0.0-0.5	SODIUM	J	75.1	105	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	10.5	PQL	mg/Kg	
	Zirconium	J	2.43	5.26	PQL	mg/Kg	
SL-125-SA5DN-SS-0.0-0.5	SODIUM	J	82.0	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.77	11.0	PQL	mg/Kg	
	Zirconium	J	3.41	5.51	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.135	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0640	0.452	PQL	mg/Kg	
	SILVER	J	0.0847	0.113	PQL	mg/Kg	
SL-014-SA5DN-SB-9.0-10.0	ANTIMONY	J	0.174	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0602	0.462	PQL	mg/Kg	
	SILVER	J	0.0336	0.115	PQL	mg/Kg	
SL-094-SA5DN-SS-0.0-0.5	SELENIUM	J	0.193	0.429	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0507	0.107	PQL	mg/Kg	
SL-095-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.198	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.139	0.420	PQL	mg/Kg	
	SILVER	J	0.0491	0.105	PQL	mg/Kg	
SL-097-SA5DN-SS-0.0-0.5	SELENIUM	J	0.188	0.433	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0492	0.108	PQL	mg/Kg	
SL-098-SA5DN-SS-0.0-0.5	SELENIUM	J	0.172	0.445	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0504	0.111	PQL	mg/Kg	
SL-099-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.185	0.205	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.156	0.409	PQL	mg/Kg	
	SILVER	J	0.0567	0.102	PQL	mg/Kg	
SL-101-SA5DN-SS-0.0-0.5	SELENIUM	J	0.250	0.419	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0965	0.105	PQL	mg/Kg	
SL-102-SA5DN-SS-0.0-0.5	SELENIUM	J	0.155	0.422	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0602	0.105	PQL	mg/Kg	
SL-103-SA5DN-SS-0.0-0.5	SELENIUM	J	0.183	0.433	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0570	0.108	PQL	mg/Kg	
SL-104-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.196	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.165	0.414	PQL	mg/Kg	
	SILVER	J	0.0659	0.104	PQL	mg/Kg	
SL-110-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.193	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.184	0.425	PQL	mg/Kg	
	SILVER	J	0.0487	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-111-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.185	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.166	0.441	PQL	mg/Kg	
	SILVER	J	0.0509	0.110	PQL	mg/Kg	
SL-112-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.150	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.167	0.428	PQL	mg/Kg	
	SILVER	J	0.0409	0.107	PQL	mg/Kg	
SL-113-SA5DN-SS-0.0-0.5	SELENIUM	J	0.186	0.422	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0625	0.105	PQL	mg/Kg	
SL-114-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.156	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.138	0.415	PQL	mg/Kg	
	SILVER	J	0.0636	0.104	PQL	mg/Kg	
SL-121-SA5DN-SS-0.0-0.5	SELENIUM	J	0.159	0.413	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0813	0.103	PQL	mg/Kg	
SL-125-SA5DN-SS-0.0-0.5	SELENIUM	J	0.159	0.437	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0469	0.109	PQL	mg/Kg	

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-097-SA5DN-SS-0.0-0.5	PERCHLORATE	J	3.5	5.6	PQL	ug/Kg	J (all detects)
SL-111-SA5DN-SS-0.0-0.5	PERCHLORATE	J	3.7	5.6	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-097-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-101-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.98	1.1	PQL	mg/Kg	J (all detects)
SL-102-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.64	1.1	PQL	mg/Kg	J (all detects)
SL-104-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.99	1.1	PQL	mg/Kg	J (all detects)
SL-110-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.64	1.1	PQL	mg/Kg	J (all detects)
SL-111-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.81	1.1	PQL	mg/Kg	J (all detects)
SL-112-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.53	1.1	PQL	mg/Kg	J (all detects)
SL-113-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.82	1.1	PQL	mg/Kg	J (all detects)
SL-114-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.83	1.1	PQL	mg/Kg	J (all detects)
SL-125-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5DN-SB-9.0-10.0	MERCURY	J	0.0037	0.111	PQL	mg/Kg	J (all detects)
SL-094-SA5DN-SS-0.0-0.5	MERCURY	J	0.0319	0.106	PQL	mg/Kg	J (all detects)
SL-095-SA5DN-SS-0.0-0.5	MERCURY	J	0.0626	0.106	PQL	mg/Kg	J (all detects)
SL-097-SA5DN-SS-0.0-0.5	MERCURY	J	0.0586	0.112	PQL	mg/Kg	J (all detects)
SL-101-SA5DN-SS-0.0-0.5	MERCURY	J	0.0090	0.106	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-121-SA5DN-SS-0.0-0.5	p-Terphenyl	J	28	38	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.71	1.4	PQL	mg/Kg	J (all detects)
SL-014-SA5DN-SB-9.0-10.0	EFH (C30-C40)	J	0.54	1.4	PQL	mg/Kg	J (all detects)
SL-097-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	9.3	13	PQL	mg/Kg	J (all detects)
SL-098-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	3.6	6.7	PQL	mg/Kg	J (all detects)
SL-099-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	3.0	6.3	PQL	mg/Kg	J (all detects)
SL-104-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	12	13	PQL	mg/Kg	J (all detects)
SL-110-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	23	26	PQL	mg/Kg	J (all detects)
SL-111-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	2.5	2.7	PQL	mg/Kg	J (all detects)
SL-113-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.0	13	PQL	mg/Kg	J (all detects)
SL-121-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.3	13	PQL	mg/Kg	J (all detects)
SL-125-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	3.9	6.6	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA5DN-SS-0.0-0.5	Chlordane	J	2.0	3.8	PQL	ug/Kg	J (all detects)
SL-097-SA5DN-SS-0.0-0.5	Chlordane	J	1.4	3.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-098-SA5DN-SS-0.0-0.5	ALPHA-BHC DELTA-BHC HEPTACHLOR	J J J	0.045 0.090 0.15	0.19 0.19 0.19	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-101-SA5DN-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.11	0.18	PQL	ug/Kg	J (all detects)
SL-102-SA5DN-SS-0.0-0.5	Chlordane	J	3.0	3.7	PQL	ug/Kg	J (all detects)
SL-104-SA5DN-SS-0.0-0.5	4,4'-DDT DELTA-BHC	J J	3.7 0.087	7.3 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-110-SA5DN-SS-0.0-0.5	Chlordane	J	2.0	3.7	PQL	ug/Kg	J (all detects)
SL-111-SA5DN-SS-0.0-0.5	4,4'-DDD Chlordane DIELDRIN ENDRIN ALDEHYDE HEPTACHLOR EPOXIDE	J J J J J	0.35 2.5 0.29 0.11 0.10	0.38 3.8 0.38 0.38 0.18	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-112-SA5DN-SS-0.0-0.5	Chlordane	J	2.2	3.7	PQL	ug/Kg	J (all detects)
SL-114-SA5DN-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.043	0.18	PQL	ug/Kg	J (all detects)
SL-121-SA5DN-SS-0.0-0.5	DELTA-BHC	J	0.076	0.18	PQL	ug/Kg	J (all detects)
SL-125-SA5DN-SS-0.0-0.5	Chlordane	J	1.9	3.7	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-095-SA5DN-SS-0.0-0.5	Aroclor 5460	J	12	18	PQL	ug/Kg	J (all detects)
SL-099-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.5	1.8	PQL	ug/Kg	J (all detects)
SL-101-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	4.8	9.1	PQL	ug/Kg	J (all detects)
SL-102-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	4.8	9.3	PQL	ug/Kg	J (all detects)
SL-103-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	5.2	19	PQL	ug/Kg	J (all detects)
SL-104-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	7.1	18	PQL	ug/Kg	J (all detects)
SL-110-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	8.2 6.6	9.3 18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-114-SA5DN-SS-0.0-0.5	Aroclor 5460	J	5.8	18	PQL	ug/Kg	J (all detects)
SL-121-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.4	3.5	PQL	ug/Kg	J (all detects)
SL-125-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	7.6 6.3	9.4 18	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.097	0.19	PQL	ug/Kg	J (all detects)
SL-101-SA5DN-SS-0.0-0.5	MCPA	J	130	270	PQL	ug/Kg	J (all detects)
SL-104-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.17	0.18	PQL	ug/Kg	J (all detects)
SL-110-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex) DICHLOROPROP	J J	0.18 1.5	0.19 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-112-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.14	0.19	PQL	ug/Kg	J (all detects)
SL-114-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.13	0.18	PQL	ug/Kg	J (all detects)
SL-121-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex) DICHLOROPROP	J J	0.17 1.6	0.18 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5DN-SB-4.0-5.0	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE METHYLENE CHLORIDE	J J	0.19 2.1	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-014-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	2.0	4.2	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	370	PQL	ug/Kg	J (all detects)
SL-095-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	350	PQL	ug/Kg	J (all detects)
SL-097-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	370	PQL	ug/Kg	J (all detects)
SL-098-SA5DN-SS-0.0-0.5	BENZO(G,H,I)PERYLENE BIS(2-ETHYLHEXYL)PHTHALATE CARBAZOLE DIBENZO(A,H)ANTHRACENE INDENO(1,2,3-CD)PYRENE	J J J J J	130 31 35 43 120	190 370 190 190 190	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-103-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	41	360	PQL	ug/Kg	J (all detects)
SL-104-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(G,H,I)PERYLENE BENZO(K)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE FLUORANTHENE INDENO(1,2,3-CD)PYRENE PYRENE	J J J J J J J J J J	40 48 64 32 30 24 56 58 30 64	180 180 180 180 180 350 180 180 180 180	PQL PQL PQL PQL PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-110-SA5DN-SS-0.0-0.5	CHRYSENE	J	21	180	PQL	ug/Kg	J (all detects)
	PYRENE	J	18	180	PQL	ug/Kg	
SL-112-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	360	PQL	ug/Kg	J (all detects)
SL-113-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	170	180	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	93	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	130	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	50	360	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	24	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	85	180	PQL	ug/Kg	
	PHENANTHRENE	J	68	180	PQL	ug/Kg	
SL-114-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	28	180	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	360	PQL	ug/Kg	
	CHRYSENE	J	59	180	PQL	ug/Kg	
SL-121-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	20	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	30	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	38	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	20	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	350	PQL	ug/Kg	
	Butylbenzylphthalate	J	20	180	PQL	ug/Kg	
	FLUORANTHENE	J	36	180	PQL	ug/Kg	
	PYRENE	J	40	180	PQL	ug/Kg	
SL-125-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	22	180	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	19	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	260	360	PQL	ug/Kg	
	CHRYSENE	J	47	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.89	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	
SL-095-SA5DN-SS-0.0-0.5	ACENAPHTHENE	J	0.87	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.46	1.8	PQL	ug/Kg	
	FLUORENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.8	PQL	ug/Kg	
SL-097-SA5DN-SS-0.0-0.5	ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.75	1.9	PQL	ug/Kg	
SL-098-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.99	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.96	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.82	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	
SL-099-SA5DN-SS-0.0-0.5	ACENAPHTHYLENE	J	0.49	1.7	PQL	ug/Kg	J (all detects)
	FLUORENE	J	0.75	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.80	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-101-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	
	2-METHYLNAPHTHALENE	J	1.4	1.8	PQL	ug/Kg	
	ACENAPHTHENE	J	1.3	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.73	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	13	19	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.9	19	PQL	ug/Kg	
	FLUORENE	J	1.6	1.8	PQL	ug/Kg	
SL-102-SA5DN-SS-0.0-0.5	ACENAPHTHYLENE	J	0.42	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.8	20	PQL	ug/Kg	J (all detects)
	FLUORENE	J	1.5	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.88	1.8	PQL	ug/Kg	
SL-103-SA5DN-SS-0.0-0.5	ANTHRACENE	J	4.2	9.0	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	3.7	9.0	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	4.4	9.0	PQL	ug/Kg	
SL-104-SA5DN-SS-0.0-0.5	ANTHRACENE	J	2.5	8.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	5.1	8.8	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	8.6	8.8	PQL	ug/Kg	
SL-110-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	7.1	9.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	7.5	9.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	5.5	9.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	8.7	9.0	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	96	98	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	4.3	9.0	PQL	ug/Kg	
	PHENANTHRENE	J	4.3	9.0	PQL	ug/Kg	
SL-111-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	7.1	9.2	PQL	ug/Kg	
	BENZO(A)PYRENE	J	8.3	9.2	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	5.9	9.2	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	6.8	9.2	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	4.6	9.2	PQL	ug/Kg	
SL-112-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	7.8	9.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	7.4	9.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	8.6	9.0	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	5.3	9.0	PQL	ug/Kg	
	PHENANTHRENE	J	5.1	9.0	PQL	ug/Kg	
SL-113-SA5DN-SS-0.0-0.5	ANTHRACENE	J	3.0	9.1	PQL	ug/Kg	J (all detects)
SL-114-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	7.8	8.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	5.4	8.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	6.3	8.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	6.0	8.9	PQL	ug/Kg	
	PYRENE	J	5.4	8.9	PQL	ug/Kg	
SL-121-SA5DN-SS-0.0-0.5	ANTHRACENE	J	2.7	8.9	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	3.8	8.9	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	7.1	8.9	PQL	ug/Kg	
SL-125-SA5DN-SS-0.0-0.5	ANTHRACENE	J	2.1	9.1	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	6.5	9.1	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	5.4	9.1	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE169 **Laboratory: LL**

EDD Filename: DE169_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8330A**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-014-SA5DN-SB-9.0-10.0	1,3-DINITROBENZENE	J	47	130	PQL	ug/Kg	J (all detects)
SL-097-SA5DN-SS-0.0-0.5	1,3-DINITROBENZENE	J	58	130	PQL	ug/Kg	J (all detects)
SL-102-SA5DN-SS-0.0-0.5	1,3-DINITROBENZENE	J	51	130	PQL	ug/Kg	J (all detects)
SL-103-SA5DN-SS-0.0-0.5	1,3-DINITROBENZENE	J	45	130	PQL	ug/Kg	J (all detects)
SL-110-SA5DN-SS-0.0-0.5	1,3-DINITROBENZENE	J	53	130	PQL	ug/Kg	J (all detects)
SL-111-SA5DN-SS-0.0-0.5	1,3-DINITROBENZENE	J	43	130	PQL	ug/Kg	J (all detects)
SL-125-SA5DN-SS-0.0-0.5	1,3-DINITROBENZENE	J	51	130	PQL	ug/Kg	J (all detects)

LDC #: 26277A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/29/11
SDG #: DE169 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MY
2nd Reviewer:

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	Al, Ba, Ca, Fe, Mg, Mn, Ti >4X
VII.	Duplicate Sample Analysis	SW	Sb, Cd, Hg, Se, Ag, Zr <5X
VIII.	Laboratory Control Samples (LCS)	NA	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr, V.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	SW	FB=3, 20+. (No qual >5X)

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

Validated Samples:

1	SL-014-SA5DN-SB-4.0-5.0	11	SL-103-SA5DN-SS-0.0-0.5	21	SL-014-SA5DN-SB-4.0-5.0MS	31	
2	SL-014-SA5DN-SB-9.0-10.0	12	SL-104-SA5DN-SS-0.0-0.5	22	SL-014-SA5DN-SB-4.0-5.0MSD	32	
3	EB11-SA5DN-SB-053111	13	SL-110-SA5DN-SS-0.0-0.5	23	SL-014-SA5DN-SB-4.0-5.0DUP	33	
4	SL-094-SA5DN-SS-0.0-0.5	14	SL-111-SA5DN-SS-0.0-0.5	24		34	
5	SL-095-SA5DN-SS-0.0-0.5	15	SL-112-SA5DN-SS-0.0-0.5	25		35	
6	SL-097-SA5DN-SS-0.0-0.5	16	SL-113-SA5DN-SS-0.0-0.5	26		36	
7	SL-098-SA5DN-SS-0.0-0.5	17	SL-114-SA5DN-SS-0.0-0.5	27		37	
8	SL-099-SA5DN-SS-0.0-0.5	18	SL-121-SA5DN-SS-0.0-0.5	28		38	
9	SL-101-SA5DN-SS-0.0-0.5	19	SL-125-SA5DN-SS-0.0-0.5	29		39	
10	SL102-SA5DN-SS-0.0-0.5	20	EB10-SA5DN-SS-053111	30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE169
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6302747BKG Matrix Spike Lab Sample ID: 6302748MS Matrix Spike Duplicate Lab Sample ID: 6302749MSD
% Solids for Sample: 87.7
Batch Id(s): P16008B, P16026A, P15911D

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		30329.6033		34600.0215		37694.2041		225.7922	228.0502	MG/KG	1891		3229		9			20	P
Antimony	121	0.1346	B	0.9184		0.8711		1.3683	1.3548	MG/KG	57	N	54	N	5		75 - 125	20	MS
Arsenic	75	5.6335		9.2429		9.4449		2.2805	2.2579	MG/KG	158	N	169	N	2		75 - 125	20	MS
Barium	137	148.0520		169.5325		161.2382		11.4025	11.2896	MG/KG	188		117		5			20	MS
Beryllium	9	0.8670		1.6376		1.6659		0.9122	0.9032	MG/KG	84		88		2		75 - 125	20	MS
Boron		0.9853	U	240.0623		242.2554		225.7922	228.0502	MG/KG	106		106		1		84 - 115	20	P
Cadmium	111	0.1481		1.3489		1.3148		1.1403	1.1290	MG/KG	105		103		3		75 - 125	20	MS
Calcium		6808.2474		8956.5248		8565.8210		451.5845	456.1003	MG/KG	476		385		4			20	P
Chromium	52	26.8693		41.1859		39.0169		11.4025	11.2896	MG/KG	126	N	108		5		75 - 125	20	MS
Cobalt	59	12.6128		67.7081		64.6895		57.0125	56.4481	MG/KG	97		92		5		75 - 125	20	MS
Copper	63	13.5475		26.3854		25.9210		11.4025	11.2896	MG/KG	113		110		2		75 - 125	20	MS
Iron		34263.1522		34357.9010		35881.1585		112.8961	114.0251	MG/KG	84		1419		4			20	P
Lead	208	9.7542		12.8073		13.4504		3.4208	3.3869	MG/KG	89		109		5		75 - 125	20	MS
Lithium		28.4919		140.8548		143.8985		112.8961	114.0251	MG/KG	100		101		2		82 - 114	20	P
Magnesium		6892.0249		7204.2133		7576.3295		225.7922	228.0502	MG/KG	138		300		5			20	P
Manganese		1371.3609		1146.8801		1023.7332		56.4481	57.0125	MG/KG	-398		-610		11			20	P
Mercury		0.0033	U	0.2100		0.1891		0.1826	0.1784	MG/KG	115		106		10		65 - 135	20	CV
Molybdenum	98	0.3111		11.0057		10.7703		11.4025	11.2896	MG/KG	94		93		2		75 - 125	20	MS
Nickel	60	18.2124		35.7583		35.5623		11.4025	11.2896	MG/KG	154	N	154	N	1		75 - 125	20	MS
Phosphorus		169.1734		272.9094		289.7742		112.8961	114.0251	MG/KG	92		106		6		75 - 125	20	P
Potassium		2520.2511		3689.3212		3884.7537		1128.9612	1140.2509	MG/KG	104		120		5		75 - 125	20	P
Selenium	78	0.0640	B	2.1106		2.0884		2.2805	2.2579	MG/KG	90		90		1		75 - 125	20	MS
Silver	107	0.0847	B	11.9977		11.4702		11.4025	11.2896	MG/KG	104		101		4		75 - 125	20	MS
Sodium		741.3645		1793.2917		1796.5986		1128.9612	1140.2509	MG/KG	93		93		0		75 - 125	20	P
Strontium		49.6961		160.0494		159.7811		112.8961	114.0251	MG/KG	98		97		0		75 - 115	20	P
Thallium	203	0.3014		0.7330		0.7232		0.4561	0.4516	MG/KG	95		93		1		75 - 125	20	MS
Tin		2.9270	B	394.3146		397.7948		451.5845	456.1003	MG/KG	87		87		1		80 - 110	20	P
Titanium		963.0636		1175.4970		1421.3432		112.8961	114.0251	MG/KG	188		402		19			20	P
Vanadium	51	42.8554		66.8415		66.5184		11.4025	11.2896	MG/KG	210	N	210	N	0		75 - 125	20	MS
Zinc	66	59.6543		71.3113		69.8601		11.4025	11.2896	MG/KG	102		90		2			20	MS
Zirconium		2.0934	B	110.1618		111.7298		112.8961	114.0251	MG/KG	96		96		1		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE169
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6302747BKG
% Solids for Duplicate: 87.6
Batch ID(s): P16008B, P16026A, P15911D
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6302750DUP
% Solids for Sample: 87.7

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			30329.6033		31816.1716		5		P
Antimony	121		0.1346	B	0.2069	B	42		MS
Arsenic	75		5.6335		6.8281		19		MS
Barium	137		148.0520		149.5741		1		MS
Beryllium	9		0.8670		0.8720		1		MS
Boron			0.9853	U	0.9853	U			P
Cadmium	111	0.1	0.1481		0.2654		57	*	MS
Calcium			6808.2474		9809.6301		36	*	P
Chromium	52		26.8693		27.4555		2		MS
Cobalt	59		12.6128		11.5232		9		MS
Copper	63		13.5475		13.6942		1		MS
Iron			34263.1522		32095.7678		7		P
Lead	208		9.7542		9.0102		8		MS
Lithium			28.4919		28.3546		0		P
Magnesium			6892.0249		6803.6267		1		P
Manganese			1371.3609		495.1966		94	*	P
Mercury			0.0033	U	0.0162	B	200		CV
Molybdenum	98	0.1	0.3111		0.3108		0		MS
Nickel	60		18.2124		22.4473		21	*	MS
Phosphorus			169.1734		171.1063		1		P
Potassium			2520.2511		3107.1692		21	*	P
Selenium	78		0.0640	B	0.0510	B	23		MS
Silver	107		0.0847	B	0.0671	B	23		MS
Sodium			741.3645		651.9711		13		P
Strontium			49.6961		47.6348		4		P
Thallium	203	0.1	0.3014		0.3121		3		MS
Tin			2.9270	B	2.9503	B	1		P
Titanium			963.0636		922.0821		4		P
Vanadium	51		42.8554		49.0308		13		MS
Zinc	66		59.6543		54.1955		10		MS
Zirconium			2.0934	B	3.9710	B	62		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE169 7981

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE170

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	3050B	6010B	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	3050B	6020	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	3060A	7199	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	3550B	8081A	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	3550B	8082	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	3550B	8151A	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	3550B	8270C	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	3550B	8270C SIM	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	METHOD	300.0	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	METHOD	314.0	III
01-Jun-2011	SL-130-SA5DN-SS-0.0-0.5	6304854	N	METHOD	7471A	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	3050B	6010B	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	3050B	6020	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	3060A	7199	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	3550B	8081A	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	3550B	8082	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	3550B	8151A	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	3550B	8270C	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	3550B	8270C SIM	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	METHOD	300.0	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	METHOD	314.0	III
01-Jun-2011	SL-129-SA5DN-SS-0.0-0.5	6304853	N	METHOD	7471A	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	3050B	6010B	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	3050B	6020	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	3060A	7199	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	3550B	8082	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	3550B	8151A	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	3550B	8270C	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	3550B	8270C SIM	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	METHOD	300.0	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	METHOD	314.0	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5	6304852	N	METHOD	7471A	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5DU	P304852D271643B	DUP	METHOD	300.0	III
01-Jun-2011	SL-128-SA5DN-SS-0.0-0.5MS	P304852R271657B	MS	METHOD	300.0	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	3050B	6010B	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	3050B	6020	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	3060A	7199	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	3550B	8081A	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	3550B	8082	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	3550B	8151A	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	3550B	8270C	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	3550B	8270C SIM	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	METHOD	300.0	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	METHOD	314.0	III
01-Jun-2011	SL-123-SA5DN-SS-0.0-0.5	6304848	N	METHOD	7471A	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	3050B	6010B	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	3050B	6020	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	3060A	7199	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	3550B	8081A	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	3550B	8082	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	3550B	8270C	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	3550B	8270C SIM	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	METHOD	300.0	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	METHOD	314.0	III
01-Jun-2011	SL-124-SA5DN-SS-0.0-0.5	6304849	N	METHOD	7471A	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	3050B	6010B	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	3050B	6020	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	3060A	7199	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	3550B	8081A	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	3550B	8082	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	3550B	8151A	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	3550B	8270C	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	3550B	8270C SIM	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	METHOD	300.0	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	METHOD	314.0	III
01-Jun-2011	SL-126-SA5DN-SS-0.0-0.5	6304850	N	METHOD	7471A	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3050B	6010B	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3050B	6020	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3060A	7199	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3546	1625C	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3550B	8015B	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3550B	8015M	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3550B	8082	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3550B	8270C	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	3550B	8270C SIM	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	5035	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	5035	8260B	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	5035	8260B SIM	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	8330	8330A	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	METHOD	300.0	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	METHOD	314.0	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	METHOD	6850	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	METHOD	7471A	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	METHOD	8015B	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	METHOD	8015M	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	METHOD	8315A	III
01-Jun-2011	SL-018-SA5DN-SB-4.0-5.0	6304861	N	METHOD	9012B	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	3050B	6010B	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	3050B	6020	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	3060A	7199	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	3550B	8081A	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	3550B	8082	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	3550B	8151A	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	3550B	8270C	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	3550B	8270C SIM	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	METHOD	300.0	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	METHOD	314.0	III
01-Jun-2011	SL-127-SA5DN-SS-0.0-0.5	6304851	N	METHOD	7471A	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	3050B	6010B	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	3050B	6020	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	3060A	7199	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	3550B	8270C	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	3550B	8270C SIM	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	5035	8260B	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	5035	8260B SIM	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	METHOD	300.0	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	METHOD	314.0	III
01-Jun-2011	SL-017-SA5DN-SB-4.0-5.0	6304859	N	METHOD	7471A	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	3050B	6010B	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	3050B	6020	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	3060A	7199	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	3550B	8082	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	3550B	8270C	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	3550B	8270C SIM	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	METHOD	300.0	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	METHOD	314.0	III
01-Jun-2011	SL-017-SA5DN-SB-7.0-8.0	6304860	N	METHOD	7471A	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3050B	6010B	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3050B	6020	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3060A	7199	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3546	1625C	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3550B	8015B	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3550B	8015M	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3550B	8081A	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3550B	8082	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3550B	8151A	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3550B	8270C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	3550B	8270C SIM	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	8330	8330A	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	METHOD	300.0	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	METHOD	314.0	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	METHOD	6850	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	METHOD	7471A	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	METHOD	8015B	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	METHOD	8015M	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	METHOD	8315A	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5	6304840	N	METHOD	9012B	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5DU	P304840D270904A	DUP	METHOD	9012B	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5MS	P304840R240010A	MS	8330	8330A	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5MS	P304840R242355A	MS	METHOD	8315A	III
01-Jun-2011	SL-105-SA5DN-SS-0.0-0.5MS	P304840R270905A	MS	METHOD	9012B	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3050B	6010B	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3050B	6020	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3060A	7199	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3546	1625C	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3550B	8015B	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3550B	8015M	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3550B	8081A	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3550B	8082	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3550B	8151A	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3550B	8270C	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	3550B	8270C SIM	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	8330	8330A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	METHOD	300.0	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	METHOD	314.0	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	METHOD	7471A	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	METHOD	8015B	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	METHOD	8015M	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	METHOD	8315A	III
01-Jun-2011	SL-106-SA5DN-SS-0.0-0.5	6304841	N	METHOD	9012B	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3050B	6010B	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3050B	6020	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3060A	7199	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3546	1625C	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3550B	8015B	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3550B	8015M	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3550B	8081A	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3550B	8082	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3550B	8151A	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3550B	8270C	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	3550B	8270C SIM	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	8330	8330A	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	METHOD	300.0	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	METHOD	314.0	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	METHOD	7471A	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	METHOD	8015B	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	METHOD	8015M	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	METHOD	8315A	III
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5	6304842	N	METHOD	9012B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-107-SA5DN-SS-0.0-0.5MS	P304842R321130A	MS	METHOD	8015M	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	3050B	6010B	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	3050B	6020	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	3060A	7199	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	3550B	8081A	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	3550B	8082	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	3550B	8151A	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	3550B	8270C	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	3550B	8270C SIM	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	METHOD	300.0	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	METHOD	314.0	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5	6304843	N	METHOD	7471A	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	3050B	6010B	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	3050B	6020	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	3060A	7199	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	3550B	8081A	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	3550B	8082	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	3550B	8151A	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	3550B	8270C	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	3550B	8270C SIM	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	METHOD	300.0	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	METHOD	314.0	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5MS	6304844	MS	METHOD	7471A	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5DU	6304846	DUP	3050B	6010B	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5DU	6304846	DUP	3050B	6020	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5DU	6304846	DUP	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5DU	6304846	DUP	METHOD	300.0	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5DU	6304846	DUP	METHOD	314.0	III
01-Jun-2011	SL-108-SA5DN-SS-0.0-0.5DU	6304846	DUP	METHOD	7471A	III
01-Jun-2011	TB-060111	6304863	TB	5030B	8015M	III
01-Jun-2011	TB-060111	6304863	TB	5030B	8260B	III
01-Jun-2011	TB-060111	6304863	TB	5030B	8260B SIM	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	3050B	6010B	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	3050B	6020	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	3060A	7199	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	3550B	8081A	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	3550B	8082	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	3550B	8151A	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	3550B	8270C	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	3550B	8270C SIM	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	METHOD	300.0	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	METHOD	314.0	III
01-Jun-2011	DUP-11-SA5DN-QC-060111	6304856	FD	METHOD	7471A	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3050B	6010B	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3050B	6020	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3060A	7199	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3546	1625C	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3550B	8015B	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3550B	8015M	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3550B	8081A	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3550B	8082	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3550B	8270C	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	3550B	8270C SIM	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	8330	8330A	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	METHOD	300.0	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	METHOD	314.0	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	METHOD	7471A	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	METHOD	8015B	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	METHOD	8015M	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	METHOD	8315A	III
01-Jun-2011	SL-109-SA5DN-SS-0.0-0.5	6304847	N	METHOD	9012B	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3050B	6010B	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3050B	6020	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3060A	7199	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3546	1625C	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3550B	8081A	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3550B	8082	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3550B	8151A	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3550B	8270C	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	3550B	8270C SIM	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	METHOD	300.0	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	METHOD	314.0	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5	6304839	N	METHOD	7471A	III
01-Jun-2011	SL-100-SA5DN-SS-0.0-0.5MS	P304839R261453	MS	3546	1625C	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3050B	6010B	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3050B	6020	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3546	1625C	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3550B	8015B	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3550B	8015M	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3550B	8082	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3550B	8270C	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	3550B	8270C SIM	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	5035	8015M	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	5035	8260B	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	5035	8260B SIM	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	8330	8330A	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	METHOD	300.0	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	METHOD	314.0	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	METHOD	7471A	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	METHOD	8015B	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	METHOD	8015M	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	METHOD	8315A	III
01-Jun-2011	SL-015-SA5DN-SB-4.0-5.0	6304857	N	METHOD	9012B	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	3050B	6010B	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	3050B	6020	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	3060A	7199	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	3550B	8081A	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	3550B	8082	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	3550B	8151A	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	3550B	8270C	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	3550B	8270C SIM	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	METHOD	314.0	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	METHOD	6850	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5	6304855	N	METHOD	7471A	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5DU	P304855D271253A	DUP	METHOD	314.0	III
01-Jun-2011	SL-148-SA5DN-SS-0.0-0.5MS	P304855R271317A	MS	METHOD	314.0	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3050B	6010B	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3050B	6020	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3060A	7199	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3546	1625C	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3550B	8015B	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3550B	8015M	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3550B	8082	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3550B	8270C	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	3550B	8270C SIM	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	5035	8015M	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	5035	8260B	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	5035	8260B SIM	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	8330	8330A	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	METHOD	300.0	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	METHOD	314.0	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	METHOD	7471A	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	METHOD	8015B	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	METHOD	8015M	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	METHOD	8315A	III
01-Jun-2011	SL-015-SA5DN-SB-12.0-13.0	6304858	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	3.6		0.88	MDL	1.6	PQL	mg/Kg	J	Q

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	10.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	2.2		0.93	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 12:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	12.0		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA5DN-SB-7.0-8.0 *Collected:* 6/1/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.5		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-018-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.9		0.89	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.85	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.85	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	2.1		0.85	MDL	1.6	PQL	mg/Kg	J	Q

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.85	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.9		0.85	MDL	1.6	PQL	mg/Kg	J	Q

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.84	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	2.3		0.84	MDL	1.6	PQL	mg/Kg	J	Q

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.84	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.87	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	3.8		0.87	MDL	1.6	PQL	mg/Kg	J	Q

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.87	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-130-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.84	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.84	MDL	1.0	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	9.83		0.377	MDL	5.24	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.05	J	0.332	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	327		0.0817	MDL	0.524	PQL	mg/Kg	J	E
PHOSPHORUS	366		0.587	MDL	10.5	PQL	mg/Kg	J	Q
SODIUM	87.2	J	39.1	MDL	105	PQL	mg/Kg	J	Z
Zirconium	2.74	J	0.880	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.20	J	0.337	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	301		0.0822	MDL	0.527	PQL	mg/Kg	J	E
PHOSPHORUS	355		0.590	MDL	10.5	PQL	mg/Kg	J	Q
Zirconium	1.65	J	0.886	MDL	5.27	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.07	J	0.362	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	338		0.0865	MDL	0.554	PQL	mg/Kg	J	E
PHOSPHORUS	317		0.621	MDL	11.1	PQL	mg/Kg	J	Q
Zirconium	2.89	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-017-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 12:35:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.44	J	0.362	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-017-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 12:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	510		0.0901	MDL	0.577	PQL	mg/Kg	J	E
PHOSPHORUS	174		0.647	MDL	11.5	PQL	mg/Kg	J	Q
Zirconium	2.19	J	0.970	MDL	5.77	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5DN-SB-7.0-8.0 *Collected:* 6/1/2011 12:39:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.98	J	0.353	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-017-SA5DN-SB-7.0-8.0 *Collected:* 6/1/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	509		0.0862	MDL	0.552	PQL	mg/Kg	J	E
PHOSPHORUS	697		0.619	MDL	11.0	PQL	mg/Kg	J	Q
Zirconium	2.90	J	0.928	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 11:16:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.34	J	0.351	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-018-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	304		0.0831	MDL	0.533	PQL	mg/Kg	J	E
PHOSPHORUS	210		0.597	MDL	10.7	PQL	mg/Kg	J	Q
Zirconium	1.77	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.28	J	0.337	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	473		0.0821	MDL	0.526	PQL	mg/Kg	J	E
PHOSPHORUS	347		0.589	MDL	10.5	PQL	mg/Kg	J	Q
SODIUM	90.6	J	39.2	MDL	105	PQL	mg/Kg	J	Z
Zirconium	4.40	J	0.884	MDL	5.26	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	1590		0.412	MDL	2.64	PQL	mg/Kg	J	E

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.26	J	0.342	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	402		0.592	MDL	10.6	PQL	mg/Kg	J	Q
SODIUM	100	J	39.4	MDL	106	PQL	mg/Kg	J	Z
Zirconium	3.93	J	0.888	MDL	5.28	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.29	J	0.338	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	357		0.0824	MDL	0.528	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	339		0.592	MDL	10.6	PQL	mg/Kg	J	Q
SODIUM	88.6	J	39.4	MDL	106	PQL	mg/Kg	J	Z
Zirconium	3.55	J	0.888	MDL	5.28	PQL	mg/Kg	J	Z

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.94	J	0.327	MDL	10.2	PQL	mg/Kg	U	B

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	409		0.0783	MDL	0.502	PQL	mg/Kg	J	E
PHOSPHORUS	388		0.562	MDL	10.0	PQL	mg/Kg	J	Q
SODIUM	83.9	J	37.4	MDL	100	PQL	mg/Kg	J	Z
Zirconium	1.37	J	0.843	MDL	5.02	PQL	mg/Kg	J	Z

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.380	U	0.380	MDL	5.28	PQL	mg/Kg	UJ	FD

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.00	J	0.328	MDL	10.3	PQL	mg/Kg	U	B

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	387		0.0824	MDL	0.528	PQL	mg/Kg	J	E
PHOSPHORUS	408		0.591	MDL	10.6	PQL	mg/Kg	J	Q
SODIUM	103	J	39.4	MDL	106	PQL	mg/Kg	J	Z
Zirconium	3.89	J	0.887	MDL	5.28	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.09	J	0.341	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	393		0.0840	MDL	0.539	PQL	mg/Kg	J	E
PHOSPHORUS	407		0.603	MDL	10.8	PQL	mg/Kg	J	Q
Zirconium	4.85	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.12	J	0.341	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	368		0.0800	MDL	0.513	PQL	mg/Kg	J	E
PHOSPHORUS	310		0.575	MDL	10.3	PQL	mg/Kg	J	Q
SODIUM	86.2	J	38.3	MDL	103	PQL	mg/Kg	J	Z
Zirconium	3.19	J	0.862	MDL	5.13	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.50	J	0.344	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	263		0.0822	MDL	0.527	PQL	mg/Kg	J	E
PHOSPHORUS	367		0.590	MDL	10.5	PQL	mg/Kg	J	Q
SODIUM	86.0	J	39.3	MDL	105	PQL	mg/Kg	J	Z
Zirconium	3.57	J	0.885	MDL	5.27	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.26	J	0.337	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	247		0.0837	MDL	0.536	PQL	mg/Kg	J	E
PHOSPHORUS	422		0.601	MDL	10.7	PQL	mg/Kg	J	Q
SODIUM	82.5	J	40.0	MDL	107	PQL	mg/Kg	J	Z
Zirconium	2.73	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.47	J	0.316	MDL	9.88	PQL	mg/Kg	U	B

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	223		0.0763	MDL	0.489	PQL	mg/Kg	J	E
PHOSPHORUS	266		0.548	MDL	9.78	PQL	mg/Kg	J	Q
Zirconium	0.949	J	0.822	MDL	4.89	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.76	J	0.351	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	273		0.0854	MDL	0.548	PQL	mg/Kg	J	E
PHOSPHORUS	361		0.613	MDL	11.0	PQL	mg/Kg	J	Q
Zirconium	1.72	J	0.920	MDL	5.48	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.06	J	0.336	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	292		0.0794	MDL	0.509	PQL	mg/Kg	J	E
PHOSPHORUS	433		0.570	MDL	10.2	PQL	mg/Kg	J	Q
SODIUM	81.9	J	38.0	MDL	102	PQL	mg/Kg	J	Z
Zirconium	2.60	J	0.856	MDL	5.09	PQL	mg/Kg	J	Z

Sample ID: SL-130-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:30:00 AM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.64	J	0.324	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-130-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	273		0.0814	MDL	0.522	PQL	mg/Kg	J	E
PHOSPHORUS	476		0.585	MDL	10.4	PQL	mg/Kg	J	Q
SODIUM	86.1	J	38.9	MDL	104	PQL	mg/Kg	J	Z
Zirconium	2.99	J	0.877	MDL	5.22	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.03	J	0.332	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	346		0.0779	MDL	0.500	PQL	mg/Kg	J	E
PHOSPHORUS	379		0.560	MDL	9.99	PQL	mg/Kg	J	Q
SODIUM	66.5	J	37.3	MDL	99.9	PQL	mg/Kg	J	Z
Zirconium	2.99	J	0.839	MDL	5.00	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.145	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.692		0.0519	MDL	0.104	PQL	mg/Kg	J	Q, E, E

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.112	MDL	0.415	PQL	mg/Kg	J	E

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.89		0.0830	MDL	0.415	PQL	mg/Kg	J	Q
BERYLLIUM	0.788		0.0166	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.384		0.0415	MDL	0.104	PQL	mg/Kg	J	Q, E
CHROMIUM	29.6		0.124	MDL	0.415	PQL	mg/Kg	J	Q, Q, E
COBALT	9.46		0.0207	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	17.0		0.0685	MDL	0.415	PQL	mg/Kg	J	Q
NICKEL	21.9		0.104	MDL	0.415	PQL	mg/Kg	J	Q, E
SILVER	0.0667	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z, Q, FD
THALLIUM	0.328		0.0311	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	52.4		0.0228	MDL	0.104	PQL	mg/Kg	J	A

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0728	J	0.0430	MDL	0.430	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.561		0.0537	MDL	0.107	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.116	MDL	0.430	PQL	mg/Kg	J	E

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0645	MDL	0.215	PQL	mg/Kg	J	Z, Q, E
ARSENIC	9.06		0.0860	MDL	0.430	PQL	mg/Kg	J	Q
BERYLLIUM	0.878		0.0172	MDL	0.107	PQL	mg/Kg	J	Q
CADMIUM	0.162		0.0430	MDL	0.107	PQL	mg/Kg	J	Q, E
CHROMIUM	30.8		0.129	MDL	0.430	PQL	mg/Kg	J	Q, Q, E
COBALT	7.83		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	18.2		0.0709	MDL	0.430	PQL	mg/Kg	J	Q
NICKEL	21.5		0.107	MDL	0.430	PQL	mg/Kg	J	Q, E
SILVER	0.0503	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.398		0.0322	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	58.0		0.0236	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0901	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.326		0.0560	MDL	0.112	PQL	mg/Kg	J	Q, E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	175		0.121	MDL	0.448	PQL	mg/Kg	J	E

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.64		0.0895	MDL	0.448	PQL	mg/Kg	J	Q
BERYLLIUM	1.06		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.281		0.0448	MDL	0.112	PQL	mg/Kg	J	Q, E
CHROMIUM	32.8		0.134	MDL	0.448	PQL	mg/Kg	J	Q, Q, E
COBALT	12.5		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	17.1		0.0739	MDL	0.448	PQL	mg/Kg	J	Q
NICKEL	24.4		0.112	MDL	0.448	PQL	mg/Kg	J	Q, E
SILVER	0.0526	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.372		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	59.3		0.0246	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: SL-017-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 12:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0652	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 12:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.223		0.0566	MDL	0.113	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-017-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 12:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	167		0.122	MDL	0.453	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-017-SA5DN-SB-4.0-5.0 ***Collected:*** 6/1/2011 12:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.130	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
ARSENIC	9.94		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
BERYLLIUM	1.13		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.161		0.0453	MDL	0.113	PQL	mg/Kg	J	Q, E
CHROMIUM	33.8		0.136	MDL	0.453	PQL	mg/Kg	J	Q, Q, E
COBALT	9.19		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	16.2		0.0747	MDL	0.453	PQL	mg/Kg	J	Q
NICKEL	25.3		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E
SILVER	0.0656	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.468		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	64.0		0.0249	MDL	0.113	PQL	mg/Kg	J	A

Sample ID: SL-017-SA5DN-SB-7.0-8.0 ***Collected:*** 6/1/2011 12:39:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.235	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5DN-SB-7.0-8.0 ***Collected:*** 6/1/2011 12:39:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.480		0.0563	MDL	0.113	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-017-SA5DN-SB-7.0-8.0 ***Collected:*** 6/1/2011 12:39:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	176		0.122	MDL	0.451	PQL	mg/Kg	J	E

Sample ID: SL-017-SA5DN-SB-7.0-8.0 ***Collected:*** 6/1/2011 12:39:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0676	MDL	0.225	PQL	mg/Kg	J	Z, Q, E
ARSENIC	12.9		0.0901	MDL	0.451	PQL	mg/Kg	J	Q
BERYLLIUM	1.36		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.643		0.0451	MDL	0.113	PQL	mg/Kg	J	Q, E
CHROMIUM	62.4		0.135	MDL	0.451	PQL	mg/Kg	J	Q, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-017-SA5DN-SB-7.0-8.0 ***Collected:*** 6/1/2011 12:39:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	17.6		0.0225	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	42.8		0.0743	MDL	0.451	PQL	mg/Kg	J	Q
NICKEL	44.0		0.113	MDL	0.451	PQL	mg/Kg	J	Q, E
SILVER	0.0164	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.433		0.0338	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	77.0		0.0248	MDL	0.113	PQL	mg/Kg	J	A

Sample ID: SL-018-SA5DN-SB-4.0-5.0 ***Collected:*** 6/1/2011 11:16:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0608	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5DN-SB-4.0-5.0 ***Collected:*** 6/1/2011 11:16:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.444		0.0533	MDL	0.107	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-018-SA5DN-SB-4.0-5.0 ***Collected:*** 6/1/2011 11:16:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	173		0.115	MDL	0.426	PQL	mg/Kg	J	E

Sample ID: SL-018-SA5DN-SB-4.0-5.0 ***Collected:*** 6/1/2011 11:16:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.107	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.87		0.0853	MDL	0.426	PQL	mg/Kg	J	Q
BERYLLIUM	1.03		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CADMIUM	0.243		0.0426	MDL	0.107	PQL	mg/Kg	J	Q, E
CHROMIUM	35.5		0.128	MDL	0.426	PQL	mg/Kg	J	Q, Q, E
COBALT	16.2		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	18.0		0.0704	MDL	0.426	PQL	mg/Kg	J	Q
NICKEL	40.4		0.107	MDL	0.426	PQL	mg/Kg	J	Q, E
SILVER	0.0974	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.395		0.0320	MDL	0.107	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-018-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 11:16:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	62.1		0.0235	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.194	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.744		0.0521	MDL	0.104	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	159		0.113	MDL	0.417	PQL	mg/Kg	J	E

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.138	J	0.0625	MDL	0.208	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.08		0.0833	MDL	0.417	PQL	mg/Kg	J	Q
BERYLLIUM	0.857		0.0167	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.495		0.0417	MDL	0.104	PQL	mg/Kg	J	Q, E
CHROMIUM	33.4		0.125	MDL	0.417	PQL	mg/Kg	J	Q, Q, E
COBALT	10.9		0.0208	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	18.9		0.0688	MDL	0.417	PQL	mg/Kg	J	Q
NICKEL	25.4		0.104	MDL	0.417	PQL	mg/Kg	J	Q, E
SILVER	0.0597	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, Q
THALLIUM	0.403		0.0313	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	56.6		0.0229	MDL	0.104	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.11		0.0518	MDL	0.104	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.112	MDL	0.414	PQL	mg/Kg	J	E

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.220		0.0622	MDL	0.207	PQL	mg/Kg	J	Q, E
ARSENIC	8.88		0.0829	MDL	0.414	PQL	mg/Kg	J	Q
BERYLLIUM	1.04		0.0166	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.684		0.0414	MDL	0.104	PQL	mg/Kg	J	Q, E
CHROMIUM	44.0		0.124	MDL	0.414	PQL	mg/Kg	J	Q, Q, E
COBALT	15.0		0.0207	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	26.5		0.0684	MDL	0.414	PQL	mg/Kg	J	Q
NICKEL	34.6		0.104	MDL	0.414	PQL	mg/Kg	J	Q, E
SILVER	0.0903	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z, Q
THALLIUM	0.521		0.0311	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	73.9		0.0228	MDL	0.104	PQL	mg/Kg	J	A

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.172	J	0.0407	MDL	0.407	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-106-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 1:45:00 PM **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.656		0.0508	MDL	0.102	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-106-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 1:45:00 PM **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	163		0.110	MDL	0.407	PQL	mg/Kg	J	E

Sample ID: SL-106-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 1:45:00 PM **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.208		0.0610	MDL	0.203	PQL	mg/Kg	J	Q, E
ARSENIC	6.65		0.0813	MDL	0.407	PQL	mg/Kg	J	Q
BERYLLIUM	0.824		0.0163	MDL	0.102	PQL	mg/Kg	J	Q
CADMIUM	0.471		0.0407	MDL	0.102	PQL	mg/Kg	J	Q, E
CHROMIUM	31.8		0.122	MDL	0.407	PQL	mg/Kg	J	Q, Q, E
COBALT	10.4		0.0203	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	18.0		0.0671	MDL	0.407	PQL	mg/Kg	J	Q
NICKEL	23.6		0.102	MDL	0.407	PQL	mg/Kg	J	Q, E
SILVER	0.0621	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.409		0.0305	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	56.6		0.0224	MDL	0.102	PQL	mg/Kg	J	A

Sample ID: SL-107-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 2:10:00 PM **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0409	MDL	0.409	PQL	mg/Kg	J	Z

Sample ID: SL-107-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 2:10:00 PM **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.591		0.0512	MDL	0.102	PQL	mg/Kg	J	Q, E, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-107-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:10:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	141		0.111	MDL	0.409	PQL	mg/Kg	J	E

Sample ID: SL-107-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:10:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.146	J	0.0614	MDL	0.205	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.54		0.0819	MDL	0.409	PQL	mg/Kg	J	Q
BERYLLIUM	0.741		0.0164	MDL	0.102	PQL	mg/Kg	J	Q
CADMIUM	0.388		0.0409	MDL	0.102	PQL	mg/Kg	J	Q, E
CHROMIUM	26.0		0.123	MDL	0.409	PQL	mg/Kg	J	Q, Q, E
COBALT	9.10		0.0205	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	14.3		0.0675	MDL	0.409	PQL	mg/Kg	J	Q
NICKEL	18.7		0.102	MDL	0.409	PQL	mg/Kg	J	Q, E
SILVER	0.0538	J	0.0123	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.361		0.0307	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	48.0		0.0225	MDL	0.102	PQL	mg/Kg	J	A

Sample ID: SL-108-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:30:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.164	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-108-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:30:00 PM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.809		0.0523	MDL	0.105	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-108-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:30:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	151		0.113	MDL	0.418	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-108-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:30:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.157	J	0.0627	MDL	0.209	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.41		0.0836	MDL	0.418	PQL	mg/Kg	J	Q
BERYLLIUM	0.796		0.0167	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	0.435		0.0418	MDL	0.105	PQL	mg/Kg	J	Q, E
CHROMIUM	33.6		0.125	MDL	0.418	PQL	mg/Kg	J	Q, Q, E
COBALT	9.66		0.0209	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	17.9		0.0690	MDL	0.418	PQL	mg/Kg	J	Q
NICKEL	25.1		0.105	MDL	0.418	PQL	mg/Kg	J	Q, E
SILVER	0.151		0.0125	MDL	0.105	PQL	mg/Kg	J	Q, FD
THALLIUM	0.356		0.0314	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	50.3		0.0230	MDL	0.105	PQL	mg/Kg	J	A

Sample ID: SL-109-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:10:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.201	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:10:00 PM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.803		0.0539	MDL	0.108	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-109-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:10:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	189		0.116	MDL	0.431	PQL	mg/Kg	J	E

Sample ID: SL-109-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:10:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.221		0.0646	MDL	0.215	PQL	mg/Kg	J	Q, E
ARSENIC	7.67		0.0862	MDL	0.431	PQL	mg/Kg	J	Q
BERYLLIUM	0.951		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.604		0.0431	MDL	0.108	PQL	mg/Kg	J	Q, E
CHROMIUM	37.1		0.129	MDL	0.431	PQL	mg/Kg	J	Q, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-109-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:10:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	13.1		0.0215	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	23.4		0.0711	MDL	0.431	PQL	mg/Kg	J	Q
NICKEL	30.0		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E
SILVER	0.0663	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.427		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	64.0		0.0237	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: SL-123-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:20:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.220	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-123-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:20:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.774		0.0518	MDL	0.104	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-123-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:20:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	169		0.112	MDL	0.414	PQL	mg/Kg	J	E

Sample ID: SL-123-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.17		0.0829	MDL	0.414	PQL	mg/Kg	J	Q
BERYLLIUM	0.896		0.0166	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.553		0.0414	MDL	0.104	PQL	mg/Kg	J	Q, E
CHROMIUM	34.7		0.124	MDL	0.414	PQL	mg/Kg	J	Q, Q, E
COBALT	11.5		0.0207	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	20.9		0.0684	MDL	0.414	PQL	mg/Kg	J	Q
NICKEL	25.1		0.104	MDL	0.414	PQL	mg/Kg	J	Q, E
SILVER	0.0660	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z, Q
THALLIUM	0.426		0.0311	MDL	0.104	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-123-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	60.3		0.0228	MDL	0.104	PQL	mg/Kg	J	A

Sample ID: SL-124-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.379	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:45:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.17		0.0543	MDL	0.109	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-124-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:45:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	153		0.117	MDL	0.434	PQL	mg/Kg	J	E

Sample ID: SL-124-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.172	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.45		0.0869	MDL	0.434	PQL	mg/Kg	J	Q
BERYLLIUM	0.787		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	1.32		0.0434	MDL	0.109	PQL	mg/Kg	J	Q, E
CHROMIUM	30.7		0.130	MDL	0.434	PQL	mg/Kg	J	Q, Q, E
COBALT	9.68		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	27.7		0.0717	MDL	0.434	PQL	mg/Kg	J	Q
NICKEL	24.5		0.109	MDL	0.434	PQL	mg/Kg	J	Q, E
SILVER	0.148		0.0130	MDL	0.109	PQL	mg/Kg	J	Q
THALLIUM	0.433		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	52.4		0.0239	MDL	0.109	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-126-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 11:15:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.399	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 11:15:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.872		0.0526	MDL	0.105	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-126-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 11:15:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	143		0.114	MDL	0.421	PQL	mg/Kg	J	E

Sample ID: SL-126-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 11:15:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.161	J	0.0631	MDL	0.210	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.21		0.0842	MDL	0.421	PQL	mg/Kg	J	Q
BERYLLIUM	0.733		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	0.880		0.0421	MDL	0.105	PQL	mg/Kg	J	Q, E
CHROMIUM	27.0		0.126	MDL	0.421	PQL	mg/Kg	J	Q, Q, E
COBALT	8.27		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	36.5		0.0694	MDL	0.421	PQL	mg/Kg	J	Q
NICKEL	20.1		0.105	MDL	0.421	PQL	mg/Kg	J	Q, E
SILVER	0.0751	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.357		0.0316	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	47.9		0.0231	MDL	0.105	PQL	mg/Kg	J	A

Sample ID: SL-127-SA5DN-SS-0.0-0.5 **Collected:** 6/1/2011 11:35:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.186	J	0.0403	MDL	0.403	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.618		0.0504	MDL	0.101	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	118		0.109	MDL	0.403	PQL	mg/Kg	J	E

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.148	J	0.0604	MDL	0.201	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.81		0.0806	MDL	0.403	PQL	mg/Kg	J	Q
BERYLLIUM	0.526		0.0161	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	0.359		0.0403	MDL	0.101	PQL	mg/Kg	J	Q, E
CHROMIUM	23.2		0.121	MDL	0.403	PQL	mg/Kg	J	Q, Q, E
COBALT	7.81		0.0201	MDL	0.101	PQL	mg/Kg	J	Q, E
COPPER	14.9		0.0665	MDL	0.403	PQL	mg/Kg	J	Q
NICKEL	15.6		0.101	MDL	0.403	PQL	mg/Kg	J	Q, E
SILVER	0.0481	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.238		0.0302	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	46.5		0.0222	MDL	0.101	PQL	mg/Kg	J	A

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.167	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.544		0.0553	MDL	0.111	PQL	mg/Kg	J	Q, E, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	193		0.119	MDL	0.443	PQL	mg/Kg	J	E

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0989	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q, E
ARSENIC	4.97		0.0885	MDL	0.443	PQL	mg/Kg	J	Q
BERYLLIUM	0.712		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.153		0.0443	MDL	0.111	PQL	mg/Kg	J	Q, E
CHROMIUM	22.7		0.133	MDL	0.443	PQL	mg/Kg	J	Q, Q, E
COBALT	9.27		0.0221	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	14.7		0.0730	MDL	0.443	PQL	mg/Kg	J	Q
NICKEL	15.8		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E
SILVER	0.0611	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.351		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	49.7		0.0243	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.198	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.757		0.0535	MDL	0.107	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.116	MDL	0.428	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-129-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 8:50:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, Q, E
ARSENIC	9.27		0.0856	MDL	0.428	PQL	mg/Kg	J	Q
BERYLLIUM	0.779		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CADMIUM	2.89		0.0428	MDL	0.107	PQL	mg/Kg	J	Q, E
CHROMIUM	29.5		0.128	MDL	0.428	PQL	mg/Kg	J	Q, Q, E
COBALT	8.26		0.0214	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	21.7		0.0706	MDL	0.428	PQL	mg/Kg	J	Q
NICKEL	22.7		0.107	MDL	0.428	PQL	mg/Kg	J	Q, E
SILVER	0.851		0.0128	MDL	0.107	PQL	mg/Kg	J	Q
THALLIUM	0.361		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	48.1		0.0235	MDL	0.107	PQL	mg/Kg	J	A

Sample ID: SL-130-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 8:30:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.0401	MDL	0.401	PQL	mg/Kg	J	Z

Sample ID: SL-130-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 8:30:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.849		0.0502	MDL	0.100	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-130-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 8:30:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.108	MDL	0.401	PQL	mg/Kg	J	E

Sample ID: SL-130-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 8:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.114	J	0.0602	MDL	0.201	PQL	mg/Kg	J	Z, Q, E
ARSENIC	12.5		0.0803	MDL	0.401	PQL	mg/Kg	J	Q
BERYLLIUM	0.718		0.0161	MDL	0.100	PQL	mg/Kg	J	Q
CADMIUM	0.763		0.0401	MDL	0.100	PQL	mg/Kg	J	Q, E
CHROMIUM	30.5		0.120	MDL	0.401	PQL	mg/Kg	J	Q, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-130-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 8:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	8.32		0.0201	MDL	0.100	PQL	mg/Kg	J	Q, E
COPPER	17.1		0.0662	MDL	0.401	PQL	mg/Kg	J	Q
NICKEL	20.6		0.100	MDL	0.401	PQL	mg/Kg	J	Q, E
SILVER	0.0898	J	0.0120	MDL	0.100	PQL	mg/Kg	J	Z, Q
THALLIUM	0.350		0.0301	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	46.8		0.0221	MDL	0.100	PQL	mg/Kg	J	A

Sample ID: SL-148-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:50:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0411	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:50:00 PM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.690		0.0514	MDL	0.103	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-148-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:50:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	145		0.111	MDL	0.411	PQL	mg/Kg	J	E

Sample ID: SL-148-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:50:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.143	J	0.0617	MDL	0.206	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.08		0.0823	MDL	0.411	PQL	mg/Kg	J	Q
BERYLLIUM	0.747		0.0165	MDL	0.103	PQL	mg/Kg	J	Q
CADMIUM	0.422		0.0411	MDL	0.103	PQL	mg/Kg	J	Q, E
CHROMIUM	29.8		0.123	MDL	0.411	PQL	mg/Kg	J	Q, Q, E
COBALT	9.83		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, E
COPPER	16.2		0.0679	MDL	0.411	PQL	mg/Kg	J	Q
NICKEL	21.3		0.103	MDL	0.411	PQL	mg/Kg	J	Q, E
SILVER	0.0571	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z, Q
THALLIUM	0.367		0.0309	MDL	0.103	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	51.7		0.0226	MDL	0.103	PQL	mg/Kg	J	A

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

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5DN-SB-7.0-8.0 *Collected:* 6/1/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.73	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.64	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.93	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-130-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: DUP-11-SA5DN-QC-060111 ***Collected:*** 6/1/2011 2:40:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.427		0.0029	MDL	0.101	PQL	mg/Kg	J	E, Q

Sample ID: SL-015-SA5DN-SB-12.0-13.0 ***Collected:*** 6/1/2011 3:54:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0091	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z, E, Q

Sample ID: SL-015-SA5DN-SB-4.0-5.0 ***Collected:*** 6/1/2011 3:45:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0155	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z, E, Q

Sample ID: SL-017-SA5DN-SB-4.0-5.0 ***Collected:*** 6/1/2011 12:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0075	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z, E, Q

Sample ID: SL-017-SA5DN-SB-7.0-8.0 ***Collected:*** 6/1/2011 12:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0032	U	0.0032	MDL	0.113	PQL	mg/Kg	UJ	E, Q

Sample ID: SL-018-SA5DN-SB-4.0-5.0 ***Collected:*** 6/1/2011 11:16:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0320	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z, E, Q

Sample ID: SL-100-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:25:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.120		0.0030	MDL	0.104	PQL	mg/Kg	J	E, Q

Sample ID: SL-105-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 1:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.321		0.0030	MDL	0.105	PQL	mg/Kg	J	E, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.621		0.0030	MDL	0.106	PQL	mg/Kg	J	E, Q

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.896		0.0140	MDL	0.489	PQL	mg/Kg	J	E, Q

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.653		0.0030	MDL	0.104	PQL	mg/Kg	J	E, Q

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.378		0.0031	MDL	0.108	PQL	mg/Kg	J	E, Q

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0440	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z, E, Q

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.317		0.0030	MDL	0.106	PQL	mg/Kg	J	E, Q

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.134		0.0030	MDL	0.106	PQL	mg/Kg	J	E, Q

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0287	J	0.0028	MDL	0.0985	PQL	mg/Kg	J	Z, E, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0907	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z, E, Q

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0788	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z, E, Q

Sample ID: SL-130-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:30:00 AM *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	1.18		0.0138	MDL	0.483	PQL	mg/Kg	J	E, Q

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0142	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z, E, Q

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	24.1	J	18.0	MDL	36.1	PQL	ng/Kg	J	Z

Sample ID: SL-018-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 11:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	30.8	J	18.4	MDL	36.8	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 6850 **Matrix:** SO

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	3.3	J	2.2	MDL	5.2	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.54	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* RES *Dilution:* 23.36

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.3	J	0.2	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.3	J	2.1	MDL	6.4	PQL	mg/Kg	J	Z

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.2	U	5.2	MDL	10	PQL	mg/Kg	UJ	Q

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.9	J	2.1	MDL	6.3	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* REA2 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	9.6	J	4.3	MDL	13	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	3.5	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.3	J	0.85	MDL	3.6	PQL	ug/Kg	J	Z, S

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.9		0.35	MDL	1.8	PQL	ug/Kg	J	L

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ALDRIN	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	2.2	J	0.85	MDL	3.6	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.33	U	0.33	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN	0.34	U	0.34	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.11	U	0.11	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.12	U	0.12	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	3.8		0.70	MDL	3.6	PQL	ug/Kg	J	L

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	1.5		0.070	MDL	0.36	PQL	ug/Kg	J	S
ALDRIN	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	2.8	J	0.85	MDL	3.6	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.47	U	0.47	MDL	0.47	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.22	U	0.22	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.22	U	0.22	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.22	U	0.22	MDL	0.22	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.085	U	0.085	MDL	0.36	PQL	ug/Kg	UJ	S
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	UJ	S

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
4,4'-DDE	2.5		0.070	MDL	0.36	PQL	ug/Kg	J	S
4,4'-DDT	1.1		0.070	MDL	0.36	PQL	ug/Kg	J	L, S
ALDRIN	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	0.85	U	0.85	MDL	3.6	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-106-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 1:45:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.11	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z, S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN	0.099	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z, L, S
ENDRIN ALDEHYDE	0.081	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z, S
ENDRIN KETONE	0.11	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z, S
gamma-BHC (Lindane)	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	UJ	S

Sample ID: SL-107-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:10:00 PM ***Analysis Type:*** DL-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	26		0.69	MDL	3.5	PQL	ug/Kg	J	L

Sample ID: SL-107-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:10:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.084	J	0.069	MDL	0.35	PQL	ug/Kg	J	Z
METHOXYCHLOR	0.49	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-108-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:30:00 PM ***Analysis Type:*** DL-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	4.1		0.70	MDL	3.6	PQL	ug/Kg	J	L

Sample ID: SL-108-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:30:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALDRIN	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	R	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.063	U	0.063	MDL	0.18	PQL	ug/Kg	R	Q
Chlordane	3.3	J	0.84	MDL	3.6	PQL	ug/Kg	J	Z
DELTA-BHC	0.12	U	0.12	MDL	0.18	PQL	ug/Kg	R	Q
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	Q
ENDRIN KETONE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	Q

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	4.7		0.72	MDL	3.7	PQL	ug/Kg	J	L

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.6	J	0.87	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	12		1.4	MDL	7.3	PQL	ug/Kg	J	L

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.2	J	0.86	MDL	3.7	PQL	ug/Kg	J	Z, S

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDE	0.76		0.072	MDL	0.37	PQL	ug/Kg	J	S
4,4'-DDT	0.44		0.072	MDL	0.37	PQL	ug/Kg	J	L, S
ALDRIN	0.072	U	0.072	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.5	J	0.87	MDL	3.7	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.087	U	0.087	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.14	U	0.14	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.087	U	0.087	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.15	U	0.15	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.2	PQL	ug/Kg	UJ	S

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.071	U	0.071	MDL	0.36	PQL	ug/Kg	UJ	S
4,4'-DDT	1.5		0.071	MDL	0.36	PQL	ug/Kg	J	L, S
ALDRIN	0.071	U	0.071	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	4.2		0.86	MDL	3.6	PQL	ug/Kg	J	S
DELTA-BHC	0.20	U	0.20	MDL	0.20	PQL	ug/Kg	UJ	S
DIELDRIN	0.31	U	0.31	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.25	U	0.25	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.071	U	0.071	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN	0.071	U	0.071	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.19	U	0.19	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.071	U	0.071	MDL	0.36	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.072	U	0.072	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.11	U	0.11	MDL	0.36	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.1	PQL	ug/Kg	UJ	S

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	2.0		0.34	MDL	1.7	PQL	ug/Kg	J	L

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.089	U	0.089	MDL	0.38	PQL	ug/Kg	R	S
4,4'-DDE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
4,4'-DDT	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
ALDRIN	0.074	U	0.074	MDL	0.19	PQL	ug/Kg	R	S
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	R	S
BETA-BHC	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	R	S
Chlordane	1.0	J	0.89	MDL	3.8	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.040	U	0.040	MDL	0.19	PQL	ug/Kg	R	S
DIELDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
ENDOSULFAN I	0.049	U	0.049	MDL	0.19	PQL	ug/Kg	R	S
ENDOSULFAN II	0.10	U	0.10	MDL	0.38	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.089	U	0.089	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN KETONE	0.12	U	0.12	MDL	0.38	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	R	S
HEPTACHLOR	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.056	U	0.056	MDL	0.19	PQL	ug/Kg	R	S
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	R	S
MIREX	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	R	S
TOXAPHENE	2.5	U	2.5	MDL	7.4	PQL	ug/Kg	R	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.51		0.071	MDL	0.36	PQL	ug/Kg	J	S
Chlordane	3.3	J	0.86	MDL	3.6	PQL	ug/Kg	J	Z, S
DIELDRIN	0.40		0.071	MDL	0.36	PQL	ug/Kg	J	S
HEPTACHLOR	0.10	J	0.064	MDL	0.18	PQL	ug/Kg	J	Z, S

Sample ID: SL-130-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.99		0.069	MDL	0.35	PQL	ug/Kg	J	S
4,4'-DDT	1.2		0.069	MDL	0.35	PQL	ug/Kg	J	L, S
Chlordane	2.2	J	0.84	MDL	3.5	PQL	ug/Kg	J	Z, S

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.57		0.069	MDL	0.36	PQL	ug/Kg	J	L

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.5	J	2.1	MDL	9.0	PQL	ug/Kg	J	Z
Aroclor 5460	5.3	U	5.3	MDL	17	PQL	ug/Kg	UJ	FD

Sample ID: SL-017-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 12:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 11:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.70	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.7	J	2.1	MDL	9.0	PQL	ug/Kg	J	Z
Aroclor 5460	6.3	J	5.3	MDL	17	PQL	ug/Kg	J	Z, FD

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.0	J	2.1	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.0	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	1.8	U	1.8	MDL	9.2	PQL	ug/Kg	R	S
AROCLOR 1221	1.8	U	1.8	MDL	9.2	PQL	ug/Kg	R	S
AROCLOR 1232	1.8	U	1.8	MDL	9.2	PQL	ug/Kg	R	S
AROCLOR 1242	1.8	U	1.8	MDL	9.2	PQL	ug/Kg	R	S
AROCLOR 1248	1.8	U	1.8	MDL	9.2	PQL	ug/Kg	R	S
AROCLOR 1254	1.8	U	1.8	MDL	9.2	PQL	ug/Kg	R	S
AROCLOR 1260	14		2.1	MDL	9.2	PQL	ug/Kg	J	S
Aroclor 1262	1.8	U	1.8	MDL	9.2	PQL	ug/Kg	R	S
Aroclor 1268	1.8	U	1.8	MDL	9.2	PQL	ug/Kg	R	S
Aroclor 5432	5.4	U	5.4	MDL	18	PQL	ug/Kg	R	S
Aroclor 5442	5.4	U	5.4	MDL	18	PQL	ug/Kg	R	S
Aroclor 5460	16	J	5.4	MDL	18	PQL	ug/Kg	J	Z, S

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	13	J	5.4	MDL	18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	8.4	J	5.1	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.9	J	1.0	MDL	3.5	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.079	U	0.079	MDL	0.18	PQL	ug/Kg	UJ	FD
DICAMBA	0.42	U	0.42	MDL	1.3	PQL	ug/Kg	UJ	FD
MCPA	460		80	MDL	260	PQL	ug/Kg	J	FD

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.090	J	0.080	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	1.4	J	0.83	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.11	J	0.079	MDL	0.18	PQL	ug/Kg	J	Z, Q, FD
DICAMBA	0.56	J	0.42	MDL	1.3	PQL	ug/Kg	J	Z, FD
MCPA	820		80	MDL	260	PQL	ug/Kg	J	Q, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8151A **Matrix:** SO

Sample ID: SL-109-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.12	J	0.081	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.17	J	0.081	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-129-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:50:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.10	J	0.080	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.12	J	0.078	MDL	0.18	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	17	MDL	350	PQL	ug/Kg	J	Z, L

Sample ID: SL-017-SA5DN-SB-7.0-8.0 *Collected:* 6/1/2011 12:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	61	J	19	MDL	380	PQL	ug/Kg	J	Z, L

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BENZO(B)FLUORANTHENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-100-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	150	J	18	MDL	350	PQL	ug/Kg	J	Z, L
CHRYSENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z, L
FLUORANTHENE	34	J	18	MDL	180	PQL	ug/Kg	J	Z, L
PYRENE	36	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-105-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	18	MDL	350	PQL	ug/Kg	J	Z, L

Sample ID: SL-106-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 1:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	68	J	18	MDL	350	PQL	ug/Kg	J	Z, L

Sample ID: SL-107-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:10:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	17	MDL	350	PQL	ug/Kg	J	Z, L

Sample ID: SL-108-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 2:30:00 PM *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	350	U	350	MDL	1100	PQL	ug/Kg	UJ	Q
BENZIDINE	1200	U	1200	MDL	3500	PQL	ug/Kg	UJ	Q

Sample ID: SL-123-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	18	MDL	360	PQL	ug/Kg	J	Z, L

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	49	J	18	MDL	360	PQL	ug/Kg	J	Z, L
CHRYSENE	55	J	18	MDL	180	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-124-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	28	J	18	MDL	180	PQL	ug/Kg	J	Z, L
PYRENE	28	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-126-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	18	J	18	MDL	180	PQL	ug/Kg	J	Z, L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	18	MDL	350	PQL	ug/Kg	J	Z, L
PYRENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-127-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	160	J	84	MDL	1700	PQL	ug/Kg	J	Z, L

Sample ID: SL-128-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 9:20:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	36	J	19	MDL	370	PQL	ug/Kg	J	Z, L

Sample ID: SL-130-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 8:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	17	MDL	350	PQL	ug/Kg	J	Z, L

Method Category: SVOA

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

Sample ID: DUP-11-SA5DN-QC-060111 *Collected:* 6/1/2011 2:40:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.86	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	1.8		0.71	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP-11-SA5DN-QC-060111 ***Collected:*** 6/1/2011 2:40:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	1.5	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	0.91	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	0.90	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD
PYRENE	1.5	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-015-SA5DN-SB-12.0-13.0 ***Collected:*** 6/1/2011 3:54:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.48	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.78	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-105-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 1:35:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	3.6	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

Sample ID: SL-106-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 1:45:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	7.7	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	7.5	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	8.0	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.5	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z
PHENANTHRENE	7.0	J	3.5	MDL	8.9	PQL	ug/Kg	J	Z

Sample ID: SL-107-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:10:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.86	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.90	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.0	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-108-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 2:30:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	3.5	U	3.5	MDL	8.8	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	3.5	U	3.5	MDL	8.8	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	4.6	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z, FD
BENZO(G,H,I)PERYLENE	3.5	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.3	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	73	J	32	MDL	95	PQL	ug/Kg	J	Z
CHRYSENE	5.2	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
FLUORANTHENE	5.8	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	3.5	U	3.5	MDL	8.8	PQL	ug/Kg	UJ	FD
PHENANTHRENE	3.5	U	3.5	MDL	8.8	PQL	ug/Kg	UJ	FD
PYRENE	5.0	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-109-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:10:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.80	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.94	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.83	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.92	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-123-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.88	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-124-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 10:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.79	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.91	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory:** LL

EDD Filename: PrepDE170_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-126-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 11:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.9	J	1.8	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	7.0	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.7	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.0	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z

Sample ID: SL-127-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 11:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	5.9	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	6.0	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.0	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.3	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
PHENANTHRENE	4.4	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-128-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 9:20:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.64	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-129-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 8:50:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.83	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.0	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	14	J	6.4	MDL	19	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-148-SA5DN-SS-0.0-0.5 ***Collected:*** 6/1/2011 3:50:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	4.2	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	3.7	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	3.9	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	45	J	31	MDL	94	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: PrepDE170_v2 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-148-SA5DN-SS-0.0-0.5 *Collected:* 6/1/2011 3:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	6.0	J	1.7	MDL	8.7	PQL	ug/Kg	J	Z
FLUORANTHENE	6.3	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z
PYRENE	4.8	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8330A **Matrix:** SO

Sample ID: SL-018-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 11:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	70	J	44	MDL	130	PQL	ug/Kg	J	Z

Method Category: VOA **Method:** 8260B **Matrix:** SO

Sample ID: SL-015-SA5DN-SB-12.0-13.0 *Collected:* 6/1/2011 3:54:00 PM *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.6		6.1	MDL	7.3	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.85	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-015-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 3:45:00 PM *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.9		7.3	MDL	8.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.2	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-017-SA5DN-SB-4.0-5.0 *Collected:* 6/1/2011 12:35:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.5		6.8	MDL	8.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.1	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-018-SA5DN-SB-4.0-5.0** ***Collected:*** **6/1/2011 11:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.04**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ACETONE	9.1	J	7.7	MDL	9.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.28	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE170

Method Blank Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15908FB220728	6/14/2011 7:28:00 AM	CALCIUM PHOSPHORUS	7.77 mg/Kg 1.63 mg/Kg	DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-146-SA5DN-SS-0.0-0.5
P15908FB220930	6/15/2011 9:30:00 AM	BORON	0.454 mg/Kg	DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5
P16508EB220829	6/16/2011 8:29:00 AM	TIN	1.75 mg/Kg	DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-11-SA5DN-QC-060111(REA4)	TIN	3.05 mg/Kg	3.05U mg/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-015-SA5DN-SB-12.0-13.0(REA4)	TIN	3.20 mg/Kg	3.20U mg/Kg
SL-015-SA5DN-SB-4.0-5.0(REA4)	TIN	3.07 mg/Kg	3.07U mg/Kg
SL-017-SA5DN-SB-4.0-5.0(REA4)	TIN	3.44 mg/Kg	3.44U mg/Kg
SL-017-SA5DN-SB-7.0-8.0(REA4)	TIN	3.98 mg/Kg	3.98U mg/Kg
SL-018-SA5DN-SB-4.0-5.0(REA4)	TIN	3.34 mg/Kg	3.34U mg/Kg
SL-100-SA5DN-SS-0.0-0.5(REA4)	TIN	3.28 mg/Kg	3.28U mg/Kg
SL-105-SA5DN-SS-0.0-0.5(REA4)	TIN	3.26 mg/Kg	3.26U mg/Kg
SL-106-SA5DN-SS-0.0-0.5(REA4)	TIN	3.29 mg/Kg	3.29U mg/Kg
SL-107-SA5DN-SS-0.0-0.5(REA4)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-108-SA5DN-SS-0.0-0.5(REA4)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-109-SA5DN-SS-0.0-0.5(REA4)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-123-SA5DN-SS-0.0-0.5(REA4)	TIN	3.12 mg/Kg	3.12U mg/Kg
SL-124-SA5DN-SS-0.0-0.5(REA4)	TIN	3.50 mg/Kg	3.50U mg/Kg
SL-126-SA5DN-SS-0.0-0.5(REA4)	TIN	3.26 mg/Kg	3.26U mg/Kg
SL-127-SA5DN-SS-0.0-0.5(REA4)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-128-SA5DN-SS-0.0-0.5(REA4)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-129-SA5DN-SS-0.0-0.5(REA4)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-130-SA5DN-SS-0.0-0.5(REA4)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-148-SA5DN-SS-0.0-0.5(REA4)	TIN	3.03 mg/Kg	3.03U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15926BB221126A	6/11/2011 11:26:00 AM	COPPER LEAD	0.307 mg/Kg 0.0446 mg/Kg	DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE170 Laboratory: LL

EDD Filename: DE170_v2 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB76B210344A	6/7/2011 3:44:00 AM	ACETONE METHYLENE CHLORIDE	8.4 ug/Kg 1.4 ug/Kg	SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-018-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-015-SA5DN-SB-12.0-13.0(RES)	ACETONE	7.6 ug/Kg	7.6U ug/Kg
SL-015-SA5DN-SB-12.0-13.0(RES)	METHYLENE CHLORIDE	0.85 ug/Kg	3.7U ug/Kg
SL-015-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.9 ug/Kg	8.9U ug/Kg
SL-015-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.4U ug/Kg
SL-017-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.5 ug/Kg	8.5U ug/Kg
SL-017-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.0U ug/Kg
SL-018-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.1 ug/Kg	9.2U ug/Kg
SL-018-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.6U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-107-SA5DN-SS-0.0-0.5MS SL-107-SA5DN-SS-0.0-0.5MSD (SL-107-SA5DN-SS-0.0-0.5)	DIETHYLENE GLYCOL	29	34	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN-SS-0.0-0.5MSD (SL-108-SA5DN-SS-0.0-0.5)	4,4'-DDD	-	-	16.00-163.00	80 (50.00)	4,4'-DDD	J(all detects)
	ALPHA-BHC	-	-	10.00-129.00	95 (50.00)	ALPHA-BHC	
	DIELDRIN	-	-	19.00-154.00	57 (50.00)	DIELDRIN	
	ENDOSULFAN I	-	-	16.00-137.00	80 (50.00)	ENDOSULFAN I	
	ENDOSULFAN SULFATE	-	-	21.00-160.00	74 (50.00)	ENDOSULFAN SULFATE	
	ENDRIN	-	-	11.00-149.00	101 (50.00)	ENDRIN	
	ENDRIN ALDEHYDE	-	-	10.00-148.00	122 (35.00)	ENDRIN ALDEHYDE	
	gamma-BHC (Lindane)	-	-	10.00-140.00	87 (50.00)	gamma-BHC (Lindane)	
	HEPTACHLOR	-	-	13.00-126.00	98 (50.00)	HEPTACHLOR	
	HEPTACHLOR EPOXIDE	-	-	13.00-157.00	89 (50.00)	HEPTACHLOR EPOXIDE	
	METHOXYCHLOR	-	-	32.00-147.00	62 (50.00)	METHOXYCHLOR	
SL-108-SA5DN-SS-0.0-0.5MS SL-108-SA5DN-SS-0.0-0.5MSD (SL-108-SA5DN-SS-0.0-0.5)	4,4'-DDE	-604	249	18.00-161.00	69 (50.00)	4,4'-DDE	J(all detects) R(all non-detects)
	4,4'-DDT	-244	-	10.00-176.00	73 (50.00)	4,4'-DDT	
	ALDRIN	0	-	16.00-126.00	200 (50.00)	ALDRIN	
	BETA-BHC	0	-	14.00-147.00	200 (50.00)	BETA-BHC	4,4-DDE, 4,4-DDT, No Qual, >4x
	DELTA-BHC	0	0	23.00-140.00	-	DELTA-BHC	
SL-108-SA5DN-SS-0.0-0.5MS SL-108-SA5DN-SS-0.0-0.5MSD (SL-108-SA5DN-SS-0.0-0.5)	ENDOSULFAN II	18	-	28.00-154.00	86 (50.00)	ENDOSULFAN II	J(all detects) UJ(all non-detects)
	ENDRIN KETONE	21	-	22.00-165.00	86 (50.00)	ENDRIN KETONE	

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN-SS-0.0-0.5MS SL-108-SA5DN-SS-0.0-0.5MSD (SL-108-SA5DN-SS-0.0-0.5)	2,4,5-TP (Silvex)	-	-	24.00-141.00	52 (35.00)	2,4,5-TP (Silvex)	J(all detects)
	2,4-DB	1112	-	10.00-201.00	190 (50.00)	2,4-DB	
SL-108-SA5DN-SS-0.0-0.5MS SL-108-SA5DN-SS-0.0-0.5MSD (SL-108-SA5DN-SS-0.0-0.5)	MCPA	-65	-73	10.00-213.00	-	MCPA	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN -SS-0.0-0.5MS SL-108-SA5DN -SS-0.0-0.5MSD (SL-108-SA5DN -SS-0.0-0.5)	1,2,4-TRICHLOROBENZENE	123	123	72.00-115.00	-	1,2,4-TRICHLOROBENZENE	
	1,2-DICHLOROBENZENE	116	121	66.00-108.00	-	1,2-DICHLOROBENZENE	
	1,3-DICHLOROBENZENE	112	115	63.00-109.00	-	1,3-DICHLOROBENZENE	
	1,4-DICHLOROBENZENE	113	116	70.00-100.00	-	1,4-DICHLOROBENZENE	
	1-METHYLNAPHTHALENE	131	130	73.00-112.00	-	1-METHYLNAPHTHALENE	
	2,4,5-TRICHLOROPHENOL	133	132	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4,6-TRICHLOROPHENOL	136	135	77.00-115.00	-	2,4,6-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	129	132	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	120	120	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	129	131	73.00-113.00	-	2,4-DINITROTOLUENE	
	2,6-DINITROTOLUENE	126	125	69.00-123.00	-	2,6-DINITROTOLUENE	
	2-CHLOROPHENOL	127	126	73.00-121.00	-	2-CHLOROPHENOL	
	2-METHYLNAPHTHALENE	122	123	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	128	126	75.00-111.00	-	2-METHYLPHENOL	
	2-NITROANILINE	149	145	67.00-125.00	-	2-NITROANILINE	
	2-NITROPHENOL	119	119	74.00-115.00	-	2-NITROPHENOL	
	3,3'-DICHLOROBENZIDINE	124	122	16.00-119.00	-	3,3'-DICHLOROBENZIDINE	
	3-NITROANILINE	147	141	59.00-122.00	-	3-NITROANILINE	
	4-CHLORO-3-METHYLPHENOL	131	131	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROANILINE	106	-	23.00-95.00	-	4-CHLOROANILINE	
	4-CHLOROPHENYL-PHENYLET	131	129	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	131	131	71.00-111.00	-	4-METHYLPHENOL	
	4-NITROANILINE	125	-	52.00-112.00	-	4-NITROANILINE	
	4-NITROPHENOL	119	117	54.00-113.00	-	4-NITROPHENOL	
	ACENAPHTHENE	128	129	75.00-115.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	136	134	81.00-110.00	-	ACENAPHTHYLENE	J(all detects)
	ANILINE	96	-	35.00-95.00	-	ANILINE	
	ANTHRACENE	132	132	75.00-115.00	-	ANTHRACENE	
	BENZO(A)ANTHRACENE	135	136	65.00-122.00	-	BENZO(A)ANTHRACENE	
	BENZO(B)FLUORANTHENE	127	-	59.00-125.00	-	BENZO(B)FLUORANTHENE	
	BENZYL ALCOHOL	134	129	67.00-115.00	-	BENZYL ALCOHOL	
	BIS(2-CHLOROETHOXY)METHA	128	128	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	BIS(2-CHLOROETHYL) ETHER	-	118	60.00-116.00	-	BIS(2-CHLOROETHYL) ETHER	
	BIS(2-ETHYLHEXYL)PHTHALAT	140	137	63.00-122.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	141	142	73.00-134.00	-	Butylbenzylphthalate	
	CARBAZOLE	136	135	64.00-120.00	-	CARBAZOLE	
	CHRYSENE	129	131	62.00-128.00	-	CHRYSENE	
	DIBENZOFURAN	133	130	71.00-112.00	-	DIBENZOFURAN	
	Diethylphthalate	128	128	66.00-118.00	-	Diethylphthalate	
	Dimethylphthalate	126	127	64.00-118.00	-	Dimethylphthalate	
	Di-n-butylphthalate	124	124	67.00-123.00	-	Di-n-butylphthalate	
	FLUORANTHENE	130	132	73.00-112.00	-	FLUORANTHENE	
	FLUORENE	134	131	77.00-111.00	-	FLUORENE	
	HEXACHLOROBENZENE	133	134	77.00-114.00	-	HEXACHLOROBENZENE	
	ISOPHORONE	129	127	73.00-102.00	-	ISOPHORONE	
	NAPHTHALENE	123	121	72.00-116.00	-	NAPHTHALENE	
	NITROBENZENE	126	128	72.00-106.00	-	NITROBENZENE	
	N-NITROSO-DI-N-PROPYLAMIN	130	131	60.00-116.00	-	N-NITROSO-DI-N-PROPYLAMI	
	PHENANTHRENE	128	129	65.00-125.00	-	PHENANTHRENE	
	PYRENE	135	136	74.00-126.00	-	PYRENE	
SL-108-SA5DN -SS-0.0-0.5MS SL-108-SA5DN -SS-0.0-0.5MSD (SL-108-SA5DN -SS-0.0-0.5)	2,4-DINITROPHENOL	14	14	20.00-143.00	-	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)
	BENZIDINE	23	26	35.00-141.00	-	BENZIDINE	

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN -SS-0.0-0.5MSD (SL-108-SA5DN -SS-0.0-0.5)	FLUORANTHENE	-	-	26.00-166.00	31 (30.00)	FLUORANTHENE	No Qual, Diluted Out
	PYRENE	-	-	15.00-153.00	32 (30.00)	PYRENE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN -SS-0.0-0.5MS	BIS(2-ETHYLHEXYL)PHTHALAT	-91	-91	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
SL-108-SA5DN -SS-0.0-0.5MSD	Butylbenzylphthalate	0	0	57.00-173.00	-	Butylbenzylphthalate	No Qual
(SL-108-SA5DN -SS-0.0-0.5)	Dimethylphthalate	0	0	74.00-118.00	-	Dimethylphthalate	Diluted Out
	Di-n-octylphthalate	0	0	40.00-192.00	-	Di-n-octylphthalate	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN -SS-0.0-0.5MS	ARSENIC	-	195	75.00-125.00	-	ARSENIC	
SL-108-SA5DN -SS-0.0-0.5MSD	BERYLLIUM	-	140	75.00-125.00	-	BERYLLIUM	
(DUP-11-SA5DN -QC-060111	COPPER	-	159	75.00-125.00	-	COPPER	
SL -015-SA5DN -SB-12.0-13.0	SILVER	-	138	75.00-125.00	-	SILVER	
SL -015-SA5DN -SB-4.0-5.0	THALLIUM	-	161	75.00-125.00	-	THALLIUM	
SL -017-SA5DN -SB-4.0-5.0	VANADIUM	126	218	75.00-125.00	-	VANADIUM	
SL -017-SA5DN -SB-7.0-8.0							
SL -018-SA5DN -SB-4.0-5.0							
SL -100-SA5DN -SS-0.0-0.5							J(all detects)
SL -105-SA5DN -SS-0.0-0.5							
SL -106-SA5DN -SS-0.0-0.5							
SL -107-SA5DN -SS-0.0-0.5							
SL -108-SA5DN -SS-0.0-0.5							V,
SL -109-SA5DN -SS-0.0-0.5							No Qual, >4x
SL -123-SA5DN -SS-0.0-0.5							
SL -124-SA5DN -SS-0.0-0.5							
SL -126-SA5DN -SS-0.0-0.5							
SL -127-SA5DN -SS-0.0-0.5							
SL -128-SA5DN -SS-0.0-0.5							
SL -129-SA5DN -SS-0.0-0.5							
SL -130-SA5DN -SS-0.0-0.5							
SL -148-SA5DN -SS-0.0-0.5)							
SL-108-SA5DN -SS-0.0-0.5MS	ANTIMONY	29	46	75.00-125.00	36 (20.00)	ANTIMONY	
SL-108-SA5DN -SS-0.0-0.5MSD	LEAD	-143	-97	75.00-125.00	-	LEAD	
(DUP-11-SA5DN -QC-060111							
SL -015-SA5DN -SB-12.0-13.0							
SL -015-SA5DN -SB-4.0-5.0							
SL -017-SA5DN -SB-4.0-5.0							
SL -017-SA5DN -SB-7.0-8.0							J(all detects)
SL -018-SA5DN -SB-4.0-5.0							UJ(all non-detects)
SL -100-SA5DN -SS-0.0-0.5							
SL -105-SA5DN -SS-0.0-0.5							
SL -106-SA5DN -SS-0.0-0.5							
SL -107-SA5DN -SS-0.0-0.5							
SL -108-SA5DN -SS-0.0-0.5							
SL -109-SA5DN -SS-0.0-0.5							Pb,
SL -123-SA5DN -SS-0.0-0.5							No Qual, >4x
SL -124-SA5DN -SS-0.0-0.5							
SL -126-SA5DN -SS-0.0-0.5							
SL -127-SA5DN -SS-0.0-0.5							
SL -128-SA5DN -SS-0.0-0.5							Sb post spike =
SL -129-SA5DN -SS-0.0-0.5							80%
SL -130-SA5DN -SS-0.0-0.5							
SL -148-SA5DN -SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN-SS-0.0-0.5MS SL-108-SA5DN-SS-0.0-0.5MSD (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	CADMIUM CHROMIUM COBALT NICKEL ZINC	- 71 - - 51	147 162 139 185 205	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	22 (20.00) 21 (20.00) 22 (20.00) 25 (20.00) -	CADMIUM CHROMIUM COBALT NICKEL ZINC	J(all detects) UJ(all non-detects) Zn, No Qual, >4x
SL-108-SA5DN-SS-0.0-0.5MSD (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	MOLYBDENUM	-	135	75.00-125.00	22 (20.00)	MOLYBDENUM	J(all detects) UJ(all non-detects)
SL-108-SA5DN-SS-0.0-0.5MSD (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	BARIUM	-	-243	75.00-125.00	25 (20.00)	BARIUM	J(all detects) UJ (all non-detects) No Qual %R, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN-SS-0.0-0.5MS **SL-108-SA5DN-SS-0.0-0.5MSD** (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	ALUMINUM	1734	1289	75.00-125.00	-	ALUMINUM	No Qual, >4x
SL-108-SA5DN-SS-0.0-0.5MS **SL-108-SA5DN-SS-0.0-0.5MSD** (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	CALCIUM IRON MAGNESIUM PHOSPHORUS	64 -1211 297 20	-32 -1166 -45 52	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	CALCIUM IRON MAGNESIUM PHOSPHORUS	J(all detects) UJ(all non-detects) Ca, Fe, Mg, No Qual, >4x P post spike = 88%
SL-108-SA5DN-SS-0.0-0.5MSD (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	MANGANESE	-	405	75.00-125.00	31 (20.00)	MANGANESE	J(all detects) UJ(all non-detects) No Qual %R, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN-SS-0.0-0.5MS SL-108-SA5DN-SS-0.0-0.5MSD (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	MERCURY	-88	-85	65.00-135.00	-	MERCURY	J(all detects) UJ(all non-detects) Post spike = 89%

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN-SS-0.0-0.5MS SL-108-SA5DN-SS-0.0-0.5MSD (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	TITANIUM	325	305	75.00-125.00	-	TITANIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-108-SA5DN-SS-0.0-0.5MS (SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5)	FLUORIDE Nitrate-NO3	51 70	- -	80.00-120.00 80.00-120.00	- -	FLUORIDE Nitrate-NO3	J(all detects) UJ(all non-detects)
SL-128-SA5DN-SS-0.0-0.5MS (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	FLUORIDE Nitrate-NO3	48 79	- -	80.00-120.00 80.00-120.00	- -	FLUORIDE Nitrate-NO3	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-108-SA5DN-SS-0.0-0.5DUP	FLUORIDE	65	20.00	No Qual, OK by Difference
(SL-100-SA5DN-SS-0.0-0.5	Nitrate-NO3	29	20.00	
SL-105-SA5DN-SS-0.0-0.5				
SL-106-SA5DN-SS-0.0-0.5				
SL-107-SA5DN-SS-0.0-0.5				
SL-108-SA5DN-SS-0.0-0.5				
SL-109-SA5DN-SS-0.0-0.5				
SL-123-SA5DN-SS-0.0-0.5				
SL-124-SA5DN-SS-0.0-0.5				
SL-126-SA5DN-SS-0.0-0.5				
SL-127-SA5DN-SS-0.0-0.5)				

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-108-SA5DN-SS-0.0-0.5DUP	Zirconium	23	20.00	No Qual, OK by Difference
(DUP-11-SA5DN-QC-060111				
SL-015-SA5DN-SB-12.0-13.0				
SL-015-SA5DN-SB-4.0-5.0				
SL-017-SA5DN-SB-4.0-5.0				
SL-017-SA5DN-SB-7.0-8.0				
SL-018-SA5DN-SB-4.0-5.0				
SL-100-SA5DN-SS-0.0-0.5				
SL-105-SA5DN-SS-0.0-0.5				
SL-106-SA5DN-SS-0.0-0.5				
SL-107-SA5DN-SS-0.0-0.5				
SL-108-SA5DN-SS-0.0-0.5				
SL-109-SA5DN-SS-0.0-0.5				
SL-123-SA5DN-SS-0.0-0.5				
SL-124-SA5DN-SS-0.0-0.5				
SL-126-SA5DN-SS-0.0-0.5				
SL-127-SA5DN-SS-0.0-0.5				
SL-128-SA5DN-SS-0.0-0.5				
SL-129-SA5DN-SS-0.0-0.5				
SL-130-SA5DN-SS-0.0-0.5				
SL-148-SA5DN-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-108-SA5DN-SS-0.0-0.5DUP	MOLYBDENUM	23	20.00	
(DUP-11-SA5DN-QC-060111	SELENIUM	22	20.00	
SL-015-SA5DN-SB-12.0-13.0	SILVER	74	20.00	
SL-015-SA5DN-SB-4.0-5.0				
SL-017-SA5DN-SB-4.0-5.0				
SL-017-SA5DN-SB-7.0-8.0				
SL-018-SA5DN-SB-4.0-5.0				J(all detects)
SL-100-SA5DN-SS-0.0-0.5				UJ(all non-detects)
SL-105-SA5DN-SS-0.0-0.5				
SL-106-SA5DN-SS-0.0-0.5				
SL-107-SA5DN-SS-0.0-0.5				
SL-108-SA5DN-SS-0.0-0.5				
SL-109-SA5DN-SS-0.0-0.5				Se, Ag,
SL-123-SA5DN-SS-0.0-0.5				No Qual,
SL-124-SA5DN-SS-0.0-0.5				OK by Difference
SL-126-SA5DN-SS-0.0-0.5				
SL-127-SA5DN-SS-0.0-0.5				
SL-128-SA5DN-SS-0.0-0.5				
SL-129-SA5DN-SS-0.0-0.5				
SL-130-SA5DN-SS-0.0-0.5				
SL-148-SA5DN-SS-0.0-0.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-108-SA5DN-SS-0.0-0.5DUP	HEXAVALENT CHROMIUM	200	20.00	
(DUP-11-SA5DN-QC-060111				
SL-015-SA5DN-SB-12.0-13.0				
SL-015-SA5DN-SB-4.0-5.0				
SL-017-SA5DN-SB-4.0-5.0				
SL-017-SA5DN-SB-7.0-8.0				
SL-018-SA5DN-SB-4.0-5.0				
SL-100-SA5DN-SS-0.0-0.5				
SL-105-SA5DN-SS-0.0-0.5				
SL-106-SA5DN-SS-0.0-0.5				
SL-107-SA5DN-SS-0.0-0.5				No Qual,
SL-108-SA5DN-SS-0.0-0.5				OK by Difference
SL-109-SA5DN-SS-0.0-0.5				
SL-123-SA5DN-SS-0.0-0.5				
SL-124-SA5DN-SS-0.0-0.5				
SL-126-SA5DN-SS-0.0-0.5				
SL-127-SA5DN-SS-0.0-0.5				
SL-128-SA5DN-SS-0.0-0.5				
SL-129-SA5DN-SS-0.0-0.5				
SL-130-SA5DN-SS-0.0-0.5				
SL-148-SA5DN-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-108-SA5DN-SS-0.0-0.5DUP (DUP-11-SA5DN-QC-060111 SL -015-SA5DN-SB-12.0-13.0 SL -015-SA5DN-SB-4.0-5.0 SL -017-SA5DN-SB-4.0-5.0 SL -017-SA5DN-SB-7.0-8.0 SL -018-SA5DN-SB-4.0-5.0 SL -100-SA5DN-SS-0.0-0.5 SL -105-SA5DN-SS-0.0-0.5 SL -106-SA5DN-SS-0.0-0.5 SL -107-SA5DN-SS-0.0-0.5 SL -108-SA5DN-SS-0.0-0.5 SL -109-SA5DN-SS-0.0-0.5 SL -123-SA5DN-SS-0.0-0.5 SL -124-SA5DN-SS-0.0-0.5 SL -126-SA5DN-SS-0.0-0.5 SL -127-SA5DN-SS-0.0-0.5 SL -128-SA5DN-SS-0.0-0.5 SL -129-SA5DN-SS-0.0-0.5 SL -130-SA5DN-SS-0.0-0.5 SL -148-SA5DN-SS-0.0-0.5)	MERCURY	0.3178	0.208	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P11595AQ242340A	4,4'-DDT	145	-	54.00-130.00	-	4,4'-DDT	
(DUP-11-SA5DN-QC-060111	ENDRIN	132	-	62.00-129.00	-	ENDRIN	
SL-100-SA5DN-SS-0.0-0.5	METHOXYCHLOR	143	-	59.00-125.00	-	METHOXYCHLOR	
SL-105-SA5DN-SS-0.0-0.5							
SL-106-SA5DN-SS-0.0-0.5							
SL-107-SA5DN-SS-0.0-0.5							
SL-108-SA5DN-SS-0.0-0.5							
SL-109-SA5DN-SS-0.0-0.5							
SL-123-SA5DN-SS-0.0-0.5							J (all detects)
SL-124-SA5DN-SS-0.0-0.5							
SL-126-SA5DN-SS-0.0-0.5							
SL-127-SA5DN-SS-0.0-0.5							
SL-128-SA5DN-SS-0.0-0.5							
SL-129-SA5DN-SS-0.0-0.5							
SL-130-SA5DN-SS-0.0-0.5							
SL-148-SA5DN-SS-0.0-0.5)							

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7LELCSQ261232	1,2,4-TRICHLOROBENZENE	119	-	73.00-108.00	-	1,2,4-TRICHLOROBENZENE	
(DUP-11-SA5DN-QC-060111	1,2-DICHLOROBENZENE	118	-	79.00-102.00	-	1,2-DICHLOROBENZENE	
SL-015-SA5DN-SB-12.0-13.0	1,2-Diphenylhydrazine/Azobenzen	125	-	77.00-111.00	-	1,2-Diphenylhydrazine/Azobenz	
SL-015-SA5DN-SB-4.0-5.0	1,3-DICHLOROBENZENE	116	-	70.00-98.00	-	1,3-DICHLOROBENZENE	
SL-017-SA5DN-SB-4.0-5.0	1,4-DICHLOROBENZENE	118	-	74.00-106.00	-	1,4-DICHLOROBENZENE	
SL-017-SA5DN-SB-7.0-8.0	1-METHYLNAPHTHALENE	126	-	74.00-105.00	-	1-METHYLNAPHTHALENE	
SL-018-SA5DN-SB-4.0-5.0	2,4,5-TRICHLOROPHENOL	127	-	76.00-107.00	-	2,4,5-TRICHLOROPHENOL	
SL-100-SA5DN-SS-0.0-0.5	2,4,6-TRICHLOROPHENOL	131	-	78.00-111.00	-	2,4,6-TRICHLOROPHENOL	
SL-105-SA5DN-SS-0.0-0.5	2,4-DICHLOROPHENOL	127	-	75.00-111.00	-	2,4-DICHLOROPHENOL	
SL-106-SA5DN-SS-0.0-0.5	2,4-DIMETHYLPHENOL	122	-	72.00-111.00	-	2,4-DIMETHYLPHENOL	
SL-107-SA5DN-SS-0.0-0.5	2,4-DINITROTOLUENE	135	-	73.00-115.00	-	2,4-DINITROTOLUENE	
SL-108-SA5DN-SS-0.0-0.5	2,6-DINITROTOLUENE	130	-	79.00-115.00	-	2,6-DINITROTOLUENE	
SL-109-SA5DN-SS-0.0-0.5	2-CHLOROPHENOL	127	-	72.00-112.00	-	2-CHLOROPHENOL	
SL-123-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	119	-	76.00-105.00	-	2-METHYLNAPHTHALENE	
SL-124-SA5DN-SS-0.0-0.5	2-METHYLPHENOL	125	-	66.00-110.00	-	2-METHYLPHENOL	
SL-126-SA5DN-SS-0.0-0.5	2-NITROANILINE	136	-	78.00-116.00	-	2-NITROANILINE	
SL-127-SA5DN-SS-0.0-0.5	2-NITROPHENOL	128	-	81.00-114.00	-	2-NITROPHENOL	
SL-128-SA5DN-SS-0.0-0.5	3-NITROANILINE	128	-	62.00-109.00	-	3-NITROANILINE	
SL-129-SA5DN-SS-0.0-0.5	4-BROMOPHENYL-PHENYLETH	119	-	79.00-117.00	-	4-BROMOPHENYL-PHENYLET	
SL-130-SA5DN-SS-0.0-0.5	4-CHLORO-3-METHYLPHENOL	126	-	74.00-119.00	-	4-CHLORO-3-METHYLPHENOL	
SL-148-SA5DN-SS-0.0-0.5)	4-CHLOROPHENYL-PHENYLET	122	-	79.00-110.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	128	-	66.00-117.00	-	4-METHYLPHENOL	
	ACENAPHTHENE	125	-	76.00-111.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	130	-	75.00-122.00	-	ACENAPHTHYLENE	
	ANILINE	108	-	34.00-94.00	-	ANILINE	
	ANTHRACENE	127	-	76.00-112.00	-	ANTHRACENE	
	BENZO(A)ANTHRACENE	132	-	73.00-112.00	-	BENZO(A)ANTHRACENE	
	BENZO(A)PYRENE	128	-	69.00-122.00	-	BENZO(A)PYRENE	J(all detects)
	BENZO(G,H,I)PERYLENE	126	-	65.00-122.00	-	BENZO(G,H,I)PERYLENE	
	BENZYL ALCOHOL	129	-	68.00-111.00	-	BENZYL ALCOHOL	
	BIS(2-CHLOROETHOXY)METHA	121	-	70.00-118.00	-	BIS(2-CHLOROETHOXY)METH	
	BIS(2-CHLOROETHYL) ETHER	121	-	70.00-104.00	-	BIS(2-CHLOROETHYL) ETHER	
	BIS(2-ETHYLHEXYL)PHTHALAT	132	-	75.00-117.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	137	-	75.00-115.00	-	Butylbenzylphthalate	
	CARBAZOLE	128	-	77.00-113.00	-	CARBAZOLE	
	CHRYSENE	129	-	76.00-113.00	-	CHRYSENE	
	DIBENZOFURAN	128	-	79.00-108.00	-	DIBENZOFURAN	
	Diethylphthalate	125	-	76.00-111.00	-	Diethylphthalate	
	Dimethylphthalate	121	-	77.00-109.00	-	Dimethylphthalate	
	Di-n-butylphthalate	118	-	79.00-112.00	-	Di-n-butylphthalate	
	FLUORANTHENE	128	-	78.00-116.00	-	FLUORANTHENE	
	FLUORENE	126	-	75.00-116.00	-	FLUORENE	
	HEXACHLOROBENZENE	122	-	78.00-116.00	-	HEXACHLOROBENZENE	
	HEXACHLOROCYCLOPENTADI	121	-	46.00-115.00	-	HEXACHLOROCYCLOPENTAD	
	HEXACHLOROETHANE	114	-	68.00-105.00	-	HEXACHLOROETHANE	
	INDENO(1,2,3-CD)PYRENE	134	-	64.00-119.00	-	INDENO(1,2,3-CD)PYRENE	
	ISOPHORONE	126	-	69.00-110.00	-	ISOPHORONE	
	NAPHTHALENE	122	-	73.00-106.00	-	NAPHTHALENE	
	NITROBENZENE	124	-	71.00-104.00	-	NITROBENZENE	
	N-NITROSODIMETHYLAMINE	117	-	60.00-106.00	-	N-NITROSODIMETHYLAMINE	
	N-NITROSO-DI-N-PROPYLAMIN	123	-	63.00-107.00	-	N-NITROSO-DI-N-PROPYLAMI	
	PENTACHLOROPHENOL	115	-	35.00-106.00	-	PENTACHLOROPHENOL	
	PHENANTHRENE	122	-	77.00-113.00	-	PHENANTHRENE	
	PHENOL	127	-	58.00-112.00	-	PHENOL	
	PYRENE	131	-	75.00-115.00	-	PYRENE	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15926BQ221129A (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	ANTIMONY	70	-	80.00-120.00	-	ANTIMONY	No Qual, SRM Within QC Limits

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15908FQ220731 (DUP-11-SA5DN-QC-060111 SL-015-SA5DN-SB-12.0-13.0 SL-015-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-4.0-5.0 SL-017-SA5DN-SB-7.0-8.0 SL-018-SA5DN-SB-4.0-5.0 SL-100-SA5DN-SS-0.0-0.5 SL-105-SA5DN-SS-0.0-0.5 SL-106-SA5DN-SS-0.0-0.5 SL-107-SA5DN-SS-0.0-0.5 SL-108-SA5DN-SS-0.0-0.5 SL-109-SA5DN-SS-0.0-0.5 SL-123-SA5DN-SS-0.0-0.5 SL-124-SA5DN-SS-0.0-0.5 SL-126-SA5DN-SS-0.0-0.5 SL-127-SA5DN-SS-0.0-0.5 SL-128-SA5DN-SS-0.0-0.5 SL-129-SA5DN-SS-0.0-0.5 SL-130-SA5DN-SS-0.0-0.5 SL-148-SA5DN-SS-0.0-0.5)	ALUMINUM IRON	78 79	- -	80.00-120.00 80.00-120.00	- -	ALUMINUM IRON	No Qual, SRM Within QC Limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP-11-SA5DN-QC-060111	DECACHLOROBIPHENYL	146	20.00-120.00	All Target Analytes	J (all detects)
SL-100-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	45	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-105-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	130	20.00-120.00	All Target Analytes	J(all detects)
SL-105-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	33	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-106-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	18 17	20.00-120.00 50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-123-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	123	20.00-120.00	All Target Analytes	J(all detects)
SL-124-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	159	20.00-120.00	All Target Analytes	J(all detects)
SL-124-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	13	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-126-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	176	20.00-120.00	All Target Analytes	J(all detects)
SL-126-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	47	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-128-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	8	50.00-130.00	All Target Analytes	J(all detects) R(all non-detects)
SL-128-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	16	20.00-120.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-129-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	138	20.00-120.00	All Target Analytes	J(all detects)
SL-130-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	123	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-108-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	123	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-124-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	0	45.00-120.00	All Target Analytes	J(all detects) R(all non-detects)

Method: 8315A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-015-SA5DN-SB-12.0-13.0	Butyraldehyde	133	64.00-126.00	All Target Analytes	J(all detects)
SL-018-SA5DN-SB-4.0-5.0	Butyraldehyde	140	64.00-126.00	All Target Analytes	J(all detects)
SL-105-SA5DN-SS-0.0-0.5	Butyraldehyde	151	64.00-126.00	All Target Analytes	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8315A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-106-SA5DN-SS-0.0-0.5	Butyraldehyde	135	64.00-126.00	All Target Analytes	J(all detects)
SL-107-SA5DN-SS-0.0-0.5	Butyraldehyde	148	64.00-126.00	All Target Analytes	J(all detects)
SL-109-SA5DN-SS-0.0-0.5	Butyraldehyde	143	64.00-126.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
MOISTURE	5.3	5.5	4		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
FLUORIDE	2.4	2.1	13	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
ALUMINUM	20500	17500	16	50.00	
CALCIUM	5100	4830	5	50.00	
IRON	25600	22400	13	50.00	
LITHIUM	21.2	18.9	11	50.00	
MAGNESIUM	5240	4630	12	50.00	
MANGANESE	387	327	17	50.00	
PHOSPHORUS	408	366	11	50.00	No Qualifiers Applied
POTASSIUM	4200	3680	13	50.00	
SODIUM	103	87.2	17	50.00	
STRONTIUM	28.6	25.3	12	50.00	
TIN	3.00	3.05	2	50.00	
TITANIUM	1150	1210	5	50.00	
Zirconium	3.89	2.74	35	50.00	
BORON	5.28 U	9.83	200	50.00	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
ANTIMONY	0.157	0.127	21	50.00	
ARSENIC	6.41	6.89	7	50.00	
BARIUM	151	142	6	50.00	
BERYLLIUM	0.796	0.788	1	50.00	
CADMIUM	0.435	0.384	12	50.00	
CHROMIUM	33.6	29.6	13	50.00	
COBALT	9.66	9.46	2	50.00	
COPPER	17.9	17.0	5	50.00	No Qualifiers Applied
LEAD	18.6	15.3	19	50.00	
MOLYBDENUM	0.809	0.692	16	50.00	
NICKEL	25.1	21.9	14	50.00	
SELENIUM	0.164	0.145	12	50.00	
THALLIUM	0.356	0.328	8	50.00	
VANADIUM	50.3	52.4	4	50.00	
ZINC	88.4	83.2	6	50.00	
SILVER	0.151	0.0667	77	50.00	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
HEXAVALENT CHROMIUM	0.64	0.60	6	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
MERCURY	0.653	0.427	42	50.00	No Qualifiers Applied

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
4,4'-DDE	9.8	9.9	1	50.00	No Qualifiers Applied
4,4'-DDT	4.1	3.5	16	50.00	
Chlordane	3.3	2.3	36	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
AROCLOR 1260	4.7	4.5	4	50.00	No Qualifiers Applied
Aroclor 5460	6.3	17 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
2,4,5-TP (Silvex)	0.11	0.18 U	200	50.00	J(all detects) UJ(all non-detects)
DICAMBA	0.56	1.3 U	200	50.00	
MCPA	820	460	56	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
BENZO(G,H,I)PERYLENE	3.5	4.1	16	50.00	No Qualifiers Applied
CHRYSENE	5.2	4.0	26	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: PrepDE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

BENZO(A)ANTHRACENE	8.8 U	0.86	200	50.00	
BENZO(A)PYRENE	8.8 U	1.0	200	50.00	
BENZO(B)FLUORANTHENE	4.6	1.8	88	50.00	
BENZO(K)FLUORANTHENE	5.3	1.2	126	50.00	J(all detects)
FLUORANTHENE	5.8	1.5	118	50.00	UJ(all non-detects)
INDENO(1,2,3-CD)PYRENE	8.8 U	0.91	200	50.00	
PHENANTHRENE	8.8 U	0.90	200	50.00	
PYRENE	5.0	1.5	108	50.00	

Method: 9045M
Matrix: SO

Analyte	*Concentration (pH unit)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-108-SA5DN-SS-0.0-0.5	DUP-11-SA5DN-QC-060111			
PH	7.16	7.57	6	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5DN-SB-12.0-13.0	N-NITROSODIMETHYLAMINE	J	24.1	36.1	PQL	ng/Kg	J (all detects)
SL-018-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	30.8	36.8	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5DN-QC-060111	SODIUM	J	87.2	105	PQL	mg/Kg	J (all detects)
	TIN	J	3.05	10.4	PQL	mg/Kg	
	Zirconium	J	2.74	5.24	PQL	mg/Kg	
SL-015-SA5DN-SB-12.0-13.0	TIN	J	3.20	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.65	5.27	PQL	mg/Kg	
SL-015-SA5DN-SB-4.0-5.0	TIN	J	3.07	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.89	5.54	PQL	mg/Kg	
SL-017-SA5DN-SB-4.0-5.0	TIN	J	3.44	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.19	5.77	PQL	mg/Kg	
SL-017-SA5DN-SB-7.0-8.0	TIN	J	3.98	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.90	5.52	PQL	mg/Kg	
SL-018-SA5DN-SB-4.0-5.0	TIN	J	3.34	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.77	5.33	PQL	mg/Kg	
SL-100-SA5DN-SS-0.0-0.5	SODIUM	J	90.6	105	PQL	mg/Kg	J (all detects)
	TIN	J	3.28	10.5	PQL	mg/Kg	
	Zirconium	J	4.40	5.26	PQL	mg/Kg	
SL-105-SA5DN-SS-0.0-0.5	SODIUM	J	100	106	PQL	mg/Kg	J (all detects)
	TIN	J	3.26	10.7	PQL	mg/Kg	
	Zirconium	J	3.93	5.28	PQL	mg/Kg	
SL-106-SA5DN-SS-0.0-0.5	SODIUM	J	88.6	106	PQL	mg/Kg	J (all detects)
	TIN	J	3.29	10.6	PQL	mg/Kg	
	Zirconium	J	3.55	5.28	PQL	mg/Kg	
SL-107-SA5DN-SS-0.0-0.5	SODIUM	J	83.9	100	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	10.2	PQL	mg/Kg	
	Zirconium	J	1.37	5.02	PQL	mg/Kg	
SL-108-SA5DN-SS-0.0-0.5	SODIUM	J	103	106	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	10.3	PQL	mg/Kg	
	Zirconium	J	3.89	5.28	PQL	mg/Kg	
SL-109-SA5DN-SS-0.0-0.5	TIN	J	3.09	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.85	5.39	PQL	mg/Kg	
SL-123-SA5DN-SS-0.0-0.5	SODIUM	J	86.2	103	PQL	mg/Kg	J (all detects)
	TIN	J	3.12	10.7	PQL	mg/Kg	
	Zirconium	J	3.19	5.13	PQL	mg/Kg	
SL-124-SA5DN-SS-0.0-0.5	SODIUM	J	86.0	105	PQL	mg/Kg	J (all detects)
	TIN	J	3.50	10.8	PQL	mg/Kg	
	Zirconium	J	3.57	5.27	PQL	mg/Kg	
SL-126-SA5DN-SS-0.0-0.5	SODIUM	J	82.5	107	PQL	mg/Kg	J (all detects)
	TIN	J	3.26	10.5	PQL	mg/Kg	
	Zirconium	J	2.73	5.36	PQL	mg/Kg	
SL-127-SA5DN-SS-0.0-0.5	TIN	J	2.47	9.88	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.949	4.89	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA5DN-SS-0.0-0.5	TIN	J	2.76	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.72	5.48	PQL	mg/Kg	
SL-129-SA5DN-SS-0.0-0.5	SODIUM	J	81.9	102	PQL	mg/Kg	J (all detects)
	TIN	J	3.06	10.5	PQL	mg/Kg	
	Zirconium	J	2.60	5.09	PQL	mg/Kg	
SL-130-SA5DN-SS-0.0-0.5	SODIUM	J	86.1	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	10.1	PQL	mg/Kg	
	Zirconium	J	2.99	5.22	PQL	mg/Kg	
SL-148-SA5DN-SS-0.0-0.5	SODIUM	J	66.5	99.9	PQL	mg/Kg	J (all detects)
	TIN	J	3.03	10.4	PQL	mg/Kg	
	Zirconium	J	2.99	5.00	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5DN-QC-060111	ANTIMONY	J	0.127	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.145	0.415	PQL	mg/Kg	
	SILVER	J	0.0667	0.104	PQL	mg/Kg	
SL-015-SA5DN-SB-12.0-13.0	ANTIMONY	J	0.103	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0728	0.430	PQL	mg/Kg	
	SILVER	J	0.0503	0.107	PQL	mg/Kg	
SL-015-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.103	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0901	0.448	PQL	mg/Kg	
	SILVER	J	0.0526	0.112	PQL	mg/Kg	
SL-017-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.130	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0652	0.453	PQL	mg/Kg	
	SILVER	J	0.0656	0.113	PQL	mg/Kg	
SL-017-SA5DN-SB-7.0-8.0	ANTIMONY	J	0.113	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.235	0.451	PQL	mg/Kg	
	SILVER	J	0.0164	0.113	PQL	mg/Kg	
SL-018-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.107	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0608	0.426	PQL	mg/Kg	
	SILVER	J	0.0974	0.107	PQL	mg/Kg	
SL-100-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.138	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.194	0.417	PQL	mg/Kg	
	SILVER	J	0.0597	0.104	PQL	mg/Kg	
SL-105-SA5DN-SS-0.0-0.5	SELENIUM	J	0.216	0.414	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0903	0.104	PQL	mg/Kg	
SL-106-SA5DN-SS-0.0-0.5	SELENIUM	J	0.172	0.407	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0621	0.102	PQL	mg/Kg	
SL-107-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.146	0.205	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.130	0.409	PQL	mg/Kg	
	SILVER	J	0.0538	0.102	PQL	mg/Kg	
SL-108-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.157	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.164	0.418	PQL	mg/Kg	
SL-109-SA5DN-SS-0.0-0.5	SELENIUM	J	0.201	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0663	0.108	PQL	mg/Kg	
SL-123-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.167	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.220	0.414	PQL	mg/Kg	
	SILVER	J	0.0660	0.104	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-124-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.172	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.379	0.434	PQL	mg/Kg	
SL-126-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.161	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.399	0.421	PQL	mg/Kg	
	SILVER	J	0.0751	0.105	PQL	mg/Kg	
SL-127-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.148	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.186	0.403	PQL	mg/Kg	
	SILVER	J	0.0481	0.101	PQL	mg/Kg	
SL-128-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.0989	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.167	0.443	PQL	mg/Kg	
	SILVER	J	0.0611	0.111	PQL	mg/Kg	
SL-129-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.128	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.198	0.428	PQL	mg/Kg	
SL-130-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.114	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.184	0.401	PQL	mg/Kg	
	SILVER	J	0.0898	0.100	PQL	mg/Kg	
SL-148-SA5DN-SS-0.0-0.5	ANTIMONY	J	0.143	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.157	0.411	PQL	mg/Kg	
	SILVER	J	0.0571	0.103	PQL	mg/Kg	

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-148-SA5DN-SS-0.0-0.5	PERCHLORATE	J	3.3	5.2	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5DN-QC-060111	HEXAVALENT CHROMIUM	J	0.60	1.1	PQL	mg/Kg	J (all detects)
SL-015-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.33	1.2	PQL	mg/Kg	J (all detects)
SL-017-SA5DN-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-018-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-100-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-105-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.73	1.1	PQL	mg/Kg	J (all detects)
SL-106-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.62	1.1	PQL	mg/Kg	J (all detects)
SL-107-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.41	1.0	PQL	mg/Kg	J (all detects)
SL-108-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.64	1.1	PQL	mg/Kg	J (all detects)
SL-124-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.93	1.1	PQL	mg/Kg	J (all detects)
SL-126-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-128-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-130-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.55	1.0	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5DN-SB-12.0-13.0	MERCURY	J	0.0091	0.103	PQL	mg/Kg	J (all detects)
SL-015-SA5DN-SB-4.0-5.0	MERCURY	J	0.0155	0.115	PQL	mg/Kg	J (all detects)
SL-017-SA5DN-SB-4.0-5.0	MERCURY	J	0.0075	0.112	PQL	mg/Kg	J (all detects)
SL-018-SA5DN-SB-4.0-5.0	MERCURY	J	0.0320	0.104	PQL	mg/Kg	J (all detects)
SL-123-SA5DN-SS-0.0-0.5	MERCURY	J	0.0440	0.106	PQL	mg/Kg	J (all detects)
SL-127-SA5DN-SS-0.0-0.5	MERCURY	J	0.0287	0.0985	PQL	mg/Kg	J (all detects)
SL-128-SA5DN-SS-0.0-0.5	MERCURY	J	0.0907	0.106	PQL	mg/Kg	J (all detects)
SL-129-SA5DN-SS-0.0-0.5	MERCURY	J	0.0788	0.105	PQL	mg/Kg	J (all detects)
SL-148-SA5DN-SS-0.0-0.5	MERCURY	J	0.0142	0.103	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5DN-SB-4.0-5.0	EFH (C15-C20) GASOLINE RANGE ORGANICS (C5-C12)	J J	0.54 0.3	1.4 1.1	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-106-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	4.3	6.4	PQL	mg/Kg	J (all detects)
SL-107-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	2.9	6.3	PQL	mg/Kg	J (all detects)
SL-109-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	9.6	13	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5DN-QC-060111	4,4'-DDT Chlordane	J J	3.5 2.3	3.6 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-100-SA5DN-SS-0.0-0.5	Chlordane	J	2.2	3.6	PQL	ug/Kg	J (all detects)
SL-105-SA5DN-SS-0.0-0.5	Chlordane	J	2.8	3.6	PQL	ug/Kg	J (all detects)
SL-106-SA5DN-SS-0.0-0.5	DIELDRIN ENDRIN ENDRIN ALDEHYDE ENDRIN KETONE	J J J J	0.11 0.099 0.081 0.11	0.36 0.36 0.36 0.36	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-107-SA5DN-SS-0.0-0.5	ENDRIN KETONE METHOXYCHLOR	J J	0.084 0.49	0.35 1.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-108-SA5DN-SS-0.0-0.5	Chlordane	J	3.3	3.6	PQL	ug/Kg	J (all detects)
SL-109-SA5DN-SS-0.0-0.5	Chlordane	J	3.6	3.7	PQL	ug/Kg	J (all detects)
SL-123-SA5DN-SS-0.0-0.5	Chlordane	J	3.2	3.7	PQL	ug/Kg	J (all detects)
SL-124-SA5DN-SS-0.0-0.5	Chlordane	J	1.5	3.7	PQL	ug/Kg	J (all detects)
SL-128-SA5DN-SS-0.0-0.5	Chlordane	J	1.0	3.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-129-SA5DN-SS-0.0-0.5	Chlordane HEPTACHLOR	J J	3.3 0.10	3.6 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-130-SA5DN-SS-0.0-0.5	Chlordane	J	2.2	3.5	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5DN-QC-060111	AROCLOR 1260	J	4.5	9.0	PQL	ug/Kg	J (all detects)
SL-017-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	1.2	2.0	PQL	ug/Kg	J (all detects)
SL-018-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	0.70	1.9	PQL	ug/Kg	J (all detects)
SL-108-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	4.7 6.3	9.0 17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-109-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	4.0	9.2	PQL	ug/Kg	J (all detects)
SL-123-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.0	3.6	PQL	ug/Kg	J (all detects)
SL-124-SA5DN-SS-0.0-0.5	Aroclor 5460	J	16	18	PQL	ug/Kg	J (all detects)
SL-126-SA5DN-SS-0.0-0.5	Aroclor 5460	J	13	18	PQL	ug/Kg	J (all detects)
SL-127-SA5DN-SS-0.0-0.5	Aroclor 5460	J	8.4	17	PQL	ug/Kg	J (all detects)
SL-148-SA5DN-SS-0.0-0.5	Aroclor 5460	J	2.9	3.5	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-106-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.090	0.18	PQL	ug/Kg	J (all detects)
SL-107-SA5DN-SS-0.0-0.5	DICHLOROPROP	J	1.4	1.8	PQL	ug/Kg	J (all detects)
SL-108-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex) DICAMBA	J J	0.11 0.56	0.18 1.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-109-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.12	0.18	PQL	ug/Kg	J (all detects)
SL-123-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.17	0.18	PQL	ug/Kg	J (all detects)
SL-129-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.10	0.18	PQL	ug/Kg	J (all detects)
SL-148-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.12	0.18	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5DN-SB-12.0-13.0	METHYLENE CHLORIDE	J	0.85	3.7	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.2	4.4	PQL	ug/Kg	J (all detects)
SL-017-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.1	4.0	PQL	ug/Kg	J (all detects)
SL-018-SA5DN-SB-4.0-5.0	ACETONE METHYLENE CHLORIDE	J J	9.1 1.6	9.2 4.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5DN-QC-060111	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	350	PQL	ug/Kg	J (all detects)
SL-017-SA5DN-SB-7.0-8.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	61	380	PQL	ug/Kg	J (all detects)
SL-100-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE BENZO(B)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE FLUORANTHENE PYRENE	J J J J J J	21 25 150 19 34 36	180 180 350 180 180 180	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-105-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	350	PQL	ug/Kg	J (all detects)
SL-106-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	68	350	PQL	ug/Kg	J (all detects)
SL-107-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	350	PQL	ug/Kg	J (all detects)
SL-123-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	360	PQL	ug/Kg	J (all detects)
SL-124-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE FLUORANTHENE PYRENE	J J J J	49 55 28 28	360 180 180 180	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-126-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE BIS(2-ETHYLHEXYL)PHTHALATE PYRENE	J J J	18 27 20	180 350 180	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-127-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	160	1700	PQL	ug/Kg	J (all detects)
SL-128-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	36	370	PQL	ug/Kg	J (all detects)
SL-130-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	350	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-11-SA5DN-QC-060111	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(K)FLUORANTHENE FLUORANTHENE INDENO(1,2,3-CD)PYRENE PHENANTHRENE PYRENE	J J J J J J J	0.86 1.0 1.2 1.5 0.91 0.90 1.5	1.8 1.8 1.8 1.8 1.8 1.8 1.8	PQL PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-015-SA5DN-SB-12.0-13.0	CHRYSENE PYRENE	J J	0.48 0.78	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-105-SA5DN-SS-0.0-0.5	NAPHTHALENE	J	3.6	8.8	PQL	ug/Kg	J (all detects)
SL-106-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	7.7	8.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	7.5	8.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	8.0	8.9	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	4.5	8.9	PQL	ug/Kg	
	PHENANTHRENE	J	7.0	8.9	PQL	ug/Kg	
SL-107-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.86	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.90	1.7	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	PYRENE	J	1.0	1.7	PQL	ug/Kg	
SL-108-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	4.6	8.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	3.5	8.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.3	8.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	73	95	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	5.2	8.8	PQL	ug/Kg	
	FLUORANTHENE	J	5.8	8.8	PQL	ug/Kg	
	PYRENE	J	5.0	8.8	PQL	ug/Kg	
SL-109-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	0.80	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	0.94	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.83	1.8	PQL	ug/Kg	
	PYRENE	J	0.92	1.8	PQL	ug/Kg	
SL-123-SA5DN-SS-0.0-0.5	FLUORENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.88	1.8	PQL	ug/Kg	J (all detects)
SL-124-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.79	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.91	1.8	PQL	ug/Kg	J (all detects)
SL-126-SA5DN-SS-0.0-0.5	ANTHRACENE	J	1.9	8.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	7.0	8.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.7	8.9	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	4.0	8.9	PQL	ug/Kg	
SL-127-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	5.9	8.4	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	6.0	8.4	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.0	8.4	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	4.3	8.4	PQL	ug/Kg	
	PHENANTHRENE	J	4.4	8.4	PQL	ug/Kg	
SL-128-SA5DN-SS-0.0-0.5	CHRYSENE	J	0.64	1.8	PQL	ug/Kg	J (all detects)
SL-129-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.83	1.8	PQL	ug/Kg	
	2-METHYLNAPHTHALENE	J	1.0	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	14	19	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.8	PQL	ug/Kg	
SL-148-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	4.2	8.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	3.7	8.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	3.9	8.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	45	94	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	6.0	8.7	PQL	ug/Kg	
	FLUORANTHENE	J	6.3	8.7	PQL	ug/Kg	
	PYRENE	J	4.8	8.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE170 **Laboratory: LL**

EDD Filename: DE170_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8330A**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-018-SA5DN-SB-4.0-5.0	1,3-DINITROBENZENE	J	70	130	PQL	ug/Kg	J (all detects)

LDC #: 26277B4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11
SDG #: DE170 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No qual.
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	RSD out Al, Ba, Ca, Fe, Pb, Mg, Mn, Ti, V, Zn >4X, No qual RSD out
VII.	Duplicate Sample Analysis	SW	~~Be~~, Se, Ag, Zr <5X.
VIII.	Laboratory Control Samples (LCS)	A	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	V.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-100-SA5DN-SS-0.0-0.5	11	SL-128-SA5DN-SS-0.0-0.5	21	~~SL-018-SA5DN-SB-7.5-8.5~~	31	
2	SL-105-SA5DN-SS-0.0-0.5	12	SL-129-SA5DN-SS-0.0-0.5	22	SL-108-SA5DN-SS-0.0-0.5MS	32	
3	SL-106-SA5DN-SS-0.0-0.5	13	SL-130-SA5DN-SS-0.0-0.5	23	SL-108-SA5DN-SS-0.0-0.5MSD	33	
4	SL-107-SA5DN-SS-0.0-0.5	14	SL-148-SA5DN-SS-0.0-0.5	24	SL-108-SA5DN-SS-0.0-0.5DUP	34	
5	SL-108-SA5DN-SS-0.0-0.5	15	DUP-11-SA5DN-QC-060111	25		35	
6	SL-109-SA5DN-SS-0.0-0.5	16	SL-015-SA5DN-SB-4.0-5.0	26		36	
7	SL-123-SA5DN-SS-0.0-0.5	17	SL-015-SA5DN-SB-12.0-13.0	27		37	
8	SL-124-SA5DN-SS-0.0-0.5	18	SL-017-SA5DN-SB-4.0-5.0	28		38	
9	SL-126-SA5DN-SS-0.0-0.5	19	SL-017-SA5DN-SB-7.0-5.0	29		39	
10	SL-127-SA5DN-SS-0.0-0.5	20	SL-018-SA5DN-SB-4.0-5.0	30		40	

Notes: # Sb = J/uJ. Post spike 80 %. P = J/uJ, Post Spike 88, Hg = 89 # Hg. Difference 0.3178 (≤ 0.208) mg/kg

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE170
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6304843BKG Matrix Spike Lab Sample ID: 6304844MS Matrix Spike Duplicate Lab Sample ID: 6304845MSD
% Solids for Sample: 94.7
Batch Id(s): P15908F, P15926B, P15911E, P16508E

Analyte	Mass	BKG Sample		MS Sample		MSD Sample		MS Spike	MSD Spike		MS		MSD				Control Limit		
		Result	C	Result	C	Result	C	Added	Added	Units	%R	Q	%R	Q	RPD	Q	%R	RPD	M
Aluminum		20454.0327		24008.8916		23149.6179		205.0420	209.1022	MG/KG	1734		1289		4			20	P
Antimony+	121	0.1571	B	0.5115		0.7375		1.2184	1.2546	MG/KG	29	N	46	N	36	*	75 - 125	20	MS
Arsenic	75	6.4132		8.7564		10.4823		2.0307	2.0910	MG/KG	115		195	N	18		75 - 125	20	MS
Barium	137	151.0136		160.8927		125.6286		10.1535	10.4551	MG/KG	97		-243		25	*		20	MS
Beryllium	9	0.7963		1.6585		1.9662		0.8123	0.8364	MG/KG	106		140	N	17		75 - 125	20	MS
Boron		0.3801	U	191.9090		194.3103		205.0420	209.1022	MG/KG	94		93		1		84 - 115	20	P
Cadmium	111	0.4345		1.5839		1.9702		1.0154	1.0455	MG/KG	113		147	N	22	*	75 - 125	20	MS
Calcium		5104.6589		5368.6737		4970.0461		410.0840	418.2044	MG/KG	64		-32		8			20	P
Chromium	52	33.5609		40.7562		50.4773		10.1535	10.4551	MG/KG	71	N	162	N	21	*	75 - 125	20	MS
Cobalt	59	9.6626		66.1400		82.2399		50.7676	52.2756	MG/KG	111		139	N	22	*	75 - 125	20	MS
Copper	63	17.9096		28.5517		34.5437		10.1535	10.4551	MG/KG	105		159	N	19		75 - 125	20	MS
Iron		25596.0686		24354.9892		24376.6757		102.5210	104.5511	MG/KG	-1211		-1166		0			20	P
Lead	208	18.6436		14.2941		15.5928		3.0461	3.1365	MG/KG	-143		-97		9			20	MS
Lithium		21.2133		118.6937		120.0027		102.5210	104.5511	MG/KG	95		94		1		82 - 114	20	P
Magnesium		5240.6473		5850.5500		5146.6695		205.0420	209.1022	MG/KG	297		-45		13			20	P
Manganese		387.1204		435.8362		598.6586		51.2605	52.2756	MG/KG	95		405		31	*		20	P
Mercury		0.6535		0.5006		0.5055		0.1726	0.1731	MG/KG	-89	N	-85	N	1		65 - 135	20	CV
Molybdenum	98	0.8088		11.9040		14.8964		10.1535	10.4551	MG/KG	109		135	N	22	*	75 - 125	20	MS
Nickel	60	25.0714		34.6844		44.4342		10.1535	10.4551	MG/KG	95		185	N	25	*	75 - 125	20	MS
Phosphorus+		408.4688		429.2103		462.3470		102.5210	104.5511	MG/KG	20	N	52	N	7		75 - 125	20	P
Potassium		4195.7878		5100.0615		5017.2426		1025.2099	1045.5111	MG/KG	88		79		2			20	P
Selenium	78	0.1640	B	2.3516		2.6849		2.0307	2.0910	MG/KG	108		121		13		75 - 125	20	MS
Silver	107	0.1513		12.2715		14.5765		10.1535	10.4551	MG/KG	119		138	N	17		75 - 125	20	MS
Sodium		103.0063	B	1083.5300		1072.9599		1025.2099	1045.5111	MG/KG	96		93		1		75 - 125	20	P
Strontium		28.6146		123.4066		124.5193		102.5210	104.5511	MG/KG	92		92		1		75 - 115	20	P
Thallium	203	0.3561		0.8385		1.0277		0.4061	0.4182	MG/KG	119		161	N	20		75 - 125	20	MS
Tin		2.9967	B	392.3960		389.0190		414.1044	414.1044	MG/KG	94		93		1		80 - 110	20	P
Titanium		1147.4590		1484.2050		1462.9553		103.5261	103.5261	MG/KG	325		305		1			20	P
Vanadium	51	50.3100		63.1346		73.0812		10.1535	10.4551	MG/KG	126		218		15			20	MS
Zinc	66	88.3666		93.5139		109.8414		10.1535	10.4551	MG/KG	51		205		16			20	MS
Zirconium		3.8870	B	102.3108		99.4699		102.5210	104.5511	MG/KG	96		91		3		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

+ Sb = post spike 80%
P ↓ 88%

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE170
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6304843BKG
% Solids for Duplicate: 94.6
Batch ID(s): P15908F, P15926B, P15911E, P16508E
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6304846DUP
% Solids for Sample: 94.7

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			20454.0327		19401.7291		5		P
Antimony	121		0.1571	B	0.1470	B	7		MS
Arsenic	75		6.4132		6.4182		0		MS
Barium	137		151.0136		158.4372		5		MS
Beryllium	9		0.7963		0.8289		4		MS
Boron			0.3801	U	0.3655	U			P
Cadmium	111	0.1	0.4345		0.4564		5		MS
Calcium			5104.6589		4563.1986		11		P
Chromium	52		33.5609		29.5671		13		MS
Cobalt	59		9.6626		10.2175		6		MS
Copper	63		17.9096		17.7423		1		MS
Iron			25596.0686		25165.3135		2		P
Lead	208		18.6436		16.1690		14		MS
Lithium			21.2133		20.5406		3		P
Magnesium			5240.6473		5029.6899		4		P
Manganese			387.1204		410.8490		6		P
~~Mercury~~ X		0.1	0.6535		0.3357		~~64~~	*	CV
Molybdenum	98		0.8088		0.6433		23	*	MS
Nickel	60		25.0714		23.8860		5		MS
Phosphorus			408.4688		367.8042		10		P
Potassium			4195.7878		4041.7828		4		P
Selenium	78		0.1640	B	0.2041	B	22		MS
Silver	107	0.1	0.1513		0.0699	B	74		MS
Sodium			103.0063	B	96.4503	B	7		P
Strontium			28.6146		27.4693		4		P
Thallium	203	0.1	0.3561		0.3740		5		MS
Tin			2.9967	B	2.9860	B	0		P
Titanium			1147.4590		1132.3711		1		P
Vanadium	51		50.3100		52.2070		4		MS
Zinc	66		88.3666		90.2218		2		MS
Zirconium			3.8870	B	4.9062	B	23		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Hg by difference 0.3178 (≤ 0.708) mg/kg

DE178 8548

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE171

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3050B	6010B	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3050B	6020	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3060A	7199	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3546	1625C	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3550B	8015B	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3550B	8015M	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3550B	8081A	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3550B	8082	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3550B	8151A	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3550B	8270C	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	3550B	8270C SIM	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	8330	8330A	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	METHOD	300.0	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	METHOD	314.0	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	METHOD	7471A	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	METHOD	8015B	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	METHOD	8015M	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	METHOD	8315A	III
02-Jun-2011	SL-136-SA5DN-SS-0.0-0.5	6305884	N	METHOD	9012B	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3050B	6010B	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3050B	6020	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3060A	7199	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3546	1625C	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3550B	8015B	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3550B	8015M	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3550B	8081A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3550B	8082	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3550B	8151A	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3550B	8270C	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	3550B	8270C SIM	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	8330	8330A	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	METHOD	300.0	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	METHOD	314.0	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	METHOD	7471A	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	METHOD	8015B	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	METHOD	8015M	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	METHOD	8315A	III
02-Jun-2011	SL-134-SA5DN-SS-0.0-0.5	6305882	N	METHOD	9012B	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3050B	6010B	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3050B	6020	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3060A	7199	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3546	1625C	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3550B	8015B	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3550B	8015M	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3550B	8081A	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3550B	8082	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3550B	8151A	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3550B	8270C	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	3550B	8270C SIM	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	8330	8330A	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	METHOD	300.0	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	METHOD	7471A	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	METHOD	8015B	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	METHOD	8015M	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	METHOD	8315A	III
02-Jun-2011	SL-135-SA5DN-SS-0.0-0.5	6305883	N	METHOD	9012B	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3050B	6010B	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3050B	6020	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3060A	7199	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3546	1625C	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3550B	8015B	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3550B	8015M	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3550B	8081A	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3550B	8082	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3550B	8151A	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3550B	8270C	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	3550B	8270C SIM	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	8330	8330A	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	METHOD	300.0	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	METHOD	314.0	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	METHOD	7471A	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	METHOD	8015B	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	METHOD	8015M	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	METHOD	8315A	III
02-Jun-2011	SL-137-SA5DN-SS-0.0-0.5	6305885	N	METHOD	9012B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3050B	6010B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3060A	7199	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3546	1625C	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3550B	8015B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3550B	8015M	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3550B	8081A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3550B	8082	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3550B	8151A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3550B	8270C	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	3550B	8270C SIM	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	8330	8330A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	METHOD	300.0	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	METHOD	314.0	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	METHOD	7471A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	METHOD	8015B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	METHOD	8015M	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	METHOD	8315A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5	6305886	N	METHOD	9012B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3050B	6010B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3050B	6020	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3060A	7199	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3546	1625C	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3550B	8015B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3550B	8015M	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3550B	8081A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3550B	8082	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3550B	8270C	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	3550B	8270C SIM	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	8330	8330A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	METHOD	300.0	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	METHOD	314.0	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	METHOD	7471A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	METHOD	8015B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	METHOD	8015M	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	METHOD	8315A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5MS	6305887	MS	METHOD	9012B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5DU	6305889	DUP	3050B	6010B	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5DU	6305889	DUP	3050B	6020	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5DU	6305889	DUP	3060A	7199	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5DU	6305889	DUP	METHOD	300.0	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5DU	6305889	DUP	METHOD	314.0	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5DU	6305889	DUP	METHOD	7471A	III
02-Jun-2011	SL-138-SA5DN-SS-0.0-0.5DU	6305889	DUP	METHOD	9012B	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3050B	6010B	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3050B	6020	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3060A	7199	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3546	1625C	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3550B	8015B	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3550B	8015M	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3550B	8081A	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3550B	8082	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3550B	8151A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3550B	8270C	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	3550B	8270C SIM	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	8330	8330A	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	METHOD	300.0	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	METHOD	314.0	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	METHOD	7471A	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	METHOD	8015B	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	METHOD	8015M	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	METHOD	8315A	III
02-Jun-2011	DUP-12-SA5DN-QC-060211	6305896	FD	METHOD	9012B	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3050B	6010B	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3050B	6020	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3060A	7199	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3546	1625C	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3550B	8015B	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3550B	8015M	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3550B	8081A	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3550B	8082	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3550B	8151A	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3550B	8270C	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	3550B	8270C SIM	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	8330	8330A	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	METHOD	300.0	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	METHOD	314.0	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	METHOD	7471A	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	METHOD	8015M	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	METHOD	8315A	III
02-Jun-2011	SL-139-SA5DN-SS-0.0-0.5	6305890	N	METHOD	9012B	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3050B	6010B	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3050B	6020	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3060A	7199	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3546	1625C	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3550B	8015B	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3550B	8015M	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3550B	8081A	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3550B	8082	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3550B	8151A	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3550B	8270C	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	3550B	8270C SIM	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	8330	8330A	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	METHOD	300.0	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	METHOD	314.0	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	METHOD	7471A	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	METHOD	8015B	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	METHOD	8015M	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	METHOD	8315A	III
02-Jun-2011	SL-140-SA5DN-SS-0.0-0.5	6305891	N	METHOD	9012B	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3050B	6010B	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3050B	6020	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3060A	7199	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3546	1625C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3550B	8015B	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3550B	8015M	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3550B	8081A	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3550B	8082	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3550B	8151A	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3550B	8270C	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	3550B	8270C SIM	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	8330	8330A	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	METHOD	300.0	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	METHOD	314.0	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	METHOD	7471A	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	METHOD	8015B	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	METHOD	8015M	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	METHOD	8315A	III
02-Jun-2011	SL-133-SA5DN-SS-0.0-0.5	6305881	N	METHOD	9012B	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3050B	6010B	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3050B	6020	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3060A	7199	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3546	1625C	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3550B	8015B	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3550B	8015M	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3550B	8081A	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3550B	8082	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3550B	8151A	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3550B	8270C	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	8330	8330A	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	METHOD	300.0	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	METHOD	314.0	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	METHOD	6850	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	METHOD	7471A	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	METHOD	8015B	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	METHOD	8015M	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	METHOD	8315A	III
02-Jun-2011	SL-132-SA5DN-SS-0.0-0.5	6305880	N	METHOD	9012B	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	3050B	6010B	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	3050B	6020	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	3060A	7199	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	3550B	8081A	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	3550B	8082	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	3550B	8151A	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	3550B	8270C	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	3550B	8270C SIM	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	METHOD	300.0	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	METHOD	314.0	III
02-Jun-2011	SL-131-SA5DN-SS-0.0-0.5	6305879	N	METHOD	7471A	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3005A	6010B	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3020A	6020	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3510C	8015B	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3510C	8015M	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3510C	8081A	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3510C	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3510C	8270C	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3510C	8270C SIM	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	3520C	1625C	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	8330	8330A	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	Gen Prep	300.0	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	Gen Prep	314.0	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	Gen Prep	7199	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	Gen Prep	8015B	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	Gen Prep	8015M	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	METHOD	7470A	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	METHOD	8151A	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	METHOD	8315A	III
02-Jun-2011	EB12-SA5DN-SS-060211	6305901	EB	METHOD	9012B	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3050B	6010B	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3050B	6020	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3060A	7199	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3546	1625C	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3550B	8015B	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3550B	8015M	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3550B	8081A	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3550B	8082	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3550B	8151A	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3550B	8270C	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	3550B	8270C SIM	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	8330	8330A	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	METHOD	314.0	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	METHOD	7471A	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	METHOD	8015B	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	METHOD	8015M	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	METHOD	8315A	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5	6305892	N	METHOD	9012B	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5DU	P305892D270633B	DUP	METHOD	314.0	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5DU	P305892D271734B	DUP	METHOD	300.0	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5MS	P305892R270657B	MS	METHOD	314.0	III
02-Jun-2011	SL-141-SA5DN-SS-0.0-0.5MS	P305892R271748B	MS	METHOD	300.0	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	3050B	6010B	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	3050B	6020	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	3060A	7199	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	3550B	8081A	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	3550B	8082	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	3550B	8151A	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	3550B	8270C	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	3550B	8270C SIM	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	METHOD	300.0	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	METHOD	314.0	III
02-Jun-2011	SL-143-SA5DN-SS-0.0-0.5	6305894	N	METHOD	7471A	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	3050B	6010B	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	3050B	6020	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	3060A	7199	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	3550B	8081A	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	3550B	8151A	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	3550B	8270C	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	3550B	8270C SIM	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	METHOD	300.0	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	METHOD	314.0	III
02-Jun-2011	SL-151-SA5DN-SS-0.0-0.5	6305900	N	METHOD	7471A	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	3050B	6010B	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	3050B	6020	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	3060A	7199	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	3550B	8081A	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	3550B	8082	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	3550B	8151A	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	3550B	8270C	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	3550B	8270C SIM	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	METHOD	300.0	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	METHOD	314.0	III
02-Jun-2011	SL-142-SA5DN-SS-0.0-0.5	6305893	N	METHOD	7471A	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	3050B	6010B	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	3050B	6020	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	3060A	7199	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	3550B	8081A	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	3550B	8082	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	3550B	8151A	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	3550B	8270C	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	3550B	8270C SIM	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	METHOD	314.0	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	METHOD	6850	III
02-Jun-2011	SL-144-SA5DN-SS-0.0-0.5	6305895	N	METHOD	7471A	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	3050B	6010B	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	3050B	6020	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	3060A	7199	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	3550B	8081A	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	3550B	8082	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	3550B	8151A	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	3550B	8270C	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	3550B	8270C SIM	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	METHOD	300.0	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	METHOD	314.0	III
02-Jun-2011	SL-145-SA5DN-SS-0.0-0.5	6305897	N	METHOD	7471A	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	3050B	6010B	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	3050B	6020	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	3060A	7199	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	3550B	8081A	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	3550B	8082	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	3550B	8151A	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	3550B	8270C	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	3550B	8270C SIM	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	METHOD	300.0	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	METHOD	314.0	III
02-Jun-2011	SL-150-SA5DN-SS-0.0-0.5	6305899	N	METHOD	7471A	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	3050B	6020	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	3060A	7199	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	3550B	8081A	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	3550B	8082	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	3550B	8151A	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	3550B	8270C	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	3550B	8270C SIM	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	METHOD	300.0	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	METHOD	314.0	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	METHOD	6850	III
02-Jun-2011	SL-149-SA5DN-SS-0.0-0.5	6305898	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-131-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.83	U	0.83	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-132-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.82	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	0.95	J	0.82	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.7		0.83	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-135-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:00:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.82	MDL	1.0	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-142-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.83	U	0.83	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-143-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.84	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.83	MDL	1.0	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.83	U	0.83	MDL	1.0	PQL	mg/Kg	UJ	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.71	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

Sample ID: SL-131-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.70	J	1.03	MDL	10.3	PQL	mg/Kg	U	B

Sample ID: SL-131-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:25:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	96.6	J	6.12	MDL	103	PQL	mg/Kg	J	Z
Zirconium	4.57	J	0.473	MDL	5.15	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-132-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 11:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.56	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

Sample ID: **SL-132-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 11:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	84.8	J	6.08	MDL	102	PQL	mg/Kg	J	Z
Zirconium	3.64	J	0.470	MDL	5.11	PQL	mg/Kg	J	Z

Sample ID: **SL-133-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 10:50:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.59	J	1.03	MDL	10.3	PQL	mg/Kg	U	B

Sample ID: **SL-133-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 10:50:00** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	86.4	J	6.12	MDL	103	PQL	mg/Kg	J	Z
Zirconium	4.35	J	0.473	MDL	5.14	PQL	mg/Kg	J	Z

Sample ID: **SL-134-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 8:45:00 AM** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.70	J	1.01	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: **SL-134-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 8:45:00 AM** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	4.88	J	0.462	MDL	5.03	PQL	mg/Kg	J	Z

Sample ID: **SL-135-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 9:00:00 AM** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.01	J	1.01	MDL	10.1	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-135-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:00:00 AM *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	5.01	J	0.465	MDL	5.06	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.65	J	1.01	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.73	J	1.00	MDL	10.0	PQL	mg/Kg	U	B

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.94	J	0.998	MDL	9.98	PQL	mg/Kg	U	B

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.56	J	0.992	MDL	9.92	PQL	mg/Kg	U	B

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	4.47	J	0.456	MDL	4.96	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	91.7	J	6.07	MDL	102	PQL	mg/Kg	J	Z
Zirconium	4.84	J	0.469	MDL	5.10	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: **SL-141-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 1:15:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.98	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: **SL-141-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 1:15:00 PM** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	4.86	J	0.487	MDL	5.29	PQL	mg/Kg	J	Z

Sample ID: **SL-142-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 2:15:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.67	J	1.00	MDL	10.0	PQL	mg/Kg	U	B

Sample ID: **SL-142-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 2:15:00 PM** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	75.9	J	5.95	MDL	100	PQL	mg/Kg	J	Z
Zirconium	3.68	J	0.460	MDL	5.00	PQL	mg/Kg	J	Z

Sample ID: **SL-143-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 1:35:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.90	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: **SL-144-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 2:35:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.72	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: **SL-144-SA5DN-SS-0.0-0.5** ***Collected:*** **6/2/2011 2:35:00 PM** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	88.5	J	6.16	MDL	104	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 Laboratory: LL

EDD Filename: PrepDE171_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.57	J	1.03	MDL	10.3	PQL	mg/Kg	U	B

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	81.0	J	6.12	MDL	103	PQL	mg/Kg	J	Z
Zirconium	4.16	J	0.473	MDL	5.14	PQL	mg/Kg	J	Z

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.96	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	75.9	J	6.35	MDL	107	PQL	mg/Kg	J	Z

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.18	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	86.5	J	6.31	MDL	106	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.31	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 Laboratory: LL

EDD Filename: PrepDE171_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6020 **Matrix:** AQ

Sample ID: EB12-SA5DN-SS-060211 *Collected:* 6/2/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000074	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.231		0.0593	MDL	0.198	PQL	mg/Kg	J	Q
ARSENIC	32.0		0.0791	MDL	0.395	PQL	mg/Kg	J	E, A
BERYLLIUM	0.744		0.0158	MDL	0.0988	PQL	mg/Kg	J	E
CADMIUM	0.297		0.0395	MDL	0.0988	PQL	mg/Kg	J	Q
CHROMIUM	27.6		0.119	MDL	0.395	PQL	mg/Kg	J	Q, E
COBALT	9.31		0.0198	MDL	0.0988	PQL	mg/Kg	J	Q, E, E, A
COPPER	14.7		0.0652	MDL	0.395	PQL	mg/Kg	J	Q, E, A
LEAD	9.65		0.0103	MDL	0.198	PQL	mg/Kg	J	Q, E, E, A
NICKEL	22.5		0.0988	MDL	0.395	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.0402	J	0.0119	MDL	0.0988	PQL	mg/Kg	J	Z, Q
THALLIUM	0.391		0.0296	MDL	0.0988	PQL	mg/Kg	J	Q, E
VANADIUM	47.5		0.0217	MDL	0.0988	PQL	mg/Kg	J	E
ZINC	83.7		0.553	MDL	2.96	PQL	mg/Kg	J	E, E, A

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.0395	MDL	0.395	PQL	mg/Kg	J	Z, Q

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.740		0.0494	MDL	0.0988	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-12-SA5DN-QC-060211 ***Collected:*** 6/2/2011 9:45:00 AM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.107	MDL	0.395	PQL	mg/Kg	J	E, E, A

Sample ID: SL-131-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.288		0.0618	MDL	0.206	PQL	mg/Kg	J	Q
ARSENIC	11.2		0.0823	MDL	0.412	PQL	mg/Kg	J	E, A
BERYLLIUM	0.670		0.0165	MDL	0.103	PQL	mg/Kg	J	E
CADMIUM	0.608		0.0412	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	25.1		0.124	MDL	0.412	PQL	mg/Kg	J	Q, E
COBALT	7.84		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, E, E, A
COPPER	18.0		0.0679	MDL	0.412	PQL	mg/Kg	J	Q, E, A
LEAD	17.0		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, E, E, A
NICKEL	19.4		0.103	MDL	0.412	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.294		0.0124	MDL	0.103	PQL	mg/Kg	J	Q
THALLIUM	0.285		0.0309	MDL	0.103	PQL	mg/Kg	J	Q, E
VANADIUM	42.5		0.0226	MDL	0.103	PQL	mg/Kg	J	E

Sample ID: SL-131-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:25:00 ***Analysis Type:*** REA5 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	156		1.44	MDL	7.72	PQL	mg/Kg	J	E, E, A

Sample ID: SL-131-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:25:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.106	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z, Q

Sample ID: SL-131-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:25:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.851		0.0515	MDL	0.103	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-131-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:25:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.111	MDL	0.412	PQL	mg/Kg	J	E, E, A

Sample ID: SL-132-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.211		0.0607	MDL	0.202	PQL	mg/Kg	J	Q
ARSENIC	11.0		0.0809	MDL	0.405	PQL	mg/Kg	J	E, A
BERYLLIUM	0.731		0.0162	MDL	0.101	PQL	mg/Kg	J	E
CADMIUM	0.557		0.0405	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	29.1		0.121	MDL	0.405	PQL	mg/Kg	J	Q, E
COBALT	8.09		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, E, E, A
COPPER	18.5		0.0667	MDL	0.405	PQL	mg/Kg	J	Q, E, A
LEAD	13.5		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, E, E, A
NICKEL	23.2		0.101	MDL	0.405	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.237		0.0121	MDL	0.101	PQL	mg/Kg	J	Q
THALLIUM	0.361		0.0303	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	50.0		0.0222	MDL	0.101	PQL	mg/Kg	J	E
ZINC	101		0.566	MDL	3.03	PQL	mg/Kg	J	E, E, A

Sample ID: SL-132-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:10:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0405	MDL	0.405	PQL	mg/Kg	J	Z, Q

Sample ID: SL-132-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:10:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.913		0.0506	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-132-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:10:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	149		0.109	MDL	0.405	PQL	mg/Kg	J	E, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.548		0.0617	MDL	0.206	PQL	mg/Kg	J	Q
ARSENIC	23.0		0.0822	MDL	0.411	PQL	mg/Kg	J	E, A
BERYLLIUM	0.753		0.0164	MDL	0.103	PQL	mg/Kg	J	E
CADMIUM	0.451		0.0411	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	27.8		0.123	MDL	0.411	PQL	mg/Kg	J	Q, E
COBALT	8.09		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, E, E, A
COPPER	16.0		0.0678	MDL	0.411	PQL	mg/Kg	J	Q, E, A
LEAD	11.9		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, E, E, A
NICKEL	22.0		0.103	MDL	0.411	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.133		0.0123	MDL	0.103	PQL	mg/Kg	J	Q
THALLIUM	0.311		0.0308	MDL	0.103	PQL	mg/Kg	J	Q, E
VANADIUM	46.7		0.0226	MDL	0.103	PQL	mg/Kg	J	E
ZINC	81.9		0.576	MDL	3.08	PQL	mg/Kg	J	E, E, A

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0411	MDL	0.411	PQL	mg/Kg	J	Z, Q

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.785		0.0514	MDL	0.103	PQL	mg/Kg	J	Q, E

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.111	MDL	0.411	PQL	mg/Kg	J	E, E, A

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.287		0.0609	MDL	0.203	PQL	mg/Kg	J	Q
ARSENIC	43.7		0.0812	MDL	0.406	PQL	mg/Kg	J	E, A
BERYLLIUM	0.924		0.0162	MDL	0.101	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 Laboratory: LL

EDD Filename: PrepDE171_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.474		0.0406	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	34.4		0.122	MDL	0.406	PQL	mg/Kg	J	Q, E
COBALT	9.62		0.0203	MDL	0.101	PQL	mg/Kg	J	Q, E, E, A
COPPER	19.3		0.0670	MDL	0.406	PQL	mg/Kg	J	Q, E, A
LEAD	15.4		0.0106	MDL	0.203	PQL	mg/Kg	J	Q, E, E, A
NICKEL	29.2		0.101	MDL	0.406	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.107		0.0122	MDL	0.101	PQL	mg/Kg	J	Q
THALLIUM	0.385		0.0304	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	56.0		0.0223	MDL	0.101	PQL	mg/Kg	J	E
ZINC	98.6		0.568	MDL	3.04	PQL	mg/Kg	J	E, E, A

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.187	J	0.0406	MDL	0.406	PQL	mg/Kg	J	Z, Q

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.702		0.0507	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	139		0.110	MDL	0.406	PQL	mg/Kg	J	E, E, A

Sample ID: SL-135-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:00:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.417		0.0601	MDL	0.200	PQL	mg/Kg	J	Q
ARSENIC	42.2		0.0801	MDL	0.401	PQL	mg/Kg	J	E, A
BERYLLIUM	0.943		0.0160	MDL	0.100	PQL	mg/Kg	J	E
CADMIUM	0.419		0.0401	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	37.6		0.120	MDL	0.401	PQL	mg/Kg	J	Q, E
COBALT	10.6		0.0200	MDL	0.100	PQL	mg/Kg	J	Q, E, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-135-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 9:00:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	36.6		0.0661	MDL	0.401	PQL	mg/Kg	J	Q, E, A
LEAD	21.2		0.0104	MDL	0.200	PQL	mg/Kg	J	Q, E, E, A
NICKEL	31.5		0.100	MDL	0.401	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.128		0.0120	MDL	0.100	PQL	mg/Kg	J	Q
THALLIUM	0.441		0.0300	MDL	0.100	PQL	mg/Kg	J	Q, E
VANADIUM	56.1		0.0220	MDL	0.100	PQL	mg/Kg	J	E
ZINC	144		0.561	MDL	3.00	PQL	mg/Kg	J	E, E, A

Sample ID: SL-135-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 9:00:00 AM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0401	MDL	0.401	PQL	mg/Kg	J	Z, Q

Sample ID: SL-135-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 9:00:00 AM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.802		0.0501	MDL	0.100	PQL	mg/Kg	J	Q, E

Sample ID: SL-135-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 9:00:00 AM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	147		0.108	MDL	0.401	PQL	mg/Kg	J	E, E, A

Sample ID: SL-136-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 8:25:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.297		0.0606	MDL	0.202	PQL	mg/Kg	J	Q
ARSENIC	30.8		0.0807	MDL	0.404	PQL	mg/Kg	J	E, A
BERYLLIUM	0.987		0.0161	MDL	0.101	PQL	mg/Kg	J	E
CADMIUM	0.456		0.0404	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	39.4		0.121	MDL	0.404	PQL	mg/Kg	J	Q, E
COBALT	10.6		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, E, E, A
COPPER	23.0		0.0666	MDL	0.404	PQL	mg/Kg	J	Q, E, A
LEAD	17.5		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, E, E, A
NICKEL	30.1		0.101	MDL	0.404	PQL	mg/Kg	J	Q, Q, E, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0894	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.431		0.0303	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	63.0		0.0222	MDL	0.101	PQL	mg/Kg	J	E
ZINC	109		0.565	MDL	3.03	PQL	mg/Kg	J	E, E, A

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.237	J	0.0404	MDL	0.404	PQL	mg/Kg	J	Z, Q

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.960		0.0505	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	170		0.109	MDL	0.404	PQL	mg/Kg	J	E, E, A

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.317		0.0591	MDL	0.197	PQL	mg/Kg	J	Q
ARSENIC	40.4		0.0787	MDL	0.394	PQL	mg/Kg	J	E, A
BERYLLIUM	0.974		0.0157	MDL	0.0984	PQL	mg/Kg	J	E
CADMIUM	0.620		0.0394	MDL	0.0984	PQL	mg/Kg	J	Q
CHROMIUM	34.0		0.118	MDL	0.394	PQL	mg/Kg	J	Q, E
COBALT	9.79		0.0197	MDL	0.0984	PQL	mg/Kg	J	Q, E, E, A
COPPER	20.8		0.0650	MDL	0.394	PQL	mg/Kg	J	Q, E, A
LEAD	15.9		0.0102	MDL	0.197	PQL	mg/Kg	J	Q, E, E, A
NICKEL	28.7		0.0984	MDL	0.394	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.0955	J	0.0118	MDL	0.0984	PQL	mg/Kg	J	Z, Q
THALLIUM	0.371		0.0295	MDL	0.0984	PQL	mg/Kg	J	Q, E
VANADIUM	53.3		0.0217	MDL	0.0984	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	112		0.551	MDL	2.95	PQL	mg/Kg	J	E, E, A

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0394	MDL	0.394	PQL	mg/Kg	J	Z, Q

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.823		0.0492	MDL	0.0984	PQL	mg/Kg	J	Q, E

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.106	MDL	0.394	PQL	mg/Kg	J	E, E, A

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.237		0.0605	MDL	0.202	PQL	mg/Kg	J	Q
ARSENIC	33.9		0.0806	MDL	0.403	PQL	mg/Kg	J	E, A
BERYLLIUM	0.923		0.0161	MDL	0.101	PQL	mg/Kg	J	E
CADMIUM	0.383		0.0403	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	28.7		0.121	MDL	0.403	PQL	mg/Kg	J	Q, E
COBALT	11.4		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, E, E, A
COPPER	17.0		0.0665	MDL	0.403	PQL	mg/Kg	J	Q, E, A
LEAD	10.3		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, E, E, A
NICKEL	26.1		0.101	MDL	0.403	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.0512	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.388		0.0302	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	51.3		0.0222	MDL	0.101	PQL	mg/Kg	J	E
ZINC	95.2		0.564	MDL	3.02	PQL	mg/Kg	J	E, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.156	J	0.0403	MDL	0.403	PQL	mg/Kg	J	Z, Q

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.843		0.0504	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	153		0.109	MDL	0.403	PQL	mg/Kg	J	E, E, A

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.239		0.0607	MDL	0.202	PQL	mg/Kg	J	Q
ARSENIC	12.6		0.0810	MDL	0.405	PQL	mg/Kg	J	E, A
BERYLLIUM	0.866		0.0162	MDL	0.101	PQL	mg/Kg	J	E
CADMIUM	0.341		0.0405	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	29.1		0.121	MDL	0.405	PQL	mg/Kg	J	Q, E
COBALT	10.5		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, E, E, A
COPPER	18.1		0.0668	MDL	0.405	PQL	mg/Kg	J	Q, E, A
LEAD	10.4		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, E, E, A
NICKEL	22.1		0.101	MDL	0.405	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.0542	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.403		0.0304	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	48.4		0.0223	MDL	0.101	PQL	mg/Kg	J	E
ZINC	74.5		0.567	MDL	3.04	PQL	mg/Kg	J	E, E, A

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0405	MDL	0.405	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.02		0.0506	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	173		0.109	MDL	0.405	PQL	mg/Kg	J	E, E, A

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.253		0.0606	MDL	0.202	PQL	mg/Kg	J	Q
ARSENIC	19.2		0.0807	MDL	0.404	PQL	mg/Kg	J	E, A
BERYLLIUM	0.796		0.0161	MDL	0.101	PQL	mg/Kg	J	E
CADMIUM	0.440		0.0404	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	30.5		0.121	MDL	0.404	PQL	mg/Kg	J	Q, E
COBALT	9.60		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, E, E, A
COPPER	18.3		0.0666	MDL	0.404	PQL	mg/Kg	J	Q, E, A
LEAD	21.6		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, E, E, A
NICKEL	24.1		0.101	MDL	0.404	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.138		0.0121	MDL	0.101	PQL	mg/Kg	J	Q
THALLIUM	0.369		0.0303	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	50.5		0.0222	MDL	0.101	PQL	mg/Kg	J	E
ZINC	90.7		0.565	MDL	3.03	PQL	mg/Kg	J	E, E, A

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0404	MDL	0.404	PQL	mg/Kg	J	Z, Q

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.933		0.0505	MDL	0.101	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-140-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 10:30:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	138		0.109	MDL	0.404	PQL	mg/Kg	J	E, E, A

Sample ID: SL-141-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:15:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.365		0.0628	MDL	0.209	PQL	mg/Kg	J	Q
ARSENIC	15.0		0.0838	MDL	0.419	PQL	mg/Kg	J	E, A
BERYLLIUM	0.999		0.0168	MDL	0.105	PQL	mg/Kg	J	E
CADMIUM	1.04		0.0419	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	38.0		0.126	MDL	0.419	PQL	mg/Kg	J	Q, E
COBALT	11.7		0.0209	MDL	0.105	PQL	mg/Kg	J	Q, E, E, A
COPPER	34.5		0.0691	MDL	0.419	PQL	mg/Kg	J	Q, E, A
LEAD	23.8		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, E, E, A
NICKEL	30.1		0.105	MDL	0.419	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	1.18		0.0126	MDL	0.105	PQL	mg/Kg	J	Q
THALLIUM	0.469		0.0314	MDL	0.105	PQL	mg/Kg	J	Q, E
VANADIUM	60.3		0.0230	MDL	0.105	PQL	mg/Kg	J	E
ZINC	169		0.587	MDL	3.14	PQL	mg/Kg	J	E, E, A

Sample ID: SL-141-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:15:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.271	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z, Q

Sample ID: SL-141-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:15:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.10		0.0524	MDL	0.105	PQL	mg/Kg	J	Q, E

Sample ID: SL-141-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:15:00 PM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	186		0.113	MDL	0.419	PQL	mg/Kg	J	E, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-142-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:15:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.239		0.0624	MDL	0.208	PQL	mg/Kg	J	Q
ARSENIC	9.99		0.0832	MDL	0.416	PQL	mg/Kg	J	E, A
BERYLLIUM	0.706		0.0166	MDL	0.104	PQL	mg/Kg	J	E
CADMIUM	0.576		0.0416	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	30.1		0.125	MDL	0.416	PQL	mg/Kg	J	Q, E
COBALT	9.72		0.0208	MDL	0.104	PQL	mg/Kg	J	Q, E, E, A
COPPER	23.6		0.0686	MDL	0.416	PQL	mg/Kg	J	Q, E, A
LEAD	17.4		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E, E, A
NICKEL	22.2		0.104	MDL	0.416	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.385		0.0125	MDL	0.104	PQL	mg/Kg	J	Q
THALLIUM	0.325		0.0312	MDL	0.104	PQL	mg/Kg	J	Q, E
VANADIUM	46.5		0.0229	MDL	0.104	PQL	mg/Kg	J	E
ZINC	92.0		0.582	MDL	3.12	PQL	mg/Kg	J	E, E, A

Sample ID: SL-142-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:15:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.167	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z, Q

Sample ID: SL-142-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:15:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.27		0.0520	MDL	0.104	PQL	mg/Kg	J	Q, E

Sample ID: SL-142-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:15:00 PM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	137		0.112	MDL	0.416	PQL	mg/Kg	J	E, E, A

Sample ID: SL-143-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:35:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.284		0.0624	MDL	0.208	PQL	mg/Kg	J	Q
ARSENIC	9.19		0.0832	MDL	0.416	PQL	mg/Kg	J	E, A
BERYLLIUM	0.655		0.0166	MDL	0.104	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-143-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:35:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.593		0.0416	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	26.4		0.125	MDL	0.416	PQL	mg/Kg	J	Q, E
COBALT	8.27		0.0208	MDL	0.104	PQL	mg/Kg	J	Q, E, E, A
COPPER	19.0		0.0686	MDL	0.416	PQL	mg/Kg	J	Q, E, A
LEAD	14.2		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E, E, A
NICKEL	19.3		0.104	MDL	0.416	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.186		0.0125	MDL	0.104	PQL	mg/Kg	J	Q
THALLIUM	0.310		0.0312	MDL	0.104	PQL	mg/Kg	J	Q, E
VANADIUM	42.6		0.0229	MDL	0.104	PQL	mg/Kg	J	E
ZINC	97.2		0.582	MDL	3.12	PQL	mg/Kg	J	E, E, A

Sample ID: SL-143-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:35:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.172	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z, Q

Sample ID: SL-143-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:35:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.931		0.0520	MDL	0.104	PQL	mg/Kg	J	Q, E

Sample ID: SL-143-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:35:00 PM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.112	MDL	0.416	PQL	mg/Kg	J	E, E, A

Sample ID: SL-144-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:35:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.249		0.0609	MDL	0.203	PQL	mg/Kg	J	Q
ARSENIC	9.95		0.0812	MDL	0.406	PQL	mg/Kg	J	E, A
BERYLLIUM	0.830		0.0162	MDL	0.101	PQL	mg/Kg	J	E
CADMIUM	0.307		0.0406	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	27.9		0.122	MDL	0.406	PQL	mg/Kg	J	Q, E
COBALT	9.47		0.0203	MDL	0.101	PQL	mg/Kg	J	Q, E, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	18.7		0.0670	MDL	0.406	PQL	mg/Kg	J	Q, E, A
LEAD	10.7		0.0106	MDL	0.203	PQL	mg/Kg	J	Q, E, E, A
NICKEL	21.5		0.101	MDL	0.406	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.211		0.0122	MDL	0.101	PQL	mg/Kg	J	Q
THALLIUM	0.394		0.0304	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	48.5		0.0223	MDL	0.101	PQL	mg/Kg	J	E
ZINC	74.4		0.568	MDL	3.04	PQL	mg/Kg	J	E, E, A

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.205	J	0.0406	MDL	0.406	PQL	mg/Kg	J	Z, Q

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.952		0.0507	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	162		0.110	MDL	0.406	PQL	mg/Kg	J	E, E, A

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.248		0.0605	MDL	0.202	PQL	mg/Kg	J	Q
ARSENIC	10.5		0.0807	MDL	0.403	PQL	mg/Kg	J	E, A
BERYLLIUM	0.733		0.0161	MDL	0.101	PQL	mg/Kg	J	E
CADMIUM	0.426		0.0403	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	27.2		0.121	MDL	0.403	PQL	mg/Kg	J	Q, E
COBALT	8.84		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, E, E, A
COPPER	17.4		0.0666	MDL	0.403	PQL	mg/Kg	J	Q, E, A
LEAD	11.3		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, E, E, A
NICKEL	20.0		0.101	MDL	0.403	PQL	mg/Kg	J	Q, Q, E, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-145-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:50:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0583	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.369		0.0303	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	48.7		0.0222	MDL	0.101	PQL	mg/Kg	J	E
ZINC	76.1		0.565	MDL	3.03	PQL	mg/Kg	J	E, E, A

Sample ID: SL-145-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:50:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.165	J	0.0403	MDL	0.403	PQL	mg/Kg	J	Z, Q

Sample ID: SL-145-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:50:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.981		0.0504	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-145-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:50:00 PM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	149		0.109	MDL	0.403	PQL	mg/Kg	J	E, E, A

Sample ID: SL-149-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 3:25:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.331		0.0647	MDL	0.216	PQL	mg/Kg	J	Q
ARSENIC	9.13		0.0862	MDL	0.431	PQL	mg/Kg	J	E, A
BERYLLIUM	0.940		0.0172	MDL	0.108	PQL	mg/Kg	J	E
CADMIUM	0.604		0.0431	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	37.8		0.129	MDL	0.431	PQL	mg/Kg	J	Q, E
COBALT	13.3		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E, E, A
COPPER	23.6		0.0711	MDL	0.431	PQL	mg/Kg	J	Q, E, A
LEAD	17.2		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E, E, A
NICKEL	28.0		0.108	MDL	0.431	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.0431	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.492		0.0323	MDL	0.108	PQL	mg/Kg	J	Q, E
VANADIUM	67.8		0.0237	MDL	0.108	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	98.0		0.603	MDL	3.23	PQL	mg/Kg	J	E, E, A

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.222	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z, Q

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.14		0.0539	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	191		0.116	MDL	0.431	PQL	mg/Kg	J	E, E, A

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.516		0.0636	MDL	0.212	PQL	mg/Kg	J	Q
ARSENIC	10.5		0.0848	MDL	0.424	PQL	mg/Kg	J	E, A
BERYLLIUM	0.845		0.0170	MDL	0.106	PQL	mg/Kg	J	E
CADMIUM	0.503		0.0424	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	34.6		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E
COBALT	11.7		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E, E, A
COPPER	28.3		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E, A
LEAD	18.0		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E, E, A
NICKEL	26.3		0.106	MDL	0.424	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.0762	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.427		0.0318	MDL	0.106	PQL	mg/Kg	J	Q, E
VANADIUM	59.3		0.0233	MDL	0.106	PQL	mg/Kg	J	E
ZINC	101		0.594	MDL	3.18	PQL	mg/Kg	J	E, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.281	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z, Q

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.33		0.0530	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	179		0.114	MDL	0.424	PQL	mg/Kg	J	E, E, A

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.155	J	0.0611	MDL	0.204	PQL	mg/Kg	J	Z, Q
ARSENIC	8.17		0.0814	MDL	0.407	PQL	mg/Kg	J	E, A
BERYLLIUM	0.953		0.0163	MDL	0.102	PQL	mg/Kg	J	E
CADMIUM	0.176		0.0407	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	27.5		0.122	MDL	0.407	PQL	mg/Kg	J	Q, E
COBALT	9.56		0.0204	MDL	0.102	PQL	mg/Kg	J	Q, E, E, A
COPPER	19.4		0.0672	MDL	0.407	PQL	mg/Kg	J	Q, E, A
LEAD	13.1		0.0106	MDL	0.204	PQL	mg/Kg	J	Q, E, E, A
NICKEL	22.1		0.102	MDL	0.407	PQL	mg/Kg	J	Q, Q, E, E, A
SILVER	0.0497	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.382		0.0305	MDL	0.102	PQL	mg/Kg	J	Q, E
VANADIUM	50.2		0.0224	MDL	0.102	PQL	mg/Kg	J	E
ZINC	95.5		0.570	MDL	3.05	PQL	mg/Kg	J	E, E, A

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.233	J	0.0407	MDL	0.407	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.15		0.0509	MDL	0.102	PQL	mg/Kg	J	Q, E

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	138		0.110	MDL	0.407	PQL	mg/Kg	J	E, E, A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.71	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.80	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.53	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.81	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.72	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-142-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.94	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.56	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7470A **Matrix: AQ**

Sample ID: EB12-SA5DN-SS-060211 *Collected:* 6/2/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000093	J	0.000046	MDL	0.00020	PQL	mg/L	U	B

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0088	J	0.0028	MDL	0.0994	PQL	mg/Kg	UJ	FD, F

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-132-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0366	J	0.0029	MDL	0.0999	PQL	mg/Kg	U	F

Sample ID: SL-133-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 10:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0645	J	0.0029	MDL	0.100	PQL	mg/Kg	U	F

Sample ID: SL-136-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 8:25:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0358	J	0.0029	MDL	0.101	PQL	mg/Kg	U	F

Sample ID: SL-138-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0282	J	0.0028	MDL	0.0985	PQL	mg/Kg	UJ	FD, F

Sample ID: SL-139-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0057	J	0.0029	MDL	0.100	PQL	mg/Kg	U	F

Sample ID: SL-140-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 10:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0064	J	0.0028	MDL	0.0992	PQL	mg/Kg	U	F

Sample ID: SL-142-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 2:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0148	J	0.0030	MDL	0.103	PQL	mg/Kg	U	F

Sample ID: SL-143-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 1:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0822	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0034	J	0.0028	MDL	0.0984	PQL	mg/Kg	U	F

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0050	J	0.0029	MDL	0.103	PQL	mg/Kg	U	F

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0051	J	0.0029	MDL	0.101	PQL	mg/Kg	U	F

Method Category: SVOA **Method:** 1625C **Matrix:** AQ

Sample ID: EB12-SA5DN-SS-060211 *Collected:* 6/2/2011 12:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	4.51		1.06	MDL	2.13	PQL	ng/L	U	B

Method Category: SVOA **Method:** 1625C **Matrix:** SO

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	40.9		16.9	MDL	33.8	PQL	ng/Kg	U	B

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	48.8		16.8	MDL	33.7	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-132-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:10:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.0	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.4	J	0.83	MDL	2.5	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q
Propylene glycol	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* REA2 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	7.0	J	4.3	MDL	13	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: EB12-SA5DN-SS-060211 *Collected:* 6/2/2011 12:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.0099	J	0.0027	MDL	0.010	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	5.8		0.34	MDL	1.7	PQL	ug/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8081A **Matrix:** SO

Sample ID: DUP-12-SA5DN-QC-060211 ***Collected:*** 6/2/2011 9:45:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	2.5		0.068	MDL	0.35	PQL	ug/Kg	J	FD
Chlordane	4.3		0.82	MDL	3.5	PQL	ug/Kg	J	FD
DIELDRIN	0.47		0.068	MDL	0.35	PQL	ug/Kg	J	FD
ENDRIN ALDEHYDE	0.17	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z, FD
MIREX	0.16	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z, FD

Sample ID: SL-131-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.5	J	0.83	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-132-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.8	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 10:50:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.4	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.089	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-134-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 8:45:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.14	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z
DIELDRIN	0.24	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z

Sample ID: SL-136-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 8:25:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.093	U	0.093	MDL	0.35	PQL	ug/Kg	UJ	S
4,4'-DDE	0.87		0.067	MDL	0.35	PQL	ug/Kg	J	S
4,4'-DDT	2.5		0.067	MDL	0.35	PQL	ug/Kg	J	S
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-136-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 8:25:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	1.4	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.037	U	0.037	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.26	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z, S
ENDOSULFAN I	0.045	U	0.045	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.063	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z, S
METHOXYCHLOR	0.35	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
TOXAPHENE	2.2	U	2.2	MDL	6.7	PQL	ug/Kg	UJ	S

Sample ID: SL-137-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 9:15:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.090	U	0.090	MDL	0.35	PQL	ug/Kg	UJ	S
4,4'-DDE	0.42		0.068	MDL	0.35	PQL	ug/Kg	J	S
4,4'-DDT	1.7		0.068	MDL	0.35	PQL	ug/Kg	J	S
ALDRIN	0.068	U	0.068	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	3.0	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.037	U	0.037	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	1.1		0.068	MDL	0.35	PQL	ug/Kg	J	S
ENDOSULFAN I	0.045	U	0.045	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.035	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z, S
METHOXYCHLOR	0.35	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.14	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z, S
TOXAPHENE	2.3	U	2.3	MDL	6.8	PQL	ug/Kg	UJ	S

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	FD
4,4'-DDT	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	FD
Chlordane	0.82	U	0.82	MDL	3.5	PQL	ug/Kg	UJ	FD
DIELDRIN	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	FD
ENDRIN ALDEHYDE	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	FD
MIREX	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	FD

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.5	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.097	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.1	J	0.83	MDL	3.5	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.16	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z
MIREX	0.27	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.9	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z
DIELDRIN	0.10	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.074	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z
MIREX	0.15	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.12	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.1	J	0.86	MDL	3.6	PQL	ug/Kg	J	Z
DELTA-BHC	0.057	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.16	J	0.071	MDL	0.36	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.20	J	0.071	MDL	0.36	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.13	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z
MIREX	0.15	J	0.071	MDL	0.36	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.40	U	0.40	MDL	1.7	PQL	ug/Kg	UJ	FD
Aroclor 5460	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	FD

Sample ID: SL-131-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	5.0	J	2.0	MDL	8.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-132-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	7.8		0.40	MDL	1.7	PQL	ug/Kg	J	S
Aroclor 5460	11		1.0	MDL	3.4	PQL	ug/Kg	J	S

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.40	MDL	1.7	PQL	ug/Kg	J	Z
Aroclor 5460	1.3	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-135-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:00:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.40	MDL	1.7	PQL	ug/Kg	J	Z
Aroclor 5460	3.2	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	2.1	J	2.0	MDL	8.7	PQL	ug/Kg	J	Z, FD
Aroclor 5460	5.8	J	5.1	MDL	17	PQL	ug/Kg	J	Z, FD

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.6	J	0.40	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	30	J	11	MDL	35	PQL	ug/Kg	J	Z

Sample ID: SL-142-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	6.2	J	2.0	MDL	8.8	PQL	ug/Kg	J	Z
Aroclor 5460	7.4	J	5.2	MDL	17	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	3.4	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP-12-SA5DN-QC-060211 *Collected:* 6/2/2011 9:45:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L
MCPA	170	U	170	MDL	260	PQL	ug/Kg	UJ	FD

Sample ID: SL-131-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	1.2	U	1.2	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-132-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	1.0	J	0.81	MDL	1.7	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L
MCPP	130	J	76	MDL	250	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-135-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:00:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L
MCPA	290		78	MDL	260	PQL	ug/Kg	J	Q, FD

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

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

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	1.0	U	1.0	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-142-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	0.87	J	0.83	MDL	1.8	PQL	ug/Kg	J	Z
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-143-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.080	J	0.077	MDL	0.17	PQL	ug/Kg	J	Z
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.12	J	0.080	MDL	0.18	PQL	ug/Kg	J	Z
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-132-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
2,4,5-TRICHLOROPHENOL	34	U	34	MDL	170	PQL	ug/Kg	UJ	Q
2,4,6-TRICHLOROPHENOL	34	U	34	MDL	170	PQL	ug/Kg	UJ	Q
2,4-DICHLOROPHENOL	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
2,4-DIMETHYLPHENOL	34	U	34	MDL	170	PQL	ug/Kg	UJ	Q
2,4-DINITROTOLUENE	34	U	34	MDL	170	PQL	ug/Kg	UJ	Q
2-NITROPHENOL	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
4-CHLORO-3-METHYLPHENOL	34	U	34	MDL	170	PQL	ug/Kg	UJ	Q
4-CHLOROPHENYL-PHENYLETHER	34	U	34	MDL	170	PQL	ug/Kg	UJ	Q
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	R	Q
BIS(2-CHLOROETHOXY)METHANE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
NITROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
N-NITROSODIPHENYLAMINE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	41	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	81	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	170	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	35	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	43	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	48	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	40	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	93	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	59	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	17	MDL	340	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8270C SIM **Matrix:** AQ

Sample ID: EB12-SA5DN-SS-060211 *Collected:* 6/2/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.029	J	0.010	MDL	0.052	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.029	J	0.010	MDL	0.052	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.22	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.082	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	0.052	U	0.052	MDL	1.0	PQL	ug/L	UJ	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP-12-SA5DN-QC-060211 ***Collected:*** 6/2/2011 9:45:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.96	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	2.2		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	4.4		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	6.2		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	42		6.2	MDL	19	PQL	ug/Kg	J	FD
CHRYSENE	5.8		0.34	MDL	1.7	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	2.9		0.69	MDL	1.7	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
PYRENE	2.9		0.69	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SL-131-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.35	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	1.5	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-132-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 11:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.6	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORENE	0.83	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5DN-SS-0.0-0.5 ***Collected:*** 6/2/2011 10:50:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.74	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.75	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.98	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.8	J	6.2	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-135-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:00:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.46	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.82	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.6	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.1	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.76	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.75	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.1	MDL	18	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.98	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-138-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(G,H,I)PERYLENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	6.2	MDL	19	PQL	ug/Kg	J	Z, FD
CHRYSENE	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	FD
DIBENZO(A,H)ANTHRACENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
FLUORANTHENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
PHENANTHRENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
PYRENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.70	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-141-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.50	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.3	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-butylphthalate	16	J	6.4	MDL	19	PQL	ug/Kg	J	Z
FLUORENE	0.96	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-142-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.73	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.97	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.35	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	1.0	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	11	J	6.2	MDL	19	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: PrepDE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-142-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-143-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.3	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.48	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-octylphthalate	13	J	6.3	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-144-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.37	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.1	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.71	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-145-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.4	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	8.0	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	4.2	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
FLUORANTHENE	7.5	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	3.6	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
PHENANTHRENE	3.7	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
PYRENE	6.5	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-149-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.93	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-150-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 3:05:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.0	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.1	J	6.4	MDL	19	PQL	ug/Kg	J	Z
FLUORENE	1.5	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-151-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 1:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.78	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.94	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-132-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	2800	J	1200	MDL	3100	PQL	ug/Kg	J	Z

Sample ID: SL-134-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:45:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1000	J	620	MDL	1600	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-135-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:00:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1200	J	610	MDL	1500	PQL	ug/Kg	J	Z

Sample ID: SL-136-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 8:25:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1200	J	610	MDL	1500	PQL	ug/Kg	J	Z

Sample ID: SL-137-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 9:15:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1200	J	610	MDL	1500	PQL	ug/Kg	J	Z

Sample ID: SL-139-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1400	J	610	MDL	1500	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-140-SA5DN-SS-0.0-0.5 *Collected:* 6/2/2011 10:30:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	150	J	100	MDL	510	PQL	ug/Kg	J	Z
METHANOL	130	J	100	MDL	510	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE171

Method Blank Outlier Report

Lab Reporting Batch ID: DE171 Laboratory: LL

EDD Filename: DE171_v2 eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWB15B261608	6/21/2011 4:08:00 PM	N-NITROSODIMETHYLAMINE	1.84 ng/L	EB12-SA5DN-SS-060211

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB12-SA5DN-SS-060211(RES)	N-NITROSODIMETHYLAMINE	4.51 ng/L	4.51U ng/L

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLH15B261032	6/23/2011 10:32:00 AM	N-NITROSODIMETHYLAMINE	18.7 ng/Kg	DUP-12-SA5DN-QC-060211 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-136-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	40.9 ng/Kg	40.9U ng/Kg
SL-137-SA5DN-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	48.8 ng/Kg	48.8U ng/Kg

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16048CB221243	6/10/2011 12:43:00 PM	MAGNESIUM	0.0195 mg/L	EB12-SA5DN-SS-060211

Method Blank Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16108AB221514	6/14/2011 3:14:00 PM	PHOSPHORUS STRONTIUM TIN	1.92 mg/Kg 0.0700 mg/Kg 1.52 mg/Kg	DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5
P16108AB222058	6/15/2011 8:58:00 PM	BORON CALCIUM MAGNESIUM	0.596 mg/Kg 12.9 mg/Kg 0.711 mg/Kg	DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-12-SA5DN-QC-060211(REA2)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-131-SA5DN-SS-0.0-0.5(REA2)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-132-SA5DN-SS-0.0-0.5(REA2)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-133-SA5DN-SS-0.0-0.5(REA2)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-134-SA5DN-SS-0.0-0.5(REA2)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-135-SA5DN-SS-0.0-0.5(REA2)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-136-SA5DN-SS-0.0-0.5(REA2)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-137-SA5DN-SS-0.0-0.5(REA2)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-138-SA5DN-SS-0.0-0.5(REA2)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-139-SA5DN-SS-0.0-0.5(REA2)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-141-SA5DN-SS-0.0-0.5(REA2)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-142-SA5DN-SS-0.0-0.5(REA2)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-143-SA5DN-SS-0.0-0.5(REA2)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-144-SA5DN-SS-0.0-0.5(REA2)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-145-SA5DN-SS-0.0-0.5(REA2)	TIN	2.57 mg/Kg	2.57U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE171 Laboratory: LL

EDD Filename: DE171_v2 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-149-SA5DN-SS-0.0-0.5(REA2)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-150-SA5DN-SS-0.0-0.5(REA2)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-151-SA5DN-SS-0.0-0.5(REA2)	TIN	3.31 mg/Kg	3.31U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16126AB220901A	6/13/2011 9:01:00 AM	LEAD	0.0635 mg/Kg	DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5

Method: 7470A
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16013BB221002	6/11/2011 10:02:00 AM	MERCURY	0.00012 mg/L	EB12-SA5DN-SS-060211

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB12-SA5DN-SS-060211(RES)	MERCURY	0.000093 mg/L	0.000093U mg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P58589AB320048A	6/12/2011 12:48:00 AM	EFH (C30-C40)	0.48 mg/Kg	DUP-12-SA5DN-QC-060211 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA5DN-SS-0.0-0.5MS SL-138-SA5DN-SS-0.0-0.5MSD (SL-138-SA5DN-SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	7 38 54	8 41 57	59.00-109.00 63.00-107.00 63.00-107.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)
SL-138-SA5DN-SS-0.0-0.5MS SL-138-SA5DN-SS-0.0-0.5MSD (SL-138-SA5DN-SS-0.0-0.5)	EFH (C15-C20)	199	217	49.00-123.00	-	EFH (C15-C20)	No Qual, Diluted Out
SL-138-SA5DN-SS-0.0-0.5MS SL-138-SA5DN-SS-0.0-0.5MSD (SL-138-SA5DN-SS-0.0-0.5)	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	0 -76 -186 0	0 - 341 0	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	- 31 (20.00) 27 (20.00) -	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	No Qual Diluted Out

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA5DN-SS-0.0-0.5MSD (SL-138-SA5DN-SS-0.0-0.5)	2,4,5-T 2,4,5-TP (Silvex)	- -	- -	10.00-156.00 24.00-141.00	40 (35.00) 46 (35.00)	2,4,5-T 2,4,5-TP (Silvex)	J(all detects)
SL-138-SA5DN-SS-0.0-0.5MS SL-138-SA5DN-SS-0.0-0.5MSD (SL-138-SA5DN-SS-0.0-0.5)	MCPA	-21	-17	10.00-213.00	-	MCPA	J(all detects) R(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA5DN-SS-0.0-0.5MS SL-138-SA5DN-SS-0.0-0.5MSD (SL-138-SA5DN-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)
SL-138-SA5DN-SS-0.0-0.5MS SL-138-SA5DN-SS-0.0-0.5MSD (SL-138-SA5DN-SS-0.0-0.5)	1,2,4-TRICHLOROBENZENE	70	-	72.00-115.00	-	1,2,4-TRICHLOROBENZENE	J(all detects) UJ(all non-detects)
	1,4-DICHLOROBENZENE	66	68	70.00-100.00	-	1,4-DICHLOROBENZENE	
	2,4,5-TRICHLOROPHENOL	73	75	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4,6-TRICHLOROPHENOL	72	-	77.00-115.00	-	2,4,6-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	74	-	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	74	-	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	69	-	73.00-113.00	-	2,4-DINITROTOLUENE	
	2-METHYLNAPHTHALENE	68	73	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-NITROPHENOL	67	-	74.00-115.00	-	2-NITROPHENOL	
	4-CHLORO-3-METHYLPHENOL	75	-	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	71	75	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	ACENAPHTHENE	71	-	75.00-115.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	73	80	81.00-110.00	-	ACENAPHTHYLENE	
	ANTHRACENE	72	-	75.00-115.00	-	ANTHRACENE	
	BIS(2-CHLOROETHOXY)METHA	73	-	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	FLUORANTHENE	66	69	73.00-112.00	-	FLUORANTHENE	
	FLUORENE	72	-	77.00-111.00	-	FLUORENE	
	HEXACHLOROBENZENE	72	-	77.00-114.00	-	HEXACHLOROBENZENE	
	NAPHTHALENE	70	-	72.00-116.00	-	NAPHTHALENE	
	NITROBENZENE	71	-	72.00-106.00	-	NITROBENZENE	
	N-NITROSODIPHENYLAMINE	77	82	86.00-145.00	-	N-NITROSODIPHENYLAMINE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA5DN-SS-0.0-0.5MS	CADMIUM	-	144	75.00-125.00	-	CADMIUM	
SL-138-SA5DN-SS-0.0-0.5MSD	CHROMIUM	-	134	75.00-125.00	-	CHROMIUM	
(DUP-12-SA5DN-QC-060211	COPPER	-	159	75.00-125.00	-	COPPER	
SL-131-SA5DN-SS-0.0-0.5	SILVER	130	155	75.00-125.00	-	SILVER	
SL-132-SA5DN-SS-0.0-0.5							
SL-133-SA5DN-SS-0.0-0.5							
SL-134-SA5DN-SS-0.0-0.5							
SL-135-SA5DN-SS-0.0-0.5							
SL-136-SA5DN-SS-0.0-0.5							
SL-137-SA5DN-SS-0.0-0.5							
SL-138-SA5DN-SS-0.0-0.5							J(all detects)
SL-139-SA5DN-SS-0.0-0.5							
SL-140-SA5DN-SS-0.0-0.5							
SL-141-SA5DN-SS-0.0-0.5							
SL-142-SA5DN-SS-0.0-0.5							
SL-143-SA5DN-SS-0.0-0.5							
SL-144-SA5DN-SS-0.0-0.5							
SL-145-SA5DN-SS-0.0-0.5							
SL-149-SA5DN-SS-0.0-0.5							
SL-150-SA5DN-SS-0.0-0.5							
SL-151-SA5DN-SS-0.0-0.5)							
SL-138-SA5DN-SS-0.0-0.5MS	ARSENIC	-45	182	75.00-125.00	-	ARSENIC	
SL-138-SA5DN-SS-0.0-0.5MSD	ZINC	-47	172	75.00-125.00	21 (20.00)	ZINC	
(DUP-12-SA5DN-QC-060211							
SL-131-SA5DN-SS-0.0-0.5							
SL-132-SA5DN-SS-0.0-0.5							
SL-133-SA5DN-SS-0.0-0.5							
SL-134-SA5DN-SS-0.0-0.5							
SL-135-SA5DN-SS-0.0-0.5							
SL-136-SA5DN-SS-0.0-0.5							
SL-137-SA5DN-SS-0.0-0.5							
SL-138-SA5DN-SS-0.0-0.5							J(all detects)
SL-139-SA5DN-SS-0.0-0.5							UJ(all non-detects)
SL-140-SA5DN-SS-0.0-0.5							
SL-141-SA5DN-SS-0.0-0.5							
SL-142-SA5DN-SS-0.0-0.5							
SL-143-SA5DN-SS-0.0-0.5							As, Zn,
SL-144-SA5DN-SS-0.0-0.5							No Qual %R, >4x
SL-145-SA5DN-SS-0.0-0.5							
SL-149-SA5DN-SS-0.0-0.5							
SL-150-SA5DN-SS-0.0-0.5							
SL-151-SA5DN-SS-0.0-0.5)							
SL-138-SA5DN-SS-0.0-0.5MS	ANTIMONY	64	72	75.00-125.00	-	ANTIMONY	
SL-138-SA5DN-SS-0.0-0.5MSD	COBALT	-	153	75.00-125.00	22 (20.00)	COBALT	
(DUP-12-SA5DN-QC-060211	LEAD	-	194	75.00-125.00	24 (20.00)	LEAD	
SL-131-SA5DN-SS-0.0-0.5	NICKEL	74	155	75.00-125.00	21 (20.00)	NICKEL	
SL-132-SA5DN-SS-0.0-0.5	THALLIUM	-	171	75.00-125.00	21 (20.00)	THALLIUM	
SL-133-SA5DN-SS-0.0-0.5	VANADIUM	39	148	75.00-125.00	-	VANADIUM	
SL-134-SA5DN-SS-0.0-0.5							
SL-135-SA5DN-SS-0.0-0.5							
SL-136-SA5DN-SS-0.0-0.5							
SL-137-SA5DN-SS-0.0-0.5							
SL-138-SA5DN-SS-0.0-0.5							J(all detects)
SL-139-SA5DN-SS-0.0-0.5							UJ(all non-detects)
SL-140-SA5DN-SS-0.0-0.5							
SL-141-SA5DN-SS-0.0-0.5							
SL-142-SA5DN-SS-0.0-0.5							
SL-143-SA5DN-SS-0.0-0.5							V,
SL-144-SA5DN-SS-0.0-0.5							No Qual, >4x
SL-145-SA5DN-SS-0.0-0.5							
SL-149-SA5DN-SS-0.0-0.5							
SL-150-SA5DN-SS-0.0-0.5							
SL-151-SA5DN-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA5DN-SS-0.0-0.5MSD (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	SELENIUM	-	141	75.00-125.00	-	SELENIUM	J(all detects)
SL-138-SA5DN-SS-0.0-0.5MS **SL-138-SA5DN-SS-0.0-0.5MSD** (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	MOLYBDENUM	130	160	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-138-SA5DN-SS-0.0-0.5MS **SL-138-SA5DN-SS-0.0-0.5MSD** (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	BARIUM	-143	231	75.00-125.00	24 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA5DN-SS-0.0-0.5MS **SL-138-SA5DN-SS-0.0-0.5MSD** (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	ALUMINUM MANGANESE TITANIUM	188 148 158	530 - 190	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM MANGANESE TITANIUM	No Qual, >4x
SL-138-SA5DN-SS-0.0-0.5MS **SL-138-SA5DN-SS-0.0-0.5MSD** (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	IRON MAGNESIUM	-2229 -95	-1538 -26	75.00-125.00 75.00-125.00	- -	IRON MAGNESIUM	No Qual, >4x
SL-138-SA5DN-SS-0.0-0.5MS **SL-138-SA5DN-SS-0.0-0.5MSD** (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	PHOSPHORUS	62	70	75.00-125.00	-	PHOSPHORUS	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-138-SA5DN-SS-0.0-0.5MS (SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5)	FLUORIDE	69	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-141-SA5DN-SS-0.0-0.5MS (DUP-12-SA5DN-QC-060211 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	FLUORIDE	76	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-138-SA5DN-SS-0.0-0.5DUP (SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5)	FLUORIDE	21	20.00	No Qual, OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-138-SA5DN-SS-0.0-0.5DUP (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	ANTIMONY	52	20.00	J(all detects) UJ(all non-detects)
	ARSENIC	56	20.00	
	BARIUM	42	20.00	
	BERYLLIUM	40	20.00	
	CADMIUM	62	20.00	
	CHROMIUM	42	20.00	
	COBALT	50	20.00	
	COPPER	34	20.00	
	LEAD	41	20.00	
	MOLYBDENUM	0.3779	0.202	
	NICKEL	43	20.00	
	THALLIUM	40	20.00	
	VANADIUM	36	20.00	
	ZINC	39	20.00	Sb, Cd, Tl, No Qual, OK by Difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-138-SA5DN-SS-0.0-0.5DUP (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	HEXAVALENT CHROMIUM	57	20.00	No Qual, OK by Difference

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-141-SA5DN-SS-0.0-0.5DUP (DUP-12-SA5DN-QC-060211 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual, OK by Difference
	Nitrate-NO3	38	20.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11570AQ242021A P11570AY242034A (EB12-SA5DN-SS-060211)	4,4'-DDE ENDOSULFAN I	142 130	142 130	66.00-130.00 68.00-128.00	- -	4,4'-DDE ENDOSULFAN I	J (all detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11582AQ242115A P11582AY242158A (EB12-SA5DN-SS-060211)	3-NITROTOLUENE	110	110	69.00-107.00	-	3-NITROTOLUENE	J(all detects)

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11601AQ321314A (EB12-SA5DN-SS-060211)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	135 130 130	- - -	78.00-126.00 80.00-124.00 80.00-120.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J(all detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WELCSY260343 (EB12-SA5DN-SS-060211)	Di-n-octylphthalate	-	148	57.00-145.00	43 (30.00)	Di-n-octylphthalate	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11606AQ240458A (DUP-12-SA5DN-QC-060211 SL-131-SA5DN-SS-0.0-0.5 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5 SL-142-SA5DN-SS-0.0-0.5 SL-143-SA5DN-SS-0.0-0.5 SL-144-SA5DN-SS-0.0-0.5 SL-145-SA5DN-SS-0.0-0.5 SL-149-SA5DN-SS-0.0-0.5 SL-150-SA5DN-SS-0.0-0.5 SL-151-SA5DN-SS-0.0-0.5)	DINOSEB	6	-	10.00-36.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11678AQ240711A (DUP-12-SA5DN-QC-060211 SL-132-SA5DN-SS-0.0-0.5 SL-133-SA5DN-SS-0.0-0.5 SL-134-SA5DN-SS-0.0-0.5 SL-135-SA5DN-SS-0.0-0.5 SL-136-SA5DN-SS-0.0-0.5 SL-137-SA5DN-SS-0.0-0.5 SL-138-SA5DN-SS-0.0-0.5 SL-139-SA5DN-SS-0.0-0.5 SL-140-SA5DN-SS-0.0-0.5 SL-141-SA5DN-SS-0.0-0.5)	2,4,6-TRINITROTOLUENE 2,6-DINITROTOLUENE 2-AMINO-4,6-DINITROTOLUENE 4-AMINO-2,6-DINITROTOLUENE NITROBENZENE PETN	128 123 125 122 127 126	- - - - - -	80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00	- - - - - -	2,4,6-TRINITROTOLUENE 2,6-DINITROTOLUENE 2-AMINO-4,6-DINITROTOLUEN 4-AMINO-2,6-DINITROTOLUEN NITROBENZENE PETN	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE171

Laboratory: LL

EDD Filename: DE171_v2

eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9LELCSQ261214	3,3'-DICHLOROBENZIDINE	130	-	24.00-101.00	-	3,3'-DICHLOROBENZIDINE	
(DUP-12-SA5DN-QC-060211	4-CHLOROANILINE	142	-	10.00-110.00	-	4-CHLOROANILINE	
SL-131-SA5DN-SS-0.0-0.5	ANILINE	115	-	34.00-94.00	-	ANILINE	
SL-132-SA5DN-SS-0.0-0.5							
SL-133-SA5DN-SS-0.0-0.5							
SL-134-SA5DN-SS-0.0-0.5							
SL-135-SA5DN-SS-0.0-0.5							
SL-136-SA5DN-SS-0.0-0.5							
SL-137-SA5DN-SS-0.0-0.5							
SL-138-SA5DN-SS-0.0-0.5							J(all detects)
SL-139-SA5DN-SS-0.0-0.5							
SL-140-SA5DN-SS-0.0-0.5							
SL-141-SA5DN-SS-0.0-0.5							
SL-142-SA5DN-SS-0.0-0.5							
SL-143-SA5DN-SS-0.0-0.5							
SL-144-SA5DN-SS-0.0-0.5							
SL-145-SA5DN-SS-0.0-0.5							
SL-149-SA5DN-SS-0.0-0.5							
SL-150-SA5DN-SS-0.0-0.5							
SL-151-SA5DN-SS-0.0-0.5)							

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16126AQ220904A	ANTIMONY	158	-	80.00-120.00	-	ANTIMONY	
(DUP-12-SA5DN-QC-060211							
SL-131-SA5DN-SS-0.0-0.5							
SL-132-SA5DN-SS-0.0-0.5							
SL-133-SA5DN-SS-0.0-0.5							
SL-134-SA5DN-SS-0.0-0.5							
SL-135-SA5DN-SS-0.0-0.5							
SL-136-SA5DN-SS-0.0-0.5							
SL-137-SA5DN-SS-0.0-0.5							
SL-138-SA5DN-SS-0.0-0.5							No Qual, SRM within QC Limits
SL-139-SA5DN-SS-0.0-0.5							
SL-140-SA5DN-SS-0.0-0.5							
SL-141-SA5DN-SS-0.0-0.5							
SL-142-SA5DN-SS-0.0-0.5							
SL-143-SA5DN-SS-0.0-0.5							
SL-144-SA5DN-SS-0.0-0.5							
SL-145-SA5DN-SS-0.0-0.5							
SL-149-SA5DN-SS-0.0-0.5							
SL-150-SA5DN-SS-0.0-0.5							
SL-151-SA5DN-SS-0.0-0.5)							

Surrogate Outlier Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-136-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	42	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-137-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	47	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-132-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	147	45.00-120.00	All Target Analytes	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
MOISTURE	2.7	2.7	0		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
FLUORIDE	2.2	2.2	0	50.00	No Qualifiers Applied
Nitrate-NO3	2.4	2.5	4	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
ALUMINUM	16800	16200	4	50.00	No Qualifiers Applied
CALCIUM	3740	3640	3	50.00	
IRON	24100	22500	7	50.00	
LITHIUM	32.6	30.9	5	50.00	
MAGNESIUM	5570	5260	6	50.00	
MANGANESE	344	314	9	50.00	
PHOSPHORUS	499	485	3	50.00	
POTASSIUM	3180	2800	13	50.00	
SODIUM	114	110	4	50.00	
STRONTIUM	18.9	19.6	4	50.00	
TIN	2.94	2.71	8	50.00	
TITANIUM	1480	1390	6	50.00	
Zirconium	5.95	5.18	14	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
ANTIMONY	0.237	0.231	3	50.00	No Qualifiers Applied
ARSENIC	33.9	32.0	6	50.00	
BARIUM	153	140	9	50.00	
BERYLLIUM	0.923	0.744	21	50.00	
CADMIUM	0.383	0.297	25	50.00	
CHROMIUM	28.7	27.6	4	50.00	
COBALT	11.4	9.31	20	50.00	
COPPER	17.0	14.7	15	50.00	
LEAD	10.3	9.65	7	50.00	
MOLYBDENUM	0.843	0.740	13	50.00	
NICKEL	26.1	22.5	15	50.00	
SELENIUM	0.156	0.176	12	50.00	
SILVER	0.0512	0.0402	24	50.00	
THALLIUM	0.388	0.391	1	50.00	
VANADIUM	51.3	47.5	8	50.00	
ZINC	95.2	83.7	13	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
HEXAVALENT CHROMIUM	0.39	0.58	39	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
MERCURY	0.0282	0.0088	105	50.00	J(all detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
EFH (C21-C30)	13	9.5	31	50.00	No Qualifiers Applied
EFH (C30-C40)	49	53	8	50.00	

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
4,4'-DDE	0.35 U	2.5	200	50.00	
4,4'-DDT	0.35 U	5.8	200	50.00	
Chlordane	3.5 U	4.3	200	50.00	J(all detects)
DIELDRIN	0.35 U	0.47	200	50.00	UJ(all non-detects)
ENDRIN ALDEHYDE	0.35 U	0.17	200	50.00	
MIREX	0.35 U	0.16	200	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
AROCLOR 1260	2.1	1.7 U	200	50.00	J(all detects)
Aroclor 5460	5.8	3.4 U	200	50.00	UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
MCPA	290	260 U	200	50.00	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: PrepDE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
BENZO(A)ANTHRACENE	1.7 U	0.96	200	50.00	
BENZO(A)PYRENE	1.7 U	2.2	200	50.00	
BENZO(B)FLUORANTHENE	1.7 U	4.4	200	50.00	
BENZO(G,H,I)PERYLENE	1.7 U	1.5	200	50.00	
BENZO(K)FLUORANTHENE	1.7 U	6.2	200	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	18	42	80	50.00	J(all detects) UJ(all non-detects)
CHRYSENE	1.7 U	5.8	200	50.00	
DIBENZO(A,H)ANTHRACENE	1.7 U	1.2	200	50.00	
FLUORANTHENE	1.7 U	2.9	200	50.00	
INDENO(1,2,3-CD)PYRENE	1.7 U	1.1	200	50.00	
PHENANTHRENE	1.7 U	1.4	200	50.00	
PYRENE	1.7 U	2.9	200	50.00	

Method: 8315A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
FORMALDEHYDE	2100	1700	21	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA5DN-SS-0.0-0.5	DUP-12-SA5DN-QC-060211			
PH	7.59	7.53	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB12-SA5DN-SS-060211	LEAD	J	0.000074	0.0010	PQL	mg/L	J (all detects)

Method: 7470A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB12-SA5DN-SS-060211	MERCURY	J	0.000093	0.00020	PQL	mg/L	J (all detects)

Method: 8081A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB12-SA5DN-SS-060211	HEPTACHLOR	J	0.0099	0.010	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB12-SA5DN-SS-060211	1-METHYLNAPHTHALENE	J	0.029	0.052	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.029	0.052	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.22	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.082	1.0	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA5DN-SS-0.0-0.5	Nitrate-NO3	J	0.95	1.5	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-12-SA5DN-QC-060211	TIN	J	2.71	10.2	PQL	mg/Kg	J (all detects)
SL-131-SA5DN-SS-0.0-0.5	SODIUM	J	96.6	103	PQL	mg/Kg	J (all detects)
	TIN	J	2.70	10.3	PQL	mg/Kg	
	Zirconium	J	4.57	5.15	PQL	mg/Kg	
SL-132-SA5DN-SS-0.0-0.5	SODIUM	J	84.8	102	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	10.2	PQL	mg/Kg	
	Zirconium	J	3.64	5.11	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA5DN-SS-0.0-0.5	SODIUM TIN Zirconium	J J J	86.4 2.59 4.35	103 10.3 5.14	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-134-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.70 4.88	10.1 5.03	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-135-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	3.01 5.01	10.1 5.06	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-136-SA5DN-SS-0.0-0.5	TIN	J	2.65	10.1	PQL	mg/Kg	J (all detects)
SL-137-SA5DN-SS-0.0-0.5	TIN	J	2.73	10.0	PQL	mg/Kg	J (all detects)
SL-138-SA5DN-SS-0.0-0.5	TIN	J	2.94	9.98	PQL	mg/Kg	J (all detects)
SL-139-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.56 4.47	9.92 4.96	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-140-SA5DN-SS-0.0-0.5	SODIUM Zirconium	J J	91.7 4.84	102 5.10	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-141-SA5DN-SS-0.0-0.5	TIN Zirconium	J J	2.98 4.86	10.6 5.29	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-142-SA5DN-SS-0.0-0.5	SODIUM TIN Zirconium	J J J	75.9 2.67 3.68	100 10.0 5.00	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-143-SA5DN-SS-0.0-0.5	TIN	J	2.90	10.5	PQL	mg/Kg	J (all detects)
SL-144-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	88.5 2.72	104 10.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-145-SA5DN-SS-0.0-0.5	SODIUM TIN Zirconium	J J J	81.0 2.57 4.16	103 10.3 5.14	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-149-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	75.9 2.96	107 10.7	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-150-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	86.5 3.18	106 10.6	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-151-SA5DN-SS-0.0-0.5	TIN	J	3.31	10.2	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-12-SA5DN-QC-060211	SELENIUM SILVER	J J	0.176 0.0402	0.395 0.0988	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-131-SA5DN-SS-0.0-0.5	SELENIUM	J	0.106	0.412	PQL	mg/Kg	J (all detects)
SL-132-SA5DN-SS-0.0-0.5	SELENIUM	J	0.157	0.405	PQL	mg/Kg	J (all detects)
SL-133-SA5DN-SS-0.0-0.5	SELENIUM	J	0.128	0.411	PQL	mg/Kg	J (all detects)
SL-134-SA5DN-SS-0.0-0.5	SELENIUM	J	0.187	0.406	PQL	mg/Kg	J (all detects)
SL-135-SA5DN-SS-0.0-0.5	SELENIUM	J	0.144	0.401	PQL	mg/Kg	J (all detects)
SL-136-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.237 0.0894	0.404 0.101	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-137-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.134 0.0955	0.394 0.0984	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-138-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.156 0.0512	0.403 0.101	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-139-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.166 0.0542	0.405 0.101	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-140-SA5DN-SS-0.0-0.5	SELENIUM	J	0.136	0.404	PQL	mg/Kg	J (all detects)
SL-141-SA5DN-SS-0.0-0.5	SELENIUM	J	0.271	0.419	PQL	mg/Kg	J (all detects)
SL-142-SA5DN-SS-0.0-0.5	SELENIUM	J	0.167	0.416	PQL	mg/Kg	J (all detects)
SL-143-SA5DN-SS-0.0-0.5	SELENIUM	J	0.172	0.416	PQL	mg/Kg	J (all detects)
SL-144-SA5DN-SS-0.0-0.5	SELENIUM	J	0.205	0.406	PQL	mg/Kg	J (all detects)
SL-145-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.165 0.0583	0.403 0.101	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-149-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.222 0.0431	0.431 0.108	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-150-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.281 0.0762	0.424 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-151-SA5DN-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.155 0.233 0.0497	0.204 0.407 0.102	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-12-SA5DN-QC-060211	HEXAVALENT CHROMIUM	J	0.58	1.0	PQL	mg/Kg	J (all detects)
SL-131-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.71	1.0	PQL	mg/Kg	J (all detects)
SL-133-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.37	1.0	PQL	mg/Kg	J (all detects)
SL-134-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.42	1.0	PQL	mg/Kg	J (all detects)
SL-136-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.80	1.0	PQL	mg/Kg	J (all detects)
SL-137-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.53	1.0	PQL	mg/Kg	J (all detects)
SL-138-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.0	PQL	mg/Kg	J (all detects)
SL-139-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.81	1.0	PQL	mg/Kg	J (all detects)
SL-140-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.0	PQL	mg/Kg	J (all detects)
SL-141-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.72	1.1	PQL	mg/Kg	J (all detects)
SL-142-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.51	1.0	PQL	mg/Kg	J (all detects)
SL-143-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)
SL-144-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.0	PQL	mg/Kg	J (all detects)
SL-145-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.94	1.0	PQL	mg/Kg	J (all detects)
SL-149-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-150-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.37	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-151-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.56	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-12-SA5DN-QC-060211	MERCURY	J	0.0088	0.0994	PQL	mg/Kg	J (all detects)
SL-132-SA5DN-SS-0.0-0.5	MERCURY	J	0.0366	0.0999	PQL	mg/Kg	J (all detects)
SL-133-SA5DN-SS-0.0-0.5	MERCURY	J	0.0645	0.100	PQL	mg/Kg	J (all detects)
SL-136-SA5DN-SS-0.0-0.5	MERCURY	J	0.0358	0.101	PQL	mg/Kg	J (all detects)
SL-138-SA5DN-SS-0.0-0.5	MERCURY	J	0.0282	0.0985	PQL	mg/Kg	J (all detects)
SL-139-SA5DN-SS-0.0-0.5	MERCURY	J	0.0057	0.100	PQL	mg/Kg	J (all detects)
SL-140-SA5DN-SS-0.0-0.5	MERCURY	J	0.0064	0.0992	PQL	mg/Kg	J (all detects)
SL-142-SA5DN-SS-0.0-0.5	MERCURY	J	0.0148	0.103	PQL	mg/Kg	J (all detects)
SL-143-SA5DN-SS-0.0-0.5	MERCURY	J	0.0822	0.103	PQL	mg/Kg	J (all detects)
SL-144-SA5DN-SS-0.0-0.5	MERCURY	J	0.0034	0.0984	PQL	mg/Kg	J (all detects)
SL-150-SA5DN-SS-0.0-0.5	MERCURY	J	0.0050	0.103	PQL	mg/Kg	J (all detects)
SL-151-SA5DN-SS-0.0-0.5	MERCURY	J	0.0051	0.101	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-140-SA5DN-SS-0.0-0.5	Isopropanol	J	150	510	PQL	ug/Kg	J (all detects)
	METHANOL	J	130	510	PQL	ug/Kg	

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	6.0	6.1	PQL	mg/Kg	J (all detects)
SL-134-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	1.4	2.5	PQL	mg/Kg	J (all detects)
SL-141-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	7.0	13	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-12-SA5DN-QC-060211	ENDRIN ALDEHYDE	J	0.17	0.35	PQL	ug/Kg	J (all detects)
	MIREX	J	0.16	0.35	PQL	ug/Kg	
SL-131-SA5DN-SS-0.0-0.5	Chlordane	J	2.5	3.5	PQL	ug/Kg	J (all detects)
SL-132-SA5DN-SS-0.0-0.5	Chlordane	J	1.8	3.5	PQL	ug/Kg	J (all detects)
SL-133-SA5DN-SS-0.0-0.5	Chlordane	J	2.4	3.5	PQL	ug/Kg	J (all detects)
	gamma-BHC (Lindane)	J	0.089	0.17	PQL	ug/Kg	
SL-134-SA5DN-SS-0.0-0.5	4,4'-DDE	J	0.14	0.35	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.24	0.35	PQL	ug/Kg	
SL-136-SA5DN-SS-0.0-0.5	Chlordane	J	1.4	3.5	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.26	0.35	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.063	0.17	PQL	ug/Kg	
SL-137-SA5DN-SS-0.0-0.5	Chlordane	J	3.0	3.5	PQL	ug/Kg	J (all detects)
	HEPTACHLOR EPOXIDE	J	0.035	0.17	PQL	ug/Kg	
	MIREX	J	0.14	0.35	PQL	ug/Kg	
SL-140-SA5DN-SS-0.0-0.5	Chlordane	J	1.5	3.5	PQL	ug/Kg	J (all detects)
SL-141-SA5DN-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.097	0.18	PQL	ug/Kg	J (all detects)
SL-144-SA5DN-SS-0.0-0.5	Chlordane	J	3.1	3.5	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.16	0.35	PQL	ug/Kg	
	MIREX	J	0.27	0.35	PQL	ug/Kg	
SL-145-SA5DN-SS-0.0-0.5	Chlordane	J	1.9	3.5	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.10	0.35	PQL	ug/Kg	
	ENDOSULFAN II	J	0.074	0.35	PQL	ug/Kg	
	MIREX	J	0.15	0.35	PQL	ug/Kg	
SL-149-SA5DN-SS-0.0-0.5	4,4'-DDE	J	0.12	0.37	PQL	ug/Kg	J (all detects)
SL-150-SA5DN-SS-0.0-0.5	Chlordane	J	2.1	3.6	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.057	0.18	PQL	ug/Kg	
	ENDOSULFAN II	J	0.16	0.36	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.20	0.36	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.13	0.18	PQL	ug/Kg	
	MIREX	J	0.15	0.36	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-131-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	5.0	8.8	PQL	ug/Kg	J (all detects)
SL-133-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.3	3.4	PQL	ug/Kg	
SL-135-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.2	1.7	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	3.2	3.4	PQL	ug/Kg	
SL-138-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	2.1	8.7	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	5.8	17	PQL	ug/Kg	
SL-140-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.6	1.7	PQL	ug/Kg	J (all detects)
SL-141-SA5DN-SS-0.0-0.5	Aroclor 5460	J	30	35	PQL	ug/Kg	J (all detects)
SL-142-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	6.2	8.8	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	7.4	17	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE171 **Laboratory:** LL

EDD Filename: DE171_v2 **eQAPP Name:** CDM_SSFL_110509

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-149-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	3.4	3.6	PQL	ug/Kg	

Method: 8151A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5DN-SS-0.0-0.5	DICHLOROPROP	J	1.0	1.7	PQL	ug/Kg	J (all detects)
	MCPP	J	130	250	PQL	ug/Kg	
SL-142-SA5DN-SS-0.0-0.5	DICHLOROPROP	J	0.87	1.8	PQL	ug/Kg	J (all detects)
SL-145-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.080	0.17	PQL	ug/Kg	J (all detects)
SL-150-SA5DN-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.12	0.18	PQL	ug/Kg	J (all detects)

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	340	PQL	ug/Kg	J (all detects)
SL-133-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	340	PQL	ug/Kg	J (all detects)
SL-141-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	25	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	41	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	81	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	170	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	24	180	PQL	ug/Kg	
	CHRYSENE	J	35	180	PQL	ug/Kg	
	FLUORANTHENE	J	43	180	PQL	ug/Kg	
	PHENANTHRENE	J	48	180	PQL	ug/Kg	
	PYRENE	J	40	180	PQL	ug/Kg	
SL-145-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	93	340	PQL	ug/Kg	J (all detects)
SL-149-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	350	PQL	ug/Kg	J (all detects)
SL-150-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	59	360	PQL	ug/Kg	J (all detects)
SL-151-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	340	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-12-SA5DN-QC-060211	BENZO(A)ANTHRACENE	J	0.96	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.5	1.7	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE171 **Laboratory: LL**

EDD Filename: DE171_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-131-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.0	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.2	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.35	1.7	PQL	ug/Kg	
	ANTHRACENE	J	1.5	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.7	PQL	ug/Kg	
SL-132-SA5DN-SS-0.0-0.5	ANTHRACENE	J	1.6	1.7	PQL	ug/Kg	J (all detects)
	FLUORENE	J	0.83	1.7	PQL	ug/Kg	
SL-133-SA5DN-SS-0.0-0.5	ACENAPHTHENE	J	0.74	1.7	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.75	1.7	PQL	ug/Kg	
SL-134-SA5DN-SS-0.0-0.5	ANTHRACENE	J	0.98	1.7	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	9.8	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.7	PQL	ug/Kg	
SL-135-SA5DN-SS-0.0-0.5	ANTHRACENE	J	0.46	1.7	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.82	1.7	PQL	ug/Kg	
SL-136-SA5DN-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.6	1.7	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.76	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.5	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.7	PQL	ug/Kg	
SL-137-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.75	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	18	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.98	1.7	PQL	ug/Kg	
	PYRENE	J	1.3	1.7	PQL	ug/Kg	
SL-138-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	19	PQL	ug/Kg	J (all detects)
SL-140-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.70	1.7	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.0	1.7	PQL	ug/Kg	
SL-141-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.50	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.3	19	PQL	ug/Kg	
	Di-n-butylphthalate	J	16	19	PQL	ug/Kg	
	FLUORENE	J	0.96	1.8	PQL	ug/Kg	
SL-142-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.73	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.97	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.35	1.7	PQL	ug/Kg	
	ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	11	19	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	
SL-143-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.3	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.48	1.7	PQL	ug/Kg	
	Di-n-octylphthalate	J	13	19	PQL	ug/Kg	
SL-144-SA5DN-SS-0.0-0.5	ANTHRACENE	J	0.37	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.71	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE171

Laboratory: LL

EDD Filename: DE171_v2

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-145-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	4.4	8.6	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	8.0	8.6	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	4.2	8.6	PQL	ug/Kg	
	FLUORANTHENE	J	7.5	8.6	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	3.6	8.6	PQL	ug/Kg	
	PHENANTHRENE	J	3.7	8.6	PQL	ug/Kg	
	PYRENE	J	6.5	8.6	PQL	ug/Kg	
SL-149-SA5DN-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.93	1.8	PQL	ug/Kg	
SL-150-SA5DN-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.1	19	PQL	ug/Kg	
	FLUORENE	J	1.5	1.8	PQL	ug/Kg	
SL-151-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.78	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.94	1.7	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-132-SA5DN-SS-0.0-0.5	FORMALDEHYDE	J	2800	3100	PQL	ug/Kg	J (all detects)
SL-134-SA5DN-SS-0.0-0.5	FORMALDEHYDE	J	1000	1600	PQL	ug/Kg	J (all detects)
SL-135-SA5DN-SS-0.0-0.5	FORMALDEHYDE	J	1200	1500	PQL	ug/Kg	J (all detects)
SL-136-SA5DN-SS-0.0-0.5	FORMALDEHYDE	J	1200	1500	PQL	ug/Kg	J (all detects)
SL-137-SA5DN-SS-0.0-0.5	FORMALDEHYDE	J	1200	1500	PQL	ug/Kg	J (all detects)
SL-139-SA5DN-SS-0.0-0.5	FORMALDEHYDE	J	1400	1500	PQL	ug/Kg	J (all detects)

LDC #: 26277C4
SDG #: DE171
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 9/30/11
Page: 1 of 1
Reviewer: MH
2nd Reviewer:

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No final
V.	ICP Interference Check Sample (ICS) Analysis	N	RPD RPD?
VI.	Matrix Spike Analysis	SW	Al, As, Ba, Ca, Fe, Mg, Mn, P, Ti, V, Zn 74% No for 2R
VII.	Duplicate Sample Analysis	SW*	Sb, Cd, Tl, <5X,
VIII.	Laboratory Control Samples (LCS)	A	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	As, Ba, Ca, Cu, Pb, Ni, Zn.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	TB=20

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

Validated Samples:

1	SL-131-SA5DN-SS-0.0-0.5	11	SL-141-SA5DN-SS-0.0-0.5	21	SL-138-SA5DN-SS-0.0-0.5MS	31	
2	SL-132-SA5DN-SS-0.0-0.5	12	SL-142-SA5DN-SS-0.0-0.5	22	SL-138-SA5DN-SS-0.0-0.5MSD	32	
3	SL-133-SA5DN-SS-0.0-0.5	13	SL-143-SA5DN-SS-0.0-0.5	23	SL-138-SA5DN-SS-0.0-0.5DUP	33	
4	SL-134-SA5DN-SS-0.0-0.5	14	SL-144-SA5DN-SS-0.0-0.5	24		34	
5	SL-135-SA5DN-SS-0.0-0.5	15	DUP-12-SA5DN-QC-060211	25		35	
6	SL-136-SA5DN-SS-0.0-0.5	16	SL-145-SA5DN-SS-0.0-0.5	26		36	
7	SL-137-SA5DN-SS-0.0-0.5	17	SL-149-SA5DN-SS-0.0-0.5	27		37	
8	SL-138-SA5DN-SS-0.0-0.5	18	SL-150-SA5DN-SS-0.0-0.5	28		38	
9	SL-139-SA5DN-SS-0.0-0.5	19	SL-151-SA5DN-SS-0.0-0.5	29		39	
10	SL-140-SA5DN-SS-0.0-0.5	20	EB12-SA5DN-SS-060211	30		40	

Notes: * Mo: difference - 0.3779 (≤ 0.202)

LDC #: 26277C4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B/6020/7000)
(Y) N N/A Were field blanks identified in this SDG?
(Y) N N/A Were target analytes detected in the field blanks?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 6/2/11 Soil factor applied 100X, Hg: 166.7
Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: All Soil

Analyte	Blank ID	Sample Identification											
	20	Action Level	2	3	6	8	9	10	12	14	15	18	19
Pb	0.074	0.037											
Hg	0.093	0.077516	0.037	0.065	0.036	0.028	0.0057	0.0064	0.015	0.0034	0.0088	0.0050	0.0051

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE171
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6305886BKG Matrix Spike Lab Sample ID: 6305887MS Matrix Spike Duplicate Lab Sample ID: 6305888MSD
% Solids for Sample: 97.3
Batch Id(s): P16108A, P16126A, P16111A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum		16779.5638		17162.1341		17827.2314		203.5147	197.6441	MG/KG	188		530		4			20	P
Antimony	121	0.2368		1.0163		1.0946		1.2091	1.1859	MG/KG	64	N	72	N	7		75 - 125	20	MS
Arsenic	75	33.8553		32.9484		37.4536		2.0152	1.9764	MG/KG	-45		182		13			20	MS
Barium	137	152.8727		138.5043		175.6661		10.0760	9.8822	MG/KG	-143		231		24	*		20	MS
Beryllium	9	0.9234		1.6708		1.8834		0.8061	0.7906	MG/KG	93		121		12		75 - 125	20	MS
Boron		0.3592	U	202.7505		197.0768		203.5147	197.6441	MG/KG	100		100		3		84 - 115	20	P
Cadmium	111	0.3829		1.5461		1.8061		1.0076	0.9882	MG/KG	115		144	N	16		75 - 125	20	MS
Calcium		3737.0289		4153.4664		4163.0722		407.0294	395.2882	MG/KG	102		108		0			20	P
Chromium	52	28.7165		36.3138		41.9598		10.0760	9.8822	MG/KG	75		134	N	14		75 - 125	20	MS
Cobalt	59	11.3516		69.7862		86.9832		50.3799	49.4110	MG/KG	116		153	N	22	*	75 - 125	20	MS
Copper	63	17.0344		26.7618		32.7496		10.0760	9.8822	MG/KG	97		159	N	20		75 - 125	20	MS
Iron		24057.6986		21789.2412		22537.6907		101.7573	98.8220	MG/KG	-2229		-1538		3			20	P
Lead	208	10.3379		12.6433		16.0863		3.0228	2.9647	MG/KG	76		194	N	24	*	75 - 125	20	MS
Lithium		32.6285		131.8785		130.6467		101.7573	98.8220	MG/KG	98		99		1		82 - 114	20	P
Magnesium		5573.9840		5379.6750		5523.1846		203.5147	197.6441	MG/KG	-95		-26		3			20	P
Manganese		344.3100		419.5893		383.9444		50.8787	49.4110	MG/KG	148		80		9			20	P
Mercury		0.0282	B	0.2097		0.1917		0.1651	0.1638	MG/KG	110		100		9		65 - 135	20	CV
Molybdenum	98	0.8428		13.9774		16.6456		10.0760	9.8822	MG/KG	130	N	160	N	17		75 - 125	20	MS
Nickel	60	26.0968		33.5328		41.4460		10.0760	9.8822	MG/KG	74	N	155	N	21	*	75 - 125	20	MS
Phosphorus		498.9463		561.8980		568.3493		101.7573	98.8220	MG/KG	62		70		1			20	P
Potassium		3181.7759		4167.2362		4304.5478		1017.5735	988.2204	MG/KG	97		114		3		75 - 125	20	P
Selenium	78	0.1556	B	2.6762		2.9409		2.0152	1.9764	MG/KG	125		141	N	9		75 - 125	20	MS
Silver	107	0.0512	B	13.1028		15.3451		10.0760	9.8822	MG/KG	130	N	155	N	16		75 - 125	20	MS
Sodium		114.2189		1096.2146		1081.1813		1017.5735	988.2204	MG/KG	97		98		1		75 - 125	20	P
Strontium		18.8936		115.5668		114.8322		101.7573	98.8220	MG/KG	95		97		1		75 - 115	20	P
Thallium	203	0.3881		0.8607		1.0631		0.4030	0.3953	MG/KG	117		171	N	21	*	75 - 125	20	MS
Tin		2.9446	B	341.1273		325.7105		407.0294	395.2882	MG/KG	83		82		5		80 - 110	20	P
Titanium		1484.9789		1645.8641		1672.6332		101.7573	98.8220	MG/KG	158		190		2			20	P
Vanadium	51	51.3270		55.2365		65.9341		10.0760	9.8822	MG/KG	39		148		18			20	MS
Zinc	66	95.1978		90.5024		112.1630		10.0760	9.8822	MG/KG	-47		172		21	*		20	MS
Zirconium		5.9460		108.7664		106.0963		101.7573	98.8220	MG/KG	101		101		2		75 - 125	20	P

DE171,6144

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE171
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6305886BKG
% Solids for Duplicate: 97.4
Batch ID(s): P16108A, P16126A, P16111A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6305889DUP
% Solids for Sample: 97.3

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			16779.5638		15878.0424		6		P
Antimony	121	0.2	0.2368		0.1395	B	52		MS
Arsenic	75		33.8553		18.9912		56	*	MS
Barium	137		152.8727		99.4297		42	*	MS
Beryllium	9		0.9234		0.6171		40	*	MS
Boron			0.3592	U	0.3627	U			P
Cadmium	111	0.1	0.3829		0.2017		62	*	MS
Calcium			3737.0289		3535.9057		6		P
Chromium	52		28.7165		18.8441		42	*	MS
Cobalt	59		11.3516		6.8194		50	*	MS
Copper	63		17.0344		12.0650		34	*	MS
Iron			24057.6986		21835.3354		10		P
Lead	208		10.3379		6.8315		41	*	MS
Lithium			32.6285		30.2148		8		P
Magnesium			5573.9840		5092.5105		9		P
Manganese			344.3100		326.8253		5		P
Mercury			0.0282	B	0.0299	B	6		CV
Molybdenum	98	0.1	0.8428		0.4649		~~58~~	*	MS
Nickel	60		26.0968		16.7765		43	*	MS
Phosphorus			498.9463		463.4978		7		P
Potassium			3181.7759		2913.3839		9		P
Selenium	78		0.1556	B	0.1301	B	18		MS
Silver	107		0.0512	B	0.0494	B	4		MS
Sodium		99.8	114.2189		103.2858		10		P
Strontium			18.8936		18.7322		1		P
Thallium	203	0.1	0.3881		0.2600		40	*	MS
Tin			2.9446	B	2.6651	B	10		P
Titanium			1484.9789		1395.2794		6		P
Vanadium	51		51.3270		35.7697		36	*	MS
Zinc	66		95.1978		64.2847		39	*	MS
Zirconium		5.0	5.9460		6.7983		13		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Mo: difference 0.3779 (≤ 0.502) mg/kg

DE171 6146

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE171
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6305886BKG Serial Dilution Lab Sample ID: 6305886L
Batch ID(s): P16108A, P16126A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		168163.1100		161696.6000		4		P
Antimony	121	1.1750		1.5000	U	100		MS
Arsenic	75	168.0000		133.4000		21	E	MS
Barium	137	758.6000		636.5000		16	E	MS
Beryllium	9	4.5820		4.3775		4		MS
Boron		3.6000	U	18.0000	U			P
Cadmium	111	1.9000		1.4655	B	23		MS
Calcium		37452.1300		38225.0500		2		P
Chromium	52	142.5000		131.7000		8		MS
Cobalt	59	56.3300		44.5600		21	E	MS
Copper	63	84.5300		68.3000		19	E	MS
Iron		241103.8500		240055.9000		0		P
Lead	208	51.3000		42.4550		17	E	MS
Lithium		327.0000		317.9500		3		P
Magnesium		55861.9100		55427.7000		1		P
Manganese		3450.6400		3597.1000		4		P
Molybdenum	98	4.1820		3.5955		14		MS
Nickel	60	129.5000		108.8000		16	E	MS
Phosphorus		5000.3900		5172.0000		3		P
Potassium		31887.4400		31763.5000		0		P
Selenium	78	0.7721	B	1.0000	U	100		MS
Silver	107	0.2540	B	0.3000	U	100		MS
Sodium		1144.6900		1108.8500	B	3		P
Strontium		189.3500		193.1500		2		P
Thallium	203	1.9260		2.0555	B	7		MS
Tin		29.5100	B	50.0000	U	100		P
Titanium		14882.3100		15413.6000		4		P
Vanadium	51	254.7000		239.7500		6		MS
Zinc	66	472.4000		374.5000		21	E	MS
Zirconium		59.5900		79.9000	B	34		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE171 6148

SAMPLE DELIVERY GROUP

DE172

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3050B	6010B	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3050B	6020	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3060A	7199	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3546	1625C	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3550B	8015B	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3550B	8015M	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3550B	8082	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3550B	8270C	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	3550B	8270C SIM	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	5035	8015M	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	5035	8260B	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	5035	8260B SIM	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	8330	8330A	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	METHOD	300.0	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	METHOD	314.0	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	METHOD	7471A	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	METHOD	8015B	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	METHOD	8015M	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	METHOD	8315A	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5	6304862	N	METHOD	9012B	III
01-Jun-2011	SL-018-SA5DN-SB-7.5-8.5MS	P304862R261201	MS	3550B	8270C SIM	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3050B	6010B	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3050B	6020	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3060A	7199	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3546	1625C	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3550B	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3550B	8015M	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3550B	8082	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3550B	8270C	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	3550B	8270C SIM	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	5035	8015M	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	5035	8260B	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	5035	8260B SIM	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	8330	8330A	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	METHOD	300.0	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	METHOD	314.0	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	METHOD	7471A	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	METHOD	8015B	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	METHOD	8015M	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	METHOD	8315A	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0	6305964	N	METHOD	9012B	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0MS	P305964R261118	MS	3546	1625C	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0MS	P305964R261520	MS	3550B	8270C SIM	III
02-Jun-2011	SL-016-SA5DN-SB-4.0-5.0MS	P305964R320711A	MS	3550B	8015B	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3050B	6010B	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3050B	6020	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3060A	7199	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3546	1625C	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3550B	8015B	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3550B	8015M	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3550B	8082	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3550B	8270C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	3550B	8270C SIM	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	5035	8015M	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	5035	8260B	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	5035	8260B SIM	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	8330	8330A	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	METHOD	300.0	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	METHOD	314.0	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	METHOD	7471A	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	METHOD	8015B	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	METHOD	8015M	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	METHOD	8315A	III
02-Jun-2011	SL-016-SA5DN-SB-12.0-13.0	6305965	N	METHOD	9012B	III
02-Jun-2011	TB-060211	6305968	TB	5030B	8015M	III
02-Jun-2011	TB-060211	6305968	TB	5030B	8260B	III
02-Jun-2011	TB-060211	6305968	TB	5030B	8260B SIM	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3050B	6010B	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3050B	6020	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3060A	7199	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3546	1625C	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3550B	8015B	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3550B	8015M	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3550B	8082	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3550B	8270C	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	3550B	8270C SIM	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	5035	8015M	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	5035	8260B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	5035	8260B SIM	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	8330	8330A	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	METHOD	300.0	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	METHOD	314.0	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	METHOD	7471A	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	METHOD	8015B	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	METHOD	8015M	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	METHOD	8315A	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0	6305966	N	METHOD	9012B	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0DU	P305966D271759B	DUP	METHOD	314.0	III
02-Jun-2011	SL-021-SA5DN-SB-4.0-5.0MS	P305966R271823B	MS	METHOD	314.0	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3050B	6010B	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3050B	6020	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3060A	7199	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3546	1625C	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3550B	8015B	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3550B	8015M	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3550B	8082	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3550B	8270C	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	3550B	8270C SIM	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	5035	8015M	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	5035	8260B	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	5035	8260B SIM	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	8330	8330A	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	METHOD	300.0	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	METHOD	314.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	METHOD	7471A	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	METHOD	8015B	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	METHOD	8015M	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	METHOD	8315A	III
02-Jun-2011	SL-021-SA5DN-SB-19.5-20.5	6305967	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory:** LL

EDD Filename: PrepDE172 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-016-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	10.2		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-018-SA5DN-SB-7.5-8.5 *Collected:* 6/1/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.2	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5DN-SB-19.5-20.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.9		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.3		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.12	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	0.997	J	0.941	MDL	5.60	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory:** LL

EDD Filename: PrepDE172 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-016-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.01	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.45	J	0.962	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5DN-SB-7.5-8.5 *Collected:* 6/1/2011 11:25:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19900		5.40	MDL	21.5	PQL	mg/Kg	J	L
TIN	2.80	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.28	J	0.902	MDL	5.37	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5DN-SB-19.5-20.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.82	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.35	J	0.908	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.95	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.49	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0551	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z
SILVER	0.0715	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-016-SA5DN-SB-4.0-5.0** ***Collected:*** **6/2/2011 10:04:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0961	J	0.0462	MDL	0.462	PQL	mg/Kg	J	Z

Sample ID: **SL-016-SA5DN-SB-4.0-5.0** ***Collected:*** **6/2/2011 10:04:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.225	J	0.0694	MDL	0.231	PQL	mg/Kg	J	Z
SILVER	0.0556	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: **SL-018-SA5DN-SB-7.5-8.5** ***Collected:*** **6/1/2011 11:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0881	J	0.0434	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: **SL-018-SA5DN-SB-7.5-8.5** ***Collected:*** **6/1/2011 11:25:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.245	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: **SL-021-SA5DN-SB-19.5-20.5** ***Collected:*** **6/2/2011 2:50:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0455	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: **SL-021-SA5DN-SB-19.5-20.5** ***Collected:*** **6/2/2011 2:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.171	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z
SILVER	0.0254	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: **SL-021-SA5DN-SB-4.0-5.0** ***Collected:*** **6/2/2011 2:40:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 Laboratory: LL

EDD Filename: PrepDE172 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0478	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

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

Sample ID: SL-016-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5DN-SB-7.5-8.5 *Collected:* 6/1/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

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

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0078	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Method Category: SVOA **Method:** 1625C **Matrix:** SO

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	36.9	J	18.9	MDL	37.7	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix:** SO

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E

Sample ID: SL-016-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 10:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1221	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1232	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1242	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1248	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
AROCLOR 1254	13		0.39	MDL	2.0	PQL	ug/Kg	J	S
AROCLOR 1260	2.3		0.46	MDL	2.0	PQL	ug/Kg	J	S
Aroclor 1262	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
Aroclor 1268	0.39	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	S
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	S, E
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E, S
Aroclor 5460	8.3		1.2	MDL	3.9	PQL	ug/Kg	J	S, E

Sample ID: SL-021-SA5DN-SB-19.5-20.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	E
Aroclor 5460	1.4	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z, E

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-016-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 10:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	20	MDL	390	PQL	ug/Kg	U	B
CARBAZOLE	26	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-021-SA5DN-SB-19.5-20.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	U	B

Method Category: SVOA

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

Sample ID: SL-021-SA5DN-SB-19.5-20.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	1.3	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.4	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-021-SA5DN-SB-19.5-20.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	670	U	670	MDL	1700	PQL	ug/Kg	UJ	S

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-018-SA5DN-SB-7.5-8.5 *Collected:* 6/1/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	78	J	44	MDL	130	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	460	J	110	MDL	570	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 10:04:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.8	U	1.8	MDL	4.1	PQL	mg/Kg	R	Q, Q
p-Terphenyl	1.8	U	1.8	MDL	4.1	PQL	mg/Kg	R	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 Laboratory: LL

EDD Filename: PrepDE172 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-021-SA5DN-SB-19.5-20.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	210	J	110	MDL	560	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-016-SA5DN-SB-12.0-13.0 *Collected:* 6/2/2011 10:19:00 *Analysis Type:* RES *Dilution:* 1.07

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.6	J	8.1	MDL	9.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.9	J	0.29	MDL	4.8	PQL	ug/Kg	U	B

Sample ID: SL-016-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 10:04:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.2		7.2	MDL	8.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.0	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-018-SA5DN-SB-7.5-8.5 *Collected:* 6/1/2011 11:25:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.9		7.2	MDL	8.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	4.1	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-021-SA5DN-SB-19.5-20.5 *Collected:* 6/2/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.2		7.0	MDL	8.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.2	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-021-SA5DN-SB-4.0-5.0 *Collected:* 6/2/2011 2:40:00 PM *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.2	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.1	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE172

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-016-SA5DN-SB-4.0-5.0MSD (SL-016-SA5DN-SB-4.0-5.0)	O-TERPHENYL	-	840	75.00-125.00	167 (20.00)	O-TERPHENYL	J (all detects)
SL-016-SA5DN-SB-4.0-5.0MS SL-016-SA5DN-SB-4.0-5.0MSD (SL-016-SA5DN-SB-4.0-5.0)	m-Terphenyl p-Terphenyl	68 -	0 0	75.00-125.00 75.00-125.00	200 (20.00) 200 (20.00)	m-Terphenyl p-Terphenyl	J(all detects) R(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-016-SA5DN-SB-4.0-5.0MS SL-016-SA5DN-SB-4.0-5.0MSD (SL-016-SA5DN-SB-4.0-5.0)	1-METHYLNAPHTHALENE	211	-	72.00-123.00	65 (30.00)	1-METHYLNAPHTHALENE	No Qual, Diluted Out
	2-METHYLNAPHTHALENE	156	-	64.00-103.00	48 (30.00)	2-METHYLNAPHTHALENE	
	ACENAPHTHENE	2674	173	63.00-105.00	172 (30.00)	ACENAPHTHENE	
	ACENAPHTHYLENE	165	-	67.00-114.00	51 (30.00)	ACENAPHTHYLENE	
	ANTHRACENE	4785	710	73.00-115.00	137 (30.00)	ANTHRACENE	
	BENZO(A)PYRENE	-	1914	45.00-138.00	84 (30.00)	BENZO(A)PYRENE	
	BENZO(B)FLUORANTHENE	356	2690	43.00-155.00	78 (30.00)	BENZO(B)FLUORANTHENE	
	BENZO(G,H,I)PERYLENE	-	324	33.00-141.00	41 (30.00)	BENZO(G,H,I)PERYLENE	
	DIBENZO(A,H)ANTHRACENE	415	249	22.00-133.00	35 (30.00)	DIBENZO(A,H)ANTHRACENE	
	FLUORANTHENE	9783	2435	26.00-166.00	94 (30.00)	FLUORANTHENE	
	FLUORENE	1459	147	66.00-122.00	161 (30.00)	FLUORENE	
	NAPHTHALENE	117	-	61.00-102.00	-	NAPHTHALENE	
	PHENANTHRENE	6286	1454	12.00-165.00	118 (30.00)	PHENANTHRENE	
SL-016-SA5DN-SB-4.0-5.0MS SL-016-SA5DN-SB-4.0-5.0MSD (SL-016-SA5DN-SB-4.0-5.0)	BENZO(A)ANTHRACENE	-909	1891	59.00-128.00	147 (30.00)	BENZO(A)ANTHRACENE	No Qual, Diluted Out
	BENZO(K)FLUORANTHENE	-317	1262	57.00-153.00	138 (30.00)	BENZO(K)FLUORANTHENE	
	BIS(2-ETHYLHEXYL)PHTHALAT	0	-	39.00-167.00	200 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	0	-	57.00-173.00	200 (30.00)	Butylbenzylphthalate	
	CHRYSENE	-1556	1596	48.00-134.00	192 (30.00)	CHRYSENE	
	Di-n-octylphthalate	0	-	40.00-192.00	200 (30.00)	Di-n-octylphthalate	
	PYRENE	-1758	942	15.00-153.00	167 (30.00)	PYRENE	
SL-016-SA5DN-SB-4.0-5.0MS SL-016-SA5DN-SB-4.0-5.0MSD (SL-016-SA5DN-SB-4.0-5.0)	INDENO(1,2,3-CD)PYRENE	9	465	21.00-143.00	74 (30.00)	INDENO(1,2,3-CD)PYRENE	No Qual, Diluted Out

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA5DN-SB-19.5-20.5MS (SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0)	FLUORIDE	59	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: DE172_v2. **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB16B261008	6/28/2011 10:08:00 AM	N-NITROSODIMETHYLAMINE	18.9 ng/Kg	SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-016-SA5DN-SB-12.0-13.0(RES)	N-NITROSODIMETHYLAMINE	36.9 ng/Kg	37.7U ng/Kg

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15808BB220530	6/8/2011 5:30:00 AM	PHOSPHORUS TIN	1.09 mg/Kg 1.28 mg/Kg	SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0
P16008CB221116	6/14/2011 11:16:00 AM	PHOSPHORUS TIN	1.82 mg/Kg 1.75 mg/Kg	SL-018-SA5DN-SB-7.5-8.5
P16008CB221207	6/15/2011 12:07:00 PM	BORON	0.406 mg/Kg	SL-018-SA5DN-SB-7.5-8.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-016-SA5DN-SB-12.0-13.0(RES)	TIN	3.12 mg/Kg	3.12U mg/Kg
SL-016-SA5DN-SB-4.0-5.0(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-018-SA5DN-SB-7.5-8.5(REA4)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-021-SA5DN-SB-19.5-20.5(RES)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-021-SA5DN-SB-4.0-5.0(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15826DB220423A	6/11/2011 4:23:00 AM	COPPER LEAD	0.152 mg/Kg 0.0660 mg/Kg	SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0
P16026CB220837A	6/11/2011 8:37:00 AM	LEAD VANADIUM	0.0160 mg/Kg 0.0337 mg/Kg	SL-018-SA5DN-SB-7.5-8.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: DE172_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB76B210344A	6/7/2011 3:44:00 AM	ACETONE METHYLENE CHLORIDE	8.4 ug/Kg 1.4 ug/Kg	SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-018-SA5DN-SB-7.5-8.5 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-016-SA5DN-SB-12.0-13.0(RES)	ACETONE	9.6 ug/Kg	9.6U ug/Kg
SL-016-SA5DN-SB-12.0-13.0(RES)	METHYLENE CHLORIDE	1.9 ug/Kg	4.8U ug/Kg
SL-016-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.2 ug/Kg	9.2U ug/Kg
SL-016-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.0 ug/Kg	4.3U ug/Kg
SL-018-SA5DN-SB-7.5-8.5(RES)	ACETONE	8.9 ug/Kg	8.9U ug/Kg
SL-018-SA5DN-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	4.1 ug/Kg	4.3U ug/Kg
SL-021-SA5DN-SB-19.5-20.5(RES)	ACETONE	9.2 ug/Kg	9.2U ug/Kg
SL-021-SA5DN-SB-19.5-20.5(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.2U ug/Kg
SL-021-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.5U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA16B260223	6/23/2011 2:23:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-016-SA5DN-SB-12.0-13.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	380U ug/Kg
SL-016-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	32 ug/Kg	390U ug/Kg
SL-021-SA5DN-SB-19.5-20.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	370U ug/Kg
SL-021-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	380U ug/Kg

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE172 Laboratory: LL

EDD Filename: DE172_v2. eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11611AQ241711A P11611AY241652A (SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0)	Aroclor 5442	148	-	36.00-106.00	38 (30.00)	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects) UJ (all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11678AQ240711A (SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0)	2,4,6-TRINITROTOLUENE 2,6-DINITROTOLUENE 2-AMINO-4,6-DINITROTOLUENE 4-AMINO-2,6-DINITROTOLUENE NITROBENZENE PETN	128 123 125 122 127 126	- - - - - -	80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00	- - - - - -	2,4,6-TRINITROTOLUENE 2,6-DINITROTOLUENE 2-AMINO-4,6-DINITROTOLUEN 4-AMINO-2,6-DINITROTOLUEN NITROBENZENE PETN	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15826DQ220426A (SL-016-SA5DN-SB-12.0-13.0 SL-016-SA5DN-SB-4.0-5.0 SL-021-SA5DN-SB-19.5-20.5 SL-021-SA5DN-SB-4.0-5.0)	ANTIMONY	132	-	80.00-120.00	-	ANTIMONY	No qual, SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8LELCSQ260926 (SL-018-SA5DN-SB-7.5-8.5)	1-METHYLNAPHTHALENE BENZO(A)ANTHRACENE BENZO(B)FLUORANTHENE Butylbenzylphthalate CHRYSENE Dimethylphthalate FLUORANTHENE FLUORENE PYRENE	122 130 150 145 130 122 127 121 125	- - - - - - - - -	72.00-120.00 74.00-120.00 63.00-143.00 65.00-131.00 73.00-114.00 79.00-121.00 64.00-120.00 71.00-120.00 56.00-121.00	- - - - - - - - -	1-METHYLNAPHTHALENE BENZO(A)ANTHRACENE BENZO(B)FLUORANTHENE Butylbenzylphthalate CHRYSENE Dimethylphthalate FLUORANTHENE FLUORENE PYRENE	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: DE172_v2. **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P9LELCSQ261214 (SL-018-SA5DN-SB-7.5-8.5)	3,3'-DICHLOROBENZIDINE	130	-	24.00-101.00	-	3,3'-DICHLOROBENZIDINE	J(all detects)
	4-CHLOROANILINE	142	-	10.00-110.00	-	4-CHLOROANILINE	
	ANILINE	115	-	34.00-94.00	-	ANILINE	

Method: **6010B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P16008CQ221119 (SL-018-SA5DN-SB-7.5-8.5)	ALUMINUM	79	-	80.00-120.00	-	ALUMINUM	No qual, SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: PrepDE172 **eQAPP Name: CDM_SSFL_110509**

Method: **8015B**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-016-SA5DN-SB -4.0-5.0	n-Triacontane-d62	153	50.00-150.00	All Target Analytes	J (all detects)

Method: **8015M**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-016-SA5DN-SB -4.0-5.0	O-TERPHENYL	663	47.00-145.00	All Target Analytes	No qual, Diluted out

Method: **8082**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-016-SA5DN-SB -4.0-5.0	TETRACHLORO-M-XYLENE	34	53.00-139.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-021-SA5DN-SB -19.5-20.5	DECACHLOROBIPHENYL	127	45.00-120.00	All Target Analytes	J(all detects)

Method: **8315A**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-021-SA5DN-SB -19.5-20.5	Butyraldehyde	62	64.00-126.00	All Target Analytes	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: DE172_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-12.0-13.0	N-NITROSODIMETHYLAMINE	J	36.9	37.7	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5DN-SB-7.5-8.5	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-021-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-12.0-13.0	TIN Zirconium	J J	3.12 0.997	11.2 5.60	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-016-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	3.01 3.45	11.4 5.72	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-018-SA5DN-SB-7.5-8.5	TIN Zirconium	J J	2.80 1.28	10.7 5.37	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-021-SA5DN-SB-19.5-20.5	TIN Zirconium	J J	2.82 2.35	10.8 5.41	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-021-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.95 3.49	11.2 5.58	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-12.0-13.0	ANTIMONY SELENIUM SILVER	J J J	0.149 0.0551 0.0715	0.220 0.439 0.110	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-016-SA5DN-SB-4.0-5.0	ANTIMONY SELENIUM SILVER	J J J	0.225 0.0961 0.0556	0.231 0.462 0.116	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-018-SA5DN-SB-7.5-8.5	CADMIUM SELENIUM	J J	0.0881 0.245	0.108 0.434	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-021-SA5DN-SB-19.5-20.5	ANTIMONY SELENIUM SILVER	J J J	0.171 0.0455 0.0254	0.214 0.428 0.107	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-021-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.112 0.0478	0.447 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: DE172_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.45	1.2	PQL	mg/Kg	J (all detects)
SL-018-SA5DN-SB-7.5-8.5	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)
SL-021-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.52	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-12.0-13.0	MERCURY	J	0.0078	0.108	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-12.0-13.0	METHANOL	J	460	570	PQL	ug/Kg	J (all detects)
SL-021-SA5DN-SB-19.5-20.5	METHANOL	J	210	560	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-12.0-13.0	AROCLOR 1260	J	1.3	1.9	PQL	ug/Kg	J (all detects)
SL-021-SA5DN-SB-4.0-5.0	Aroclor 5460	J	1.4	3.8	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-12.0-13.0	METHYLENE CHLORIDE	J	1.9	4.8	PQL	ug/Kg	J (all detects)
SL-016-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.0	4.3	PQL	ug/Kg	J (all detects)
SL-018-SA5DN-SB-7.5-8.5	METHYLENE CHLORIDE	J	4.1	4.3	PQL	ug/Kg	J (all detects)
SL-021-SA5DN-SB-19.5-20.5	METHYLENE CHLORIDE	J	2.2	4.2	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE172 **Laboratory: LL**

EDD Filename: DE172_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.2	4.5	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.1	4.5	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5DN-SB-12.0-13.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-016-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	390	PQL	ug/Kg	J (all detects)
	CARBAZOLE	J	26	200	PQL	ug/Kg	
SL-021-SA5DN-SB-19.5-20.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-021-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5DN-SB-19.5-20.5	DIBENZO(A,H)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
SL-021-SA5DN-SB-4.0-5.0	ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	

Method: 8330A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5DN-SB-7.5-8.5	1,3-DINITROBENZENE	J	78	130	PQL	ug/Kg	J (all detects)

LDC #: 26407K4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-21-11
SDG #: DE172 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OR
2nd Reviewer: MG

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	CS
VII.	Duplicate Sample Analysis	N	↓
VIII.	Laboratory Control Samples (LCS)	~~A~~ N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	N	Not performed
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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

Validated Samples:

1	SL-018-SA5DN-SB-7.5-8.5	11		21		31	
2	SL-016-SA5DN-SB-4.0-5.0	12		22		32	
3	SL-016-SA5DN-SB-12.0-13.0	13		23		33	
4	SL-021-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-021-SA5DN-SB-19.5-20.5	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

SAMPLE DELIVERY GROUP

DE173

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3050B	6010B	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3050B	6020	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3060A	7199	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3546	1625C	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3550B	8015B	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3550B	8015M	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3550B	8081A	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3550B	8082	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3550B	8151A	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3550B	8270C	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	3550B	8270C SIM	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	8330	8330A	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	METHOD	300.0	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	METHOD	314.0	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	METHOD	7471A	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	METHOD	8015B	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	METHOD	8015M	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	METHOD	8315A	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5	6306847	N	METHOD	9012B	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5DU	P306847D271809A	DUP	METHOD	9012B	IV
03-Jun-2011	SL-207-SA5DN-SS-0.0-0.5MS	P306847R271810A	MS	METHOD	9012B	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	3050B	6010B	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	3050B	6020	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	3060A	7199	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	3550B	8081A	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	3550B	8082	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	3550B	8151A	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	3550B	8270C	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	3550B	8270C SIM	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	METHOD	300.0	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	METHOD	314.0	IV
03-Jun-2011	SL-159-SA5DN-SS-0.0-0.5	6306843	N	METHOD	7471A	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	3050B	6010B	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	3050B	6020	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	3060A	7199	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	3550B	8081A	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	3550B	8082	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	3550B	8151A	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	3550B	8270C	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	3550B	8270C SIM	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	METHOD	300.0	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	METHOD	314.0	IV
03-Jun-2011	SL-156-SA5DN-SS-0.0-0.5	6306840	N	METHOD	7471A	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	3050B	6010B	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	3050B	6020	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	3060A	7199	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	3550B	8081A	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	3550B	8082	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	3550B	8151A	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	3550B	8270C	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	3550B	8270C SIM	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	METHOD	300.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	METHOD	314.0	IV
03-Jun-2011	SL-157-SA5DN-SS-0.0-0.5	6306841	N	METHOD	7471A	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	3050B	6010B	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	3050B	6020	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	3060A	7199	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	3550B	8081A	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	3550B	8082	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	3550B	8151A	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	3550B	8270C	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	3550B	8270C SIM	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	METHOD	300.0	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	METHOD	314.0	IV
03-Jun-2011	SL-158-SA5DN-SS-0.0-0.5	6306842	N	METHOD	7471A	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	3050B	6010B	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	3050B	6020	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	3060A	7199	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	3550B	8081A	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	3550B	8082	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	3550B	8151A	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	3550B	8270C	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	3550B	8270C SIM	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	METHOD	300.0	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	METHOD	314.0	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5	6306836	N	METHOD	7471A	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	3050B	6010B	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	3050B	6020	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	3060A	7199	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	3550B	8081A	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	3550B	8082	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	3550B	8151A	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	3550B	8270C	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	3550B	8270C SIM	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	METHOD	300.0	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	METHOD	314.0	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5MS	6306837	MS	METHOD	7471A	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5DU	6306839	DUP	3050B	6010B	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5DU	6306839	DUP	3050B	6020	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5DU	6306839	DUP	3060A	7199	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5DU	6306839	DUP	METHOD	300.0	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5DU	6306839	DUP	METHOD	314.0	IV
03-Jun-2011	SL-155-SA5DN-SS-0.0-0.5DU	6306839	DUP	METHOD	7471A	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	3050B	6010B	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	3050B	6020	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	3060A	7199	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	3550B	8081A	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	3550B	8082	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	3550B	8151A	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	3550B	8270C	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	3550B	8270C SIM	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	METHOD	300.0	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	METHOD	314.0	IV
03-Jun-2011	DUP-13-SA5DN-QC-060311	6306848	FD	METHOD	7471A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3050B	6010B	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3050B	6020	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3060A	7199	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3546	1625C	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3550B	8015B	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3550B	8015M	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3550B	8082	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3550B	8270C	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	3550B	8270C SIM	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	5035	8015M	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	5035	8260B	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	5035	8260B SIM	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	8330	8330A	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	METHOD	300.0	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	METHOD	314.0	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	METHOD	6850	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	METHOD	7471A	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	METHOD	8015B	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	METHOD	8015M	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	METHOD	8315A	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0	6306851	N	METHOD	9012B	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0MS	P306851R320924A	MS	3550B	8015M	IV
03-Jun-2011	SL-019-SA5DN-SB-4.0-5.0MS	P306851R322336A	MS	METHOD	8015B	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	3050B	6010B	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	3050B	6020	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	3060A	7199	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	3550B	8081A	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	3550B	8082	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	3550B	8151A	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	3550B	8270C	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	3550B	8270C SIM	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	METHOD	300.0	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	METHOD	314.0	IV
03-Jun-2011	SL-154-SA5DN-SS-0.0-0.5	6306835	N	METHOD	7471A	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	3050B	6010B	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	3050B	6020	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	3060A	7199	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	3550B	8081A	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	3550B	8082	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	3550B	8151A	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	3550B	8270C	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	3550B	8270C SIM	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	METHOD	300.0	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	METHOD	314.0	IV
03-Jun-2011	SL-152-SA5DN-SS-0.0-0.5	6306833	N	METHOD	7471A	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	3050B	6010B	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	3050B	6020	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	3060A	7199	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	3550B	8081A	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	3550B	8082	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	3550B	8151A	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	3550B	8270C	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	3550B	8270C SIM	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	METHOD	300.0	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	METHOD	314.0	IV
03-Jun-2011	SL-153-SA5DN-SS-0.0-0.5	6306834	N	METHOD	7471A	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	3005A	6010B	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	3020A	6020	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	3510C	8082	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	3510C	8270C	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	3510C	8270C SIM	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	Gen Prep	300.0	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	Gen Prep	314.0	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	Gen Prep	7199	IV
03-Jun-2011	EB14-SA5DN-SB-060311	6306849	EB	METHOD	7470A	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	3005A	6010B	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	3020A	6020	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	3510C	8081A	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	3510C	8082	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	3510C	8270C	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	3510C	8270C SIM	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	Gen Prep	300.0	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	Gen Prep	314.0	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	Gen Prep	7199	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	METHOD	7470A	IV
03-Jun-2011	EB13-SA5DN-SS-060311	6306850	EB	METHOD	8151A	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	3050B	6010B	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	3050B	6020	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	3060A	7199	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	3550B	8081A	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	3550B	8082	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	3550B	8151A	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	3550B	8270C	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	3550B	8270C SIM	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	METHOD	300.0	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	METHOD	314.0	IV
03-Jun-2011	SL-162-SA5DN-SS-0.0-0.5	6306845	N	METHOD	7471A	IV
03-Jun-2011	TB-060311	6306857	TB	5030B	8015M	IV
03-Jun-2011	TB-060311	6306857	TB	5030B	8260B	IV
03-Jun-2011	TB-060311	6306857	TB	5030B	8260B SIM	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3050B	6010B	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3050B	6020	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3060A	7199	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3546	1625C	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3550B	8015B	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3550B	8015M	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3550B	8082	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3550B	8270C	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	3550B	8270C SIM	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	5035	8015M	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	5035	8260B	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	5035	8260B SIM	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	8330	8330A	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	METHOD	300.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	METHOD	314.0	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	METHOD	7471A	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	METHOD	8015B	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	METHOD	8015M	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	METHOD	8315A	IV
03-Jun-2011	SL-019-SA5DN-SB-9.0-10.0	6306852	N	METHOD	9012B	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3050B	6010B	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3050B	6020	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3060A	7199	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3546	1625C	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3550B	8015B	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3550B	8015M	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3550B	8082	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3550B	8270C	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	3550B	8270C SIM	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	5035	8015M	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	5035	8260B	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	5035	8260B SIM	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	8330	8330A	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	METHOD	300.0	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	METHOD	314.0	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	METHOD	7471A	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	METHOD	8015B	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	METHOD	8015M	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	METHOD	8315A	IV
03-Jun-2011	SL-027-SA5DN-SB-4.0-5.0	6306853	N	METHOD	9012B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	3050B	6010B	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	3050B	6020	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	3060A	7199	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	3550B	8081A	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	3550B	8082	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	3550B	8151A	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	3550B	8270C	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	3550B	8270C SIM	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	METHOD	300.0	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	METHOD	314.0	IV
03-Jun-2011	SL-160-SA5DN-SS-0.0-0.5	6306844	N	METHOD	7471A	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3050B	6010B	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3050B	6020	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3060A	7199	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3546	1625C	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3550B	8015B	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3550B	8015M	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3550B	8082	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3550B	8270C	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	3550B	8270C SIM	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	5035	8015M	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	5035	8260B	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	5035	8260B SIM	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	8330	8330A	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	METHOD	300.0	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	METHOD	314.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	METHOD	7471A	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	METHOD	8015B	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	METHOD	8015M	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	METHOD	8315A	IV
03-Jun-2011	SL-027-SA5DN-SB-14.0-15.0	6306854	N	METHOD	9012B	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	3050B	6010B	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	3050B	6020	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	3060A	7199	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	3550B	8081A	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	3550B	8082	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	3550B	8151A	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	3550B	8270C	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	3550B	8270C SIM	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	METHOD	300.0	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	METHOD	314.0	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5	6306846	N	METHOD	7471A	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5DU	P306846D270302B	DUP	METHOD	300.0	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5DU	P306846D271907B	DUP	METHOD	314.0	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5MS	P306846R270316B	MS	METHOD	300.0	IV
03-Jun-2011	SL-166-SA5DN-SS-0.0-0.5MS	P306846R271930B	MS	METHOD	314.0	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	3050B	6010B	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	3050B	6020	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	3060A	7199	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	3550B	8082	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	3550B	8270C	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	3550B	8270C SIM	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	5035	8260B	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	5035	8260B SIM	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	METHOD	300.0	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	METHOD	314.0	IV
03-Jun-2011	SL-052-SA5DN-SB-4.0-5.0	6306855	N	METHOD	7471A	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	3050B	6010B	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	3050B	6020	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	3060A	7199	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	3550B	8082	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	3550B	8270C	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	3550B	8270C SIM	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	METHOD	300.0	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	METHOD	314.0	IV
03-Jun-2011	SL-052-SA5DN-SB-9.0-10.0	6306856	N	METHOD	7471A	IV

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE173 Laboratory: LL

EDD Filename: PrepDE173_v2 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.84	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-019-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.1		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.5		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.3		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-052-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 4:04:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	20.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.84	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-156-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:45:00 AM *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-157-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-158-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:25:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* RES *Dilution:* 1

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 Laboratory: LL

EDD Filename: PrepDE173_v2 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.83	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-162-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 2:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.8		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	92.0	J	37.6	MDL	101	PQL	mg/Kg	J	Z
TIN	3.19	J	1.01	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-019-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 11:16:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.37	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.22	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.33	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.29	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-052-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 4:04:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.13	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	5.50	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.27	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	10.4	J	2.03	MDL	28.1	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	4.34	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	14.0	J	1.89	MDL	26.3	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	87.4	J	39.4	MDL	106	PQL	mg/Kg	J	Z
TIN	3.34	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	94.4	J	40.2	MDL	108	PQL	mg/Kg	J	Z
TIN	3.45	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	90.7	J	38.6	MDL	104	PQL	mg/Kg	J	Z
TIN	3.35	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: SL-156-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:45:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	79.6	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	3.31	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-157-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	90.7	J	40.1	MDL	108	PQL	mg/Kg	J	Z
TIN	3.24	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-158-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	87.7	J	39.5	MDL	106	PQL	mg/Kg	J	Z
TIN	3.26	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	93.5	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	3.40	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.29	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

Sample ID: SL-162-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 2:25:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	98.6	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	3.70	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	87.7	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	3.40	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	94.7	J	39.3	MDL	105	PQL	mg/Kg	J	Z
TIN	3.47	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: AQ**

Sample ID: EB13-SA5DN-SS-060311 *Collected:* 6/3/2011 1:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000062	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: AQ**

Sample ID: EB14-SA5DN-SB-060311 *Collected:* 6/3/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000064	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.252		0.0760	MDL	0.206	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.29		0.0822	MDL	0.411	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.636		0.0164	MDL	0.103	PQL	mg/Kg	J	Q, E
CADMIUM	0.365		0.0452	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	27.8		0.123	MDL	0.411	PQL	mg/Kg	J	Q
COBALT	9.72		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, E
COPPER	14.7		0.0822	MDL	0.411	PQL	mg/Kg	J	Q
LEAD	8.67		0.0105	MDL	0.206	PQL	mg/Kg	J	Q, E
NICKEL	17.7		0.103	MDL	0.411	PQL	mg/Kg	J	Q, A
SILVER	0.0381	J	0.0146	MDL	0.103	PQL	mg/Kg	J	Z, Q
THALLIUM	0.298		0.0308	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.204	J	0.0596	MDL	0.411	PQL	mg/Kg	J	Z, Q

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.736		0.0514	MDL	0.103	PQL	mg/Kg	J	Q, E

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.109	MDL	0.411	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-019-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 11:16:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.303		0.0850	MDL	0.230	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.77		0.0919	MDL	0.459	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.910		0.0184	MDL	0.115	PQL	mg/Kg	J	Q, E
CADMIUM	0.165		0.0505	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	31.9		0.138	MDL	0.459	PQL	mg/Kg	J	Q
COBALT	6.54		0.0230	MDL	0.115	PQL	mg/Kg	J	Q, E
COPPER	31.5		0.0919	MDL	0.459	PQL	mg/Kg	J	Q
LEAD	8.39		0.0117	MDL	0.230	PQL	mg/Kg	J	Q, E
NICKEL	19.8		0.115	MDL	0.459	PQL	mg/Kg	J	Q, A
SILVER	0.0629	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.276		0.0345	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-019-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 11:16:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.590		0.0574	MDL	0.115	PQL	mg/Kg	J	Q, E

Sample ID: SL-019-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 11:16:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	143		0.122	MDL	0.459	PQL	mg/Kg	J	E, A

Sample ID: SL-019-SA5DN-SB-9.0-10.0 ***Collected:*** 6/3/2011 2:50:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.212	J	0.0808	MDL	0.218	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.64		0.0873	MDL	0.437	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.661		0.0175	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.231		0.0480	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	23.1		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COBALT	11.0		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	13.0		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
LEAD	7.34		0.0111	MDL	0.218	PQL	mg/Kg	J	Q, E
NICKEL	16.2		0.109	MDL	0.437	PQL	mg/Kg	J	Q, A
SILVER	0.0445	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.259		0.0328	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.455		0.0546	MDL	0.109	PQL	mg/Kg	J	Q, E

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	94.4		0.116	MDL	0.437	PQL	mg/Kg	J	E, A

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.117	J	0.0788	MDL	0.213	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.75		0.0852	MDL	0.426	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.619		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.137		0.0469	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	24.8		0.128	MDL	0.426	PQL	mg/Kg	J	Q
COBALT	6.79		0.0213	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	12.1		0.0852	MDL	0.426	PQL	mg/Kg	J	Q
LEAD	5.92		0.0109	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	16.1		0.106	MDL	0.426	PQL	mg/Kg	J	Q, A
SILVER	0.0434	J	0.0151	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.249		0.0319	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.313		0.0532	MDL	0.106	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	91.0		0.113	MDL	0.426	PQL	mg/Kg	J	E, A

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.245		0.0825	MDL	0.223	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.66		0.0892	MDL	0.446	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.773		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.231		0.0490	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	28.4		0.134	MDL	0.446	PQL	mg/Kg	J	Q
COBALT	9.90		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	15.4		0.0892	MDL	0.446	PQL	mg/Kg	J	Q
LEAD	8.59		0.0114	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	17.2		0.111	MDL	0.446	PQL	mg/Kg	J	Q, A
SILVER	0.0659	J	0.0158	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.273		0.0334	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0939	J	0.0647	MDL	0.446	PQL	mg/Kg	J	Z, Q

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.367		0.0557	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.118	MDL	0.446	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-052-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 4:04:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.273		0.0794	MDL	0.215	PQL	mg/Kg	UJ	Q, B
ARSENIC	8.10		0.0859	MDL	0.429	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.892		0.0172	MDL	0.107	PQL	mg/Kg	J	Q, E
CADMIUM	0.215		0.0472	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	32.0		0.129	MDL	0.429	PQL	mg/Kg	J	Q
COBALT	10.1		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	17.5		0.0859	MDL	0.429	PQL	mg/Kg	J	Q
LEAD	9.98		0.0109	MDL	0.215	PQL	mg/Kg	J	Q, E
NICKEL	19.6		0.107	MDL	0.429	PQL	mg/Kg	J	Q, A
SILVER	0.0528	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.321		0.0322	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-052-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 4:04:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0622	MDL	0.429	PQL	mg/Kg	J	Z, Q

Sample ID: SL-052-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 4:04:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.547		0.0537	MDL	0.107	PQL	mg/Kg	J	Q, E

Sample ID: SL-052-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 4:04:00 PM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	162		0.114	MDL	0.429	PQL	mg/Kg	J	E, A

Sample ID: SL-052-SA5DN-SB-9.0-10.0 ***Collected:*** 6/3/2011 4:08:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.226		0.0825	MDL	0.223	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.51		0.0892	MDL	0.446	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.793		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.189		0.0490	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	31.5		0.134	MDL	0.446	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.80		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	12.9		0.0892	MDL	0.446	PQL	mg/Kg	J	Q
LEAD	7.47		0.0114	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	15.5		0.111	MDL	0.446	PQL	mg/Kg	J	Q, A
SILVER	0.173		0.0158	MDL	0.111	PQL	mg/Kg	J	Q
THALLIUM	0.325		0.0334	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.263		0.0557	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.118	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.259		0.0786	MDL	0.212	PQL	mg/Kg	UJ	Q, B
ARSENIC	15.0		0.0850	MDL	0.425	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.32		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.284		0.0467	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	36.5		0.127	MDL	0.425	PQL	mg/Kg	J	Q
COBALT	15.4		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	26.5		0.0850	MDL	0.425	PQL	mg/Kg	J	Q
LEAD	12.4		0.0108	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	22.6		0.106	MDL	0.425	PQL	mg/Kg	J	Q, A
SILVER	0.147		0.0151	MDL	0.106	PQL	mg/Kg	J	Q
THALLIUM	0.422		0.0319	MDL	0.106	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.369	J	0.0616	MDL	0.425	PQL	mg/Kg	J	Z, Q

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.26		0.0531	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	151		0.113	MDL	0.425	PQL	mg/Kg	J	E, A

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.239		0.0783	MDL	0.212	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.54		0.0846	MDL	0.423	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.759		0.0169	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.268		0.0465	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	24.9		0.127	MDL	0.423	PQL	mg/Kg	J	Q
COBALT	8.87		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	14.3		0.0846	MDL	0.423	PQL	mg/Kg	J	Q
LEAD	7.70		0.0108	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	16.5		0.106	MDL	0.423	PQL	mg/Kg	J	Q, A
SILVER	0.0737	J	0.0150	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.304		0.0317	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.0613	MDL	0.423	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.716		0.0529	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	134		0.112	MDL	0.423	PQL	mg/Kg	J	E, A

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.401		0.0790	MDL	0.213	PQL	mg/Kg	UJ	Q, B
ARSENIC	9.19		0.0854	MDL	0.427	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.992		0.0171	MDL	0.107	PQL	mg/Kg	J	Q, E
CADMIUM	0.383		0.0469	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	33.5		0.128	MDL	0.427	PQL	mg/Kg	J	Q
COBALT	12.9		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	21.2		0.0854	MDL	0.427	PQL	mg/Kg	J	Q
LEAD	11.8		0.0109	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	21.4		0.107	MDL	0.427	PQL	mg/Kg	J	Q, A
SILVER	0.0571	J	0.0151	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.403		0.0320	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.257	J	0.0619	MDL	0.427	PQL	mg/Kg	J	Z, Q

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.888		0.0533	MDL	0.107	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	188		0.113	MDL	0.427	PQL	mg/Kg	J	E, A

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.339		0.0752	MDL	0.203	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.79		0.0812	MDL	0.406	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.815		0.0162	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	0.423		0.0447	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	33.0		0.122	MDL	0.406	PQL	mg/Kg	J	Q
COBALT	12.0		0.0203	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	17.5		0.0812	MDL	0.406	PQL	mg/Kg	J	Q
LEAD	11.8		0.0104	MDL	0.203	PQL	mg/Kg	J	Q, E
NICKEL	20.5		0.102	MDL	0.406	PQL	mg/Kg	J	Q, A
SILVER	0.0436	J	0.0144	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.419		0.0305	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.247	J	0.0589	MDL	0.406	PQL	mg/Kg	J	Z, Q

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.903		0.0508	MDL	0.102	PQL	mg/Kg	J	Q, E

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	144		0.108	MDL	0.406	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-156-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:45:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.335		0.0817	MDL	0.221	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.51		0.0883	MDL	0.442	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.794		0.0177	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.384		0.0486	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	38.9		0.132	MDL	0.442	PQL	mg/Kg	J	Q
COBALT	12.8		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	17.4		0.0883	MDL	0.442	PQL	mg/Kg	J	Q
LEAD	13.0		0.0113	MDL	0.221	PQL	mg/Kg	J	Q, E
NICKEL	26.2		0.110	MDL	0.442	PQL	mg/Kg	J	Q, A
SILVER	0.0398	J	0.0157	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.373		0.0331	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-156-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:45:00 AM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.226	J	0.0640	MDL	0.442	PQL	mg/Kg	J	Z, Q

Sample ID: SL-156-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:45:00 AM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.971		0.0552	MDL	0.110	PQL	mg/Kg	J	Q, E

Sample ID: SL-156-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:45:00 AM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	146		0.117	MDL	0.442	PQL	mg/Kg	J	E, A

Sample ID: SL-157-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.341		0.0804	MDL	0.217	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.88		0.0869	MDL	0.434	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.824		0.0174	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.330		0.0478	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	36.7		0.130	MDL	0.434	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-157-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	12.5		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	17.4		0.0869	MDL	0.434	PQL	mg/Kg	J	Q
LEAD	13.2		0.0111	MDL	0.217	PQL	mg/Kg	J	Q, E
NICKEL	23.8		0.109	MDL	0.434	PQL	mg/Kg	J	Q, A
SILVER	0.0381	J	0.0154	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.358		0.0326	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-157-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:05:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.253	J	0.0630	MDL	0.434	PQL	mg/Kg	J	Z, Q

Sample ID: SL-157-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:05:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.810		0.0543	MDL	0.109	PQL	mg/Kg	J	Q, E

Sample ID: SL-157-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:05:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.115	MDL	0.434	PQL	mg/Kg	J	E, A

Sample ID: SL-158-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.288		0.0784	MDL	0.212	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.29		0.0848	MDL	0.424	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.655		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.277		0.0466	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	31.9		0.127	MDL	0.424	PQL	mg/Kg	J	Q
COBALT	10.5		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	13.8		0.0848	MDL	0.424	PQL	mg/Kg	J	Q
LEAD	10.2		0.0108	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	20.6		0.106	MDL	0.424	PQL	mg/Kg	J	Q, A
SILVER	0.0290	J	0.0151	MDL	0.106	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-158-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.296		0.0318	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-158-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:25:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.242	J	0.0615	MDL	0.424	PQL	mg/Kg	J	Z, Q

Sample ID: SL-158-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:25:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.678		0.0530	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-158-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:25:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.112	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.258		0.0806	MDL	0.218	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.21		0.0872	MDL	0.436	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.663		0.0174	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.276		0.0479	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	30.7		0.131	MDL	0.436	PQL	mg/Kg	J	Q
COBALT	9.90		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	13.1		0.0872	MDL	0.436	PQL	mg/Kg	J	Q
LEAD	10.8		0.0111	MDL	0.218	PQL	mg/Kg	J	Q, E
NICKEL	16.3		0.109	MDL	0.436	PQL	mg/Kg	J	Q, A
SILVER	0.0268	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.296		0.0327	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.223	J	0.0632	MDL	0.436	PQL	mg/Kg	J	Z, Q

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.725		0.0545	MDL	0.109	PQL	mg/Kg	J	Q, E

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.116	MDL	0.436	PQL	mg/Kg	J	E, A

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.310		0.0737	MDL	0.199	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.50		0.0797	MDL	0.399	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.773		0.0159	MDL	0.0996	PQL	mg/Kg	J	Q, E
CADMIUM	0.263		0.0438	MDL	0.0996	PQL	mg/Kg	J	Q
CHROMIUM	29.3		0.120	MDL	0.399	PQL	mg/Kg	J	Q
COBALT	9.97		0.0199	MDL	0.0996	PQL	mg/Kg	J	Q, E
COPPER	15.9		0.0797	MDL	0.399	PQL	mg/Kg	J	Q
LEAD	8.93		0.0102	MDL	0.199	PQL	mg/Kg	J	Q, E
NICKEL	15.4		0.0996	MDL	0.399	PQL	mg/Kg	J	Q, A
SILVER	0.0232	J	0.0141	MDL	0.0996	PQL	mg/Kg	J	Z, Q
THALLIUM	0.313		0.0299	MDL	0.0996	PQL	mg/Kg	J	Q

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.257	J	0.0578	MDL	0.399	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-160-SA5DN-SS-0.0-0.5** ***Collected:*** **6/3/2011 3:00:00 PM** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.822		0.0498	MDL	0.0996	PQL	mg/Kg	J	Q, E

Sample ID: **SL-160-SA5DN-SS-0.0-0.5** ***Collected:*** **6/3/2011 3:00:00 PM** ***Analysis Type:*** **REA8** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.106	MDL	0.399	PQL	mg/Kg	J	E, A

Sample ID: **SL-162-SA5DN-SS-0.0-0.5** ***Collected:*** **6/3/2011 2:25:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.326		0.0793	MDL	0.214	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.63		0.0858	MDL	0.429	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.842		0.0172	MDL	0.107	PQL	mg/Kg	J	Q, E
CHROMIUM	32.5		0.129	MDL	0.429	PQL	mg/Kg	J	Q
COBALT	12.3		0.0214	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	22.3		0.0858	MDL	0.429	PQL	mg/Kg	J	Q
LEAD	11.6		0.0109	MDL	0.214	PQL	mg/Kg	J	Q, E
NICKEL	18.3		0.107	MDL	0.429	PQL	mg/Kg	J	Q, A
SILVER	0.0322	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.439		0.0322	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-162-SA5DN-SS-0.0-0.5** ***Collected:*** **6/3/2011 2:25:00 PM** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.203		0.0472	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-162-SA5DN-SS-0.0-0.5** ***Collected:*** **6/3/2011 2:25:00 PM** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.270	J	0.0622	MDL	0.429	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-162-SA5DN-SS-0.0-0.5** ***Collected:*** **6/3/2011 2:25:00 PM** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.773		0.0536	MDL	0.107	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-162-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 2:25:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.114	MDL	0.429	PQL	mg/Kg	J	E, A

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.595		0.0792	MDL	0.214	PQL	mg/Kg	J	Q
ARSENIC	11.2		0.0857	MDL	0.428	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.983		0.0171	MDL	0.107	PQL	mg/Kg	J	Q, E
CADMIUM	0.646		0.0471	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	39.0		0.128	MDL	0.428	PQL	mg/Kg	J	Q
COBALT	14.6		0.0214	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	26.4		0.0857	MDL	0.428	PQL	mg/Kg	J	Q
LEAD	48.6		0.0109	MDL	0.214	PQL	mg/Kg	J	Q, E
NICKEL	25.5		0.107	MDL	0.428	PQL	mg/Kg	J	Q, A
SILVER	0.0656	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.404		0.0321	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.267	J	0.0621	MDL	0.428	PQL	mg/Kg	J	Z, Q

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.931		0.0535	MDL	0.107	PQL	mg/Kg	J	Q, E

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	182		0.114	MDL	0.428	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-207-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 8:35:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.575		0.0779	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	7.67		0.0842	MDL	0.421	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.814		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.696		0.0463	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	30.4		0.126	MDL	0.421	PQL	mg/Kg	J	Q
COBALT	12.5		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	20.3		0.0842	MDL	0.421	PQL	mg/Kg	J	Q
LEAD	25.1		0.0107	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	19.5		0.105	MDL	0.421	PQL	mg/Kg	J	Q, A
SILVER	0.0572	J	0.0150	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.326		0.0316	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-207-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 8:35:00 AM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.208	J	0.0611	MDL	0.421	PQL	mg/Kg	J	Z, Q

Sample ID: SL-207-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 8:35:00 AM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.797		0.0527	MDL	0.105	PQL	mg/Kg	J	Q, E

Sample ID: SL-207-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 8:35:00 AM ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.112	MDL	0.421	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP-13-SA5DN-QC-060311 ***Collected:*** 6/3/2011 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.21	U	0.21	MDL	1.0	PQL	mg/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-027-SA5DN-SB-4.0-5.0 **Collected:** 6/3/2011 2:50:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.53	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-052-SA5DN-SB-4.0-5.0 **Collected:** 6/3/2011 4:04:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5DN-SS-0.0-0.5 **Collected:** 6/3/2011 11:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA5DN-SS-0.0-0.5 **Collected:** 6/3/2011 11:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA5DN-SS-0.0-0.5 **Collected:** 6/3/2011 10:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z, FD

Sample ID: SL-157-SA5DN-SS-0.0-0.5 **Collected:** 6/3/2011 10:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-160-SA5DN-SS-0.0-0.5 **Collected:** 6/3/2011 3:00:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-162-SA5DN-SS-0.0-0.5 **Collected:** 6/3/2011 2:25:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.69	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

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

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0175	J	0.0028	MDL	0.0989	PQL	mg/Kg	UJ	B, B, FD

Sample ID: SL-019-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0294	J	0.0033	MDL	0.115	PQL	mg/Kg	U	B

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0162	J	0.0031	MDL	0.108	PQL	mg/Kg	U	B, B

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0119	J	0.0031	MDL	0.110	PQL	mg/Kg	U	B, B

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0185	J	0.0031	MDL	0.109	PQL	mg/Kg	U	B, B

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0044	J	0.0032	MDL	0.111	PQL	mg/Kg	U	B, B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-152-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0136	J	0.0030	MDL	0.104	PQL	mg/Kg	U	B

Sample ID: SL-153-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 12:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0496	J	0.0030	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0029	U	0.0029	MDL	0.0998	PQL	mg/Kg	UJ	FD

Sample ID: SL-156-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:45:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0247	J	0.0030	MDL	0.106	PQL	mg/Kg	U	B

Sample ID: SL-157-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0110	J	0.0031	MDL	0.110	PQL	mg/Kg	U	B, B

Sample ID: SL-159-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:25:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0261	J	0.0030	MDL	0.105	PQL	mg/Kg	U	B

Sample ID: SL-160-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 3:00:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0165	J	0.0028	MDL	0.0991	PQL	mg/Kg	U	B, B

Sample ID: SL-162-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 2:25:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0274	J	0.0032	MDL	0.111	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0316	J	0.0032	MDL	0.111	PQL	mg/Kg	U	B

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0657	J	0.0029	MDL	0.103	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	40.2		18.6	MDL	37.1	PQL	ng/Kg	U	B

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	41.7		18.5	MDL	36.9	PQL	ng/Kg	U	B

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	45.4		19.1	MDL	38.3	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* REA2 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	7.4	J	4.3	MDL	13	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: EB13-SA5DN-SS-060311 *Collected:* 6/3/2011 1:30:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.0052	U	0.0052	MDL	0.021	PQL	ug/L	UJ	C
4,4'-DDE	0.0052	U	0.0052	MDL	0.021	PQL	ug/L	UJ	C, C
4,4'-DDT	0.0052	U	0.0052	MDL	0.021	PQL	ug/L	UJ	C
ENDOSULFAN II	0.016	U	0.016	MDL	0.021	PQL	ug/L	UJ	C
ENDOSULFAN SULFATE	0.0060	U	0.0060	MDL	0.021	PQL	ug/L	UJ	C
ENDRIN	0.0084	U	0.0084	MDL	0.021	PQL	ug/L	UJ	C, C
ENDRIN ALDEHYDE	0.021	U	0.021	MDL	0.10	PQL	ug/L	UJ	C
HEPTACHLOR	0.0086	J	0.0027	MDL	0.010	PQL	ug/L	J	Z
METHOXYCHLOR	0.031	U	0.031	MDL	0.10	PQL	ug/L	UJ	C

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.45	U	0.45	MDL	0.45	PQL	ug/Kg	UJ	C, FD
4,4'-DDT	0.30	U	0.30	MDL	0.36	PQL	ug/Kg	UJ	C, FD
ALDRIN	0.069	U	0.069	MDL	0.17	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	C
BETA-BHC	0.063	U	0.063	MDL	0.17	PQL	ug/Kg	UJ	C
Chlordane	4.0		0.84	MDL	3.6	PQL	ug/Kg	J	C
DELTA-BHC	0.038	U	0.038	MDL	0.17	PQL	ug/Kg	UJ	C, FD
DIELDRIN	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.046	U	0.046	MDL	0.17	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.12	U	0.12	MDL	0.36	PQL	ug/Kg	UJ	C, FD
ENDOSULFAN SULFATE	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	C
ENDRIN	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.29	U	0.29	MDL	0.36	PQL	ug/Kg	UJ	C, FD
ENDRIN KETONE	0.075	J	0.069	MDL	0.36	PQL	ug/Kg	J	Z, C, *XIII, FD
gamma-BHC (Lindane)	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.063	U	0.063	MDL	0.17	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.36	U	0.36	MDL	1.7	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	C
TOXAPHENE	2.3	U	2.3	MDL	6.9	PQL	ug/Kg	UJ	C

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.26	J	0.18	MDL	0.91	PQL	ug/Kg	J	Z, *XIII
BETA-BHC	1.0		0.16	MDL	0.45	PQL	ug/Kg	J	* XIII

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDE	0.093	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ALDRIN	0.071	U	0.071	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	1.8	J	0.86	MDL	3.7	PQL	ug/Kg	J	Z, S, * XIII
DELTA-BHC	0.039	U	0.039	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.099	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z, S
ENDOSULFAN SULFATE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.1	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.15	J	0.066	MDL	0.18	PQL	ug/Kg	J	Z, * XIII
Chlordane	3.1	J	0.88	MDL	3.7	PQL	ug/Kg	J	Z, * XIII
ENDRIN KETONE	0.14	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.29	J	0.069	MDL	0.36	PQL	ug/Kg	J	Z, * XIII, FD
4,4'-DDT	0.37		0.069	MDL	0.36	PQL	ug/Kg	J	FD
Chlordane	2.5	J	0.84	MDL	3.6	PQL	ug/Kg	J	Z
DELTA-BHC	0.063	J	0.038	MDL	0.17	PQL	ug/Kg	J	Z, FD
ENDOSULFAN II	0.15	J	0.069	MDL	0.36	PQL	ug/Kg	J	Z, FD
ENDRIN ALDEHYDE	0.23	J	0.069	MDL	0.36	PQL	ug/Kg	J	Z, * XIII, FD
ENDRIN KETONE	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	FD

Sample ID: SL-156-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:45:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.44		0.074	MDL	0.38	PQL	ug/Kg	J	* XIII
4,4'-DDE	0.40		0.074	MDL	0.38	PQL	ug/Kg	J	* XIII
4,4'-DDT	0.27	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, * XIII
Chlordane	4.7		0.89	MDL	3.8	PQL	ug/Kg	J	*XIII
ENDRIN KETONE	0.14	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, * XIII

Sample ID: SL-157-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.53		0.074	MDL	0.38	PQL	ug/Kg	J	* XIII
Chlordane	3.5	J	0.89	MDL	3.8	PQL	ug/Kg	J	Z
DELTA-BHC	0.048	J	0.040	MDL	0.19	PQL	ug/Kg	J	Z, * XIII

Sample ID: SL-158-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-158-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.60		0.071	MDL	0.37	PQL	ug/Kg	J	C, * XIII
4,4'-DDT	0.35	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z, C, * XIII
ALDRIN	0.071	U	0.071	MDL	0.18	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	C
BETA-BHC	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	C
Chlordane	2.1	J	0.86	MDL	3.7	PQL	ug/Kg	J	Z, C
DELTA-BHC	0.058	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z, C, * XIII
DIELDRIN	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.092	U	0.092	MDL	0.37	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.084	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z, C
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	C
MIREX	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	C
TOXAPHENE	2.4	U	2.4	MDL	7.1	PQL	ug/Kg	UJ	C

Sample ID: SL-159-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:25:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
4,4'-DDE	1.1	U	1.1	MDL	1.1	PQL	ug/Kg	UJ	C
4,4'-DDT	0.81	U	0.81	MDL	0.81	PQL	ug/Kg	UJ	C
ALDRIN	0.074	U	0.074	MDL	0.19	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	C
BETA-BHC	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	UJ	C
Chlordane	3.3	J	0.90	MDL	3.8	PQL	ug/Kg	J	Z, C
DELTA-BHC	0.067	J	0.040	MDL	0.19	PQL	ug/Kg	J	Z, C, * XIII
DIELDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.049	U	0.049	MDL	0.19	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.19	U	0.19	MDL	0.38	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.089	U	0.089	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
TOXAPHENE	2.5	U	2.5	MDL	7.4	PQL	ug/Kg	UJ	C

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	C
4,4'-DDE	0.16	J	0.068	MDL	0.35	PQL	ug/Kg	J	Z, C, * XIII
4,4'-DDT	0.17	U	0.17	MDL	0.35	PQL	ug/Kg	UJ	C
ALDRIN	0.068	U	0.068	MDL	0.17	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	C
BETA-BHC	0.062	U	0.062	MDL	0.17	PQL	ug/Kg	UJ	C
Chlordane	1.1	J	0.83	MDL	3.5	PQL	ug/Kg	J	Z, C, * XIII
DELTA-BHC	0.037	U	0.037	MDL	0.17	PQL	ug/Kg	UJ	C
DIELDRIN	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.064	J	0.046	MDL	0.17	PQL	ug/Kg	J	Z, C
ENDOSULFAN II	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	C
ENDRIN	0.096	U	0.096	MDL	0.35	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.062	U	0.062	MDL	0.17	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.35	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.068	U	0.068	MDL	0.35	PQL	ug/Kg	UJ	C
TOXAPHENE	2.3	U	2.3	MDL	6.8	PQL	ug/Kg	UJ	C

Sample ID: SL-162-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 2:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.31	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z, C, * XIII
4,4'-DDE	0.52	U	0.52	MDL	0.52	PQL	ug/Kg	UJ	C
4,4'-DDT	0.51		0.074	MDL	0.38	PQL	ug/Kg	J	C
ALDRIN	0.074	U	0.074	MDL	0.19	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	C
BETA-BHC	0.14	J	0.067	MDL	0.19	PQL	ug/Kg	J	Z, C
Chlordane	4.7		0.89	MDL	3.8	PQL	ug/Kg	J	C
DELTA-BHC	0.042	J	0.040	MDL	0.19	PQL	ug/Kg	J	Z, C, * XIII
DIELDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.049	U	0.049	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.086	U	0.086	MDL	0.38	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.067	U	0.067	MDL	0.19	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.060	U	0.060	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	C
TOXAPHENE	2.5	U	2.5	MDL	7.4	PQL	ug/Kg	UJ	C

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S, C
4,4'-DDE	0.37	U	0.37	MDL	0.38	PQL	ug/Kg	UJ	S, C
4,4'-DDT	0.46	U	0.46	MDL	0.46	PQL	ug/Kg	UJ	S, C
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	S, C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S, C
BETA-BHC	0.067	U	0.067	MDL	0.18	PQL	ug/Kg	UJ	S, C
Chlordane	1.1	J	0.89	MDL	3.8	PQL	ug/Kg	J	Z, S, C, * XIII
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	UJ	S, C
DIELDRIN	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S, C
ENDOSULFAN I	0.049	U	0.049	MDL	0.18	PQL	ug/Kg	UJ	S, C
ENDOSULFAN II	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S, C
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S, C
ENDRIN	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S, C
ENDRIN ALDEHYDE	0.13	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z, S, C
ENDRIN KETONE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S, C
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S, C
HEPTACHLOR	0.067	U	0.067	MDL	0.18	PQL	ug/Kg	UJ	S, C
HEPTACHLOR EPOXIDE	0.042	U	0.042	MDL	0.18	PQL	ug/Kg	UJ	S, C
METHOXYCHLOR	0.38	U	0.38	MDL	1.8	PQL	ug/Kg	UJ	S, C
MIREX	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	S, C
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	S, C

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	4.9	U	4.9	MDL	4.9	PQL	ug/Kg	UJ	C
DIELDRIN	18	U	18	MDL	18	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.47	U	0.47	MDL	1.8	PQL	ug/Kg	UJ	C
ENDOSULFAN II	1.8	U	1.8	MDL	3.7	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.97	U	0.97	MDL	3.7	PQL	ug/Kg	UJ	C
ENDRIN	8.2	U	8.2	MDL	8.2	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.71	U	0.71	MDL	3.7	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	C
METHOXYCHLOR	3.7	U	3.7	MDL	18	PQL	ug/Kg	UJ	C
MIREX	0.71	U	0.71	MDL	3.7	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* DL2-BASE/NEUTRAL *Dilution:* 25

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	21		1.8	MDL	9.1	PQL	ug/Kg	J	* XIII

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALDRIN	0.071	U	0.071	MDL	0.18	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	C
BETA-BHC	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	C
Chlordane	4.0		0.86	MDL	3.7	PQL	ug/Kg	J	C, * XIII
DELTA-BHC	0.039	U	0.039	MDL	0.18	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	C
HEPTACHLOR	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	C
TOXAPHENE	2.4	U	2.4	MDL	7.1	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8082 **Matrix:** AQ

Sample ID: EB13-SA5DN-SS-060311 *Collected:* 6/3/2011 1:30:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	C
AROCLOR 1221	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	C
AROCLOR 1232	0.21	U	0.21	MDL	0.52	PQL	ug/L	UJ	C
AROCLOR 1242	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	C
Aroclor 5460	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	C

Sample ID: EB14-SA5DN-SB-060311 *Collected:* 6/3/2011 12:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.10	U	0.10	MDL	0.51	PQL	ug/L	UJ	C
AROCLOR 1221	0.10	U	0.10	MDL	0.51	PQL	ug/L	UJ	C
AROCLOR 1232	0.20	U	0.20	MDL	0.51	PQL	ug/L	UJ	C
AROCLOR 1242	0.10	U	0.10	MDL	0.51	PQL	ug/L	UJ	C
Aroclor 5460	0.10	U	0.10	MDL	0.51	PQL	ug/L	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP-13-SA5DN-QC-060311 ***Collected:*** 6/3/2011 10:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1260	1.6	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z, C
Aroclor 5460	2.7	J	1.0	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: SL-019-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 11:16:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.45	U	0.45	MDL	2.0	PQL	ug/Kg	UJ	C

Sample ID: SL-019-SA5DN-SB-9.0-10.0 ***Collected:*** 6/3/2011 2:50:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	C

Sample ID: SL-027-SA5DN-SB-14.0-15.0 ***Collected:*** 6/3/2011 3:00:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	C

Sample ID: SL-027-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 2:50:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.46	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z, C, * XIII

Sample ID: SL-052-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 4:04:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.57	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z, C
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.45	U	0.45	MDL	2.0	PQL	ug/Kg	UJ	C
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1260	1.9		0.42	MDL	1.8	PQL	ug/Kg	J	C
Aroclor 5460	1.3	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.42	U	0.42	MDL	1.8	PQL	ug/Kg	UJ	C

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.36	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.70	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z, C, * XIII

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1260	1.6	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z, C
Aroclor 5460	3.5		1.0	MDL	3.5	PQL	ug/Kg	J	L

Sample ID: SL-156-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:45:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	1.2	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z, C
Aroclor 5460	2.3	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-157-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-157-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z, C
Aroclor 5460	1.5	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-158-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1260	1.1	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z, C
Aroclor 5460	1.8	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	2.4		0.44	MDL	1.9	PQL	ug/Kg	J	S, C
Aroclor 5460	3.4	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, S, L

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.34	U	0.34	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.34	U	0.34	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.34	U	0.34	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.40	U	0.40	MDL	1.8	PQL	ug/Kg	UJ	C

Sample ID: SL-162-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 2:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 Laboratory: LL

EDD Filename: PrepDE173_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-162-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 2:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z, C, * XIII
Aroclor 5460	1.9	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	3.0		0.43	MDL	1.9	PQL	ug/Kg	J	C
Aroclor 5460	4.6		1.1	MDL	3.7	PQL	ug/Kg	J	L

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	7.1	U	7.1	MDL	37	PQL	ug/Kg	UJ	C
AROCLOR 1248	7.1	U	7.1	MDL	37	PQL	ug/Kg	UJ	C
AROCLOR 1254	7.1	U	7.1	MDL	37	PQL	ug/Kg	UJ	C
AROCLOR 1260	300		8.4	MDL	37	PQL	ug/Kg	J	C

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	460		81	MDL	270	PQL	ug/Kg	J	*IX

Sample ID: SL-157-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.46	J	0.45	MDL	1.3	PQL	ug/Kg	J	Z, * IX

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	330		78	MDL	260	PQL	ug/Kg	J	* IX

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	220	J	81	MDL	270	PQL	ug/Kg	J	Z, * IX

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	44	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-154-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 11:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
2,4,5-TRICHLOROPHENOL	35	U	35	MDL	170	PQL	ug/Kg	UJ	Q
2,4-DICHLOROPHENOL	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
2,4-DIMETHYLPHENOL	35	U	35	MDL	170	PQL	ug/Kg	UJ	Q
2-METHYLPHENOL	35	U	35	MDL	170	PQL	ug/Kg	UJ	Q
4-CHLORO-3-METHYLPHENOL	35	U	35	MDL	170	PQL	ug/Kg	UJ	Q
4-CHLOROPHENYL-PHENYLETHER	35	U	35	MDL	170	PQL	ug/Kg	UJ	Q
4-METHYLPHENOL	35	U	35	MDL	170	PQL	ug/Kg	UJ	Q
BENZIDINE	1200	U	1200	MDL	3500	PQL	ug/Kg	R	Q
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	17	MDL	350	PQL	ug/Kg	J	Z
N-NITROSODIPHENYLAMINE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q

Sample ID: SL-156-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:45:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	44	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-157-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	61	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-158-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-159-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:25:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	370	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB13-SA5DN-SS-060311 *Collected:* 6/3/2011 1:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.026	J	0.011	MDL	0.053	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.026	J	0.011	MDL	0.053	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.055	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.065	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Di-n-octylphthalate	0.053	U	0.053	MDL	1.1	PQL	ug/L	UJ	E

Sample ID: EB14-SA5DN-SB-060311 *Collected:* 6/3/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.028	J	0.010	MDL	0.051	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.026	J	0.010	MDL	0.051	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.057	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.067	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	0.051	U	0.051	MDL	1.0	PQL	ug/L	UJ	E

Method Category: SVOA

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

Sample ID: DUP-13-SA5DN-QC-060311 *Collected:* 6/3/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.79	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP-13-SA5DN-QC-060311 ***Collected:*** 6/3/2011 10:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.82	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.9		0.35	MDL	1.7	PQL	ug/Kg	J	FD
Di-n-butylphthalate	6.3	U	6.3	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	2.5		0.70	MDL	1.7	PQL	ug/Kg	J	L
NAPHTHALENE	0.88	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-019-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 11:16:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.78	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, L
PYRENE	0.80	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-019-SA5DN-SB-9.0-10.0 ***Collected:*** 6/3/2011 2:50:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	L
PYRENE	0.97	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA5DN-SB-14.0-15.0 ***Collected:*** 6/3/2011 3:00:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: SL-027-SA5DN-SB-4.0-5.0 ***Collected:*** 6/3/2011 2:50:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-052-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 4:04:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: SL-052-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 4:08:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-152-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.79	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.81	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, L
INDENO(1,2,3-CD)PYRENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-153-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 12:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.79	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.99	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.5	U	6.5	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	2.4		0.72	MDL	1.8	PQL	ug/Kg	J	L
INDENO(1,2,3-CD)PYRENE	0.90	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-154-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 11:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.77	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.84	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	1.9		0.73	MDL	1.8	PQL	ug/Kg	J	L
NAPHTHALENE	0.75	J	0.73	MDL	1.8	PQL	ug/Kg	U	F
PHENANTHRENE	0.98	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.70	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.73	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	5.4		0.35	MDL	1.7	PQL	ug/Kg	J	FD
Di-n-butylphthalate	6.3	U	6.3	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	2.6		0.70	MDL	1.7	PQL	ug/Kg	J	L
NAPHTHALENE	0.96	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-156-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 9:45:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.0	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	4.5		0.74	MDL	1.9	PQL	ug/Kg	J	L
INDENO(1,2,3-CD)PYRENE	0.90	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-157-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.76	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	1.8	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z, L
NAPHTHALENE	0.99	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-158-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 10:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.5	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z, L
NAPHTHALENE	0.97	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-159-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 9:25:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	4.4		0.75	MDL	1.9	PQL	ug/Kg	J	L
INDENO(1,2,3-CD)PYRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-160-SA5DN-SS-0.0-0.5 ***Collected:*** 6/3/2011 3:00:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.2	U	6.2	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-160-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.71	J	0.69	MDL	1.7	PQL	ug/Kg	U	F

Sample ID: SL-162-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 2:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-166-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.86	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.92	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	2.3		0.74	MDL	1.9	PQL	ug/Kg	J	L
NAPHTHALENE	1.4	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	J	6.4	MDL	19	PQL	ug/Kg	J	Z, L
FLUORANTHENE	6.1		0.72	MDL	1.8	PQL	ug/Kg	J	L
INDENO(1,2,3-CD)PYRENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-019-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	690	U	690	MDL	1700	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	660	U	660	MDL	1600	PQL	ug/Kg	UJ	S

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	690	U	690	MDL	1700	PQL	ug/Kg	UJ	S

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1500	J	640	MDL	1600	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-207-SA5DN-SS-0.0-0.5 *Collected:* 6/3/2011 8:35:00 AM *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.6	U	1.6	MDL	3.8	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.6	U	1.6	MDL	3.8	PQL	mg/Kg	UJ	S
p-Terphenyl	1.6	U	1.6	MDL	3.8	PQL	mg/Kg	UJ	S

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-019-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 11:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.81	U	0.81	MDL	4.6	PQL	ug/Kg	UJ	C
2-BUTANONE (MEK)	1.4	U	1.4	MDL	9.3	PQL	ug/Kg	UJ	C
2-HEXANONE	1.9	U	1.9	MDL	9.3	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.45	U	0.45	MDL	9.3	PQL	ug/Kg	UJ	C
ACETONE	14		7.7	MDL	9.3	PQL	ug/Kg	UJ	B, C
METHYLENE CHLORIDE	1.2	J	0.28	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory:** LL

EDD Filename: PrepDE173_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-019-SA5DN-SB-9.0-10.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1.02

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.79	U	0.79	MDL	4.5	PQL	ug/Kg	UJ	C
2-BUTANONE (MEK)	1.4	U	1.4	MDL	9.1	PQL	ug/Kg	UJ	C
2-HEXANONE	1.8	U	1.8	MDL	9.1	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.44	U	0.44	MDL	9.1	PQL	ug/Kg	UJ	C
ACETONE	12		7.6	MDL	9.1	PQL	ug/Kg	UJ	B, C
METHYLENE CHLORIDE	5.0		0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-027-SA5DN-SB-14.0-15.0 *Collected:* 6/3/2011 3:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.74	U	0.74	MDL	4.2	PQL	ug/Kg	UJ	C
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.4	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.4	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.41	U	0.41	MDL	8.4	PQL	ug/Kg	UJ	C
ACETONE	11		7.1	MDL	8.4	PQL	ug/Kg	UJ	B, C
METHYLENE CHLORIDE	5.5		0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 2:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.73	U	0.73	MDL	4.2	PQL	ug/Kg	UJ	C
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.4	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.4	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.41	U	0.41	MDL	8.4	PQL	ug/Kg	UJ	C
ACETONE	9.0		7.0	MDL	8.4	PQL	ug/Kg	UJ	B, C
METHYLENE CHLORIDE	1.2	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-052-SA5DN-SB-4.0-5.0 *Collected:* 6/3/2011 4:04:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.79	U	0.79	MDL	4.5	PQL	ug/Kg	UJ	C
2-BUTANONE (MEK)	1.4	U	1.4	MDL	9.0	PQL	ug/Kg	UJ	C
2-HEXANONE	1.8	U	1.8	MDL	9.0	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.44	U	0.44	MDL	9.0	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-052-SA5DN-SB-4.0-5.0** ***Collected:*** **6/3/2011 4:04:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1.01**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ACETONE	10		7.5	MDL	9.0	PQL	ug/Kg	UJ	B, C
METHYLENE CHLORIDE	1.4	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*IX, *XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: PrepDE173_v2 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE173

Method Blank Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB16B261008	6/28/2011 10:08:00 AM	N-NITROSODIMETHYLAMINE	18.9 ng/Kg	SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-207-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-019-SA5DN-SB-9.0-10.0(RES)	N-NITROSODIMETHYLAMINE	40.2 ng/Kg	40.2U ng/Kg
SL-027-SA5DN-SB-14.0-15.0(RES)	N-NITROSODIMETHYLAMINE	41.7 ng/Kg	41.7U ng/Kg
SL-027-SA5DN-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	45.4 ng/Kg	45.4U ng/Kg

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16048CB221243	6/10/2011 12:43:00 PM	MAGNESIUM	0.0195 mg/L	EB13-SA5DN-SS-060311 EB14-SA5DN-SB-060311

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16408BB221704	6/14/2011 5:04:00 PM	ALUMINUM CALCIUM PHOSPHORUS TIN	9.32 mg/Kg 11.0 mg/Kg 1.80 mg/Kg 1.74 mg/Kg	DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-13-SA5DN-QC-060311(REA2)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-019-SA5DN-SB-4.0-5.0(REA2)	TIN	3.37 mg/Kg	3.37U mg/Kg
SL-019-SA5DN-SB-9.0-10.0(REA2)	TIN	3.22 mg/Kg	3.22U mg/Kg
SL-027-SA5DN-SB-14.0-15.0(REA2)	TIN	3.33 mg/Kg	3.33U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-027-SA5DN-SB-4.0-5.0(REA2)	TIN	3.29 mg/Kg	3.29U mg/Kg
SL-052-SA5DN-SB-4.0-5.0(REA2)	TIN	3.13 mg/Kg	3.13U mg/Kg
SL-052-SA5DN-SB-9.0-10.0(REA2)	TIN	3.27 mg/Kg	3.27U mg/Kg
SL-152-SA5DN-SS-0.0-0.5(REA2)	TIN	4.34 mg/Kg	4.34U mg/Kg
SL-153-SA5DN-SS-0.0-0.5(REA2)	TIN	3.34 mg/Kg	3.34U mg/Kg
SL-154-SA5DN-SS-0.0-0.5(REA2)	TIN	3.45 mg/Kg	3.45U mg/Kg
SL-155-SA5DN-SS-0.0-0.5(REA2)	TIN	3.35 mg/Kg	3.35U mg/Kg
SL-156-SA5DN-SS-0.0-0.5(REA2)	TIN	3.31 mg/Kg	3.31U mg/Kg
SL-157-SA5DN-SS-0.0-0.5(REA2)	TIN	3.24 mg/Kg	3.24U mg/Kg
SL-158-SA5DN-SS-0.0-0.5(REA2)	TIN	3.26 mg/Kg	3.26U mg/Kg
SL-159-SA5DN-SS-0.0-0.5(REA2)	TIN	3.40 mg/Kg	3.40U mg/Kg
SL-160-SA5DN-SS-0.0-0.5(REA2)	TIN	3.29 mg/Kg	3.29U mg/Kg
SL-162-SA5DN-SS-0.0-0.5(REA2)	TIN	3.70 mg/Kg	3.70U mg/Kg
SL-166-SA5DN-SS-0.0-0.5(REA2)	TIN	3.40 mg/Kg	3.40U mg/Kg
SL-207-SA5DN-SS-0.0-0.5(REA2)	TIN	3.47 mg/Kg	3.47U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16426BB221130A	6/16/2011 11:30:00 AM	ANTIMONY	0.0975 mg/Kg	DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-13-SA5DN-QC-060311(REA4)	ANTIMONY	0.252 mg/Kg	0.252U mg/Kg
SL-019-SA5DN-SB-4.0-5.0(REA4)	ANTIMONY	0.303 mg/Kg	0.303U mg/Kg
SL-019-SA5DN-SB-9.0-10.0(REA4)	ANTIMONY	0.212 mg/Kg	0.212U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-027-SA5DN-SB-14.0-15.0(REA4)	ANTIMONY	0.117 mg/Kg	0.117U mg/Kg
SL-027-SA5DN-SB-4.0-5.0(REA4)	ANTIMONY	0.245 mg/Kg	0.245U mg/Kg
SL-052-SA5DN-SB-4.0-5.0(REA4)	ANTIMONY	0.273 mg/Kg	0.273U mg/Kg
SL-052-SA5DN-SB-9.0-10.0(REA4)	ANTIMONY	0.226 mg/Kg	0.226U mg/Kg
SL-152-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.259 mg/Kg	0.259U mg/Kg
SL-153-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.239 mg/Kg	0.239U mg/Kg
SL-154-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.401 mg/Kg	0.401U mg/Kg
SL-155-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.339 mg/Kg	0.339U mg/Kg
SL-156-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.335 mg/Kg	0.335U mg/Kg
SL-157-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.341 mg/Kg	0.341U mg/Kg
SL-158-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.288 mg/Kg	0.286U mg/Kg
SL-159-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.258 mg/Kg	0.258U mg/Kg
SL-160-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.310 mg/Kg	0.310U mg/Kg
SL-162-SA5DN-SS-0.0-0.5(REA4)	ANTIMONY	0.326 mg/Kg	0.326U mg/Kg

Method: **7470A**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16013BB221002	6/11/2011 10:02:00 AM	MERCURY	0.00012 mg/L	EB13-SA5DN-SS-060311 EB14-SA5DN-SB-060311

Method: **7471A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16411BB221342	6/14/2011 1:42:00 PM	MERCURY	0.0044 mg/Kg	DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **7471A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP-13-SA5DN-QC-060311(RES)	MERCURY	0.0175 mg/Kg	0.0175U mg/Kg
SL-019-SA5DN-SB-9.0-10.0(RES)	MERCURY	0.0162 mg/Kg	0.0162U mg/Kg
SL-027-SA5DN-SB-14.0-15.0(RES)	MERCURY	0.0119 mg/Kg	0.0119U mg/Kg
SL-027-SA5DN-SB-4.0-5.0(RES)	MERCURY	0.0185 mg/Kg	0.0185U mg/Kg
SL-052-SA5DN-SB-9.0-10.0(RES)	MERCURY	0.0044 mg/Kg	0.0044U mg/Kg
SL-152-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0136 mg/Kg	0.0136U mg/Kg
SL-157-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0110 mg/Kg	0.0110U mg/Kg
SL-160-SA5DN-SS-0.0-0.5(RES)	MERCURY	0.0165 mg/Kg	0.0165U mg/Kg

Method: **8151A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P66665AB240051A	6/18/2011 12:51:00 AM	MCPP	150 ug/Kg	DUP-13-SA5DN-QC-060311 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-182-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB78B211215A	6/8/2011 12:15:00 PM	ACETONE METHYLENE CHLORIDE	8.7 ug/Kg 1.0 ug/Kg	SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-019-SA5DN-SB-4.0-5.0(RES)	ACETONE	14 ug/Kg	14U ug/Kg
SL-019-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.6U ug/Kg
SL-019-SA5DN-SB-9.0-10.0(RES)	ACETONE	12 ug/Kg	12U ug/Kg
SL-019-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	5.0 ug/Kg	5.0U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-027-SA5DN-SB-14.0-15.0(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-027-SA5DN-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	5.5 ug/Kg	5.5U ug/Kg
SL-027-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.0 ug/Kg	9.0U ug/Kg
SL-027-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.2U ug/Kg
SL-052-SA5DN-SB-4.0-5.0(RES)	ACETONE	10 ug/Kg	10U ug/Kg
SL-052-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.5U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLD16B261938	6/21/2011 7:38:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	71 ug/Kg	DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB13-SA5DN-SS-060311 (RES)	6/3/2011 1:30:00 PM	1-METHYLNAPHTHALENE	0.026 ug/L	DUP-13-SA5DN-QC-060311
		2-METHYLNAPHTHALENE	0.026 ug/L	SL-152-SA5DN-SS-0.0-0.5
		BIS(2-ETHYLHEXYL)PHTHALATE	0.055 ug/L	SL-153-SA5DN-SS-0.0-0.5
		Di-n-butylphthalate	0.065 ug/L	SL-154-SA5DN-SS-0.0-0.5
		NAPHTHALENE	0.16 ug/L	SL-155-SA5DN-SS-0.0-0.5
				SL-156-SA5DN-SS-0.0-0.5
				SL-157-SA5DN-SS-0.0-0.5
				SL-158-SA5DN-SS-0.0-0.5
				SL-159-SA5DN-SS-0.0-0.5
				SL-160-SA5DN-SS-0.0-0.5
				SL-162-SA5DN-SS-0.0-0.5
				SL-166-SA5DN-SS-0.0-0.5
				SL-207-SA5DN-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-154-SA5DN-SS-0.0-0.5(RES)	NAPHTHALENE	0.75 ug/Kg	1.8U ug/Kg
SL-160-SA5DN-SS-0.0-0.5(RES)	NAPHTHALENE	0.71 ug/Kg	1.7U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 | Laboratory: LL

EDD Filename: DE173_v2 | eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (SL-155-SA5DN-SS-0.0-0.5)	HEPTACHLOR	130	142	13.00-126.00	-	HEPTACHLOR	J (all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-155-SA5DN-SS-0.0-0.5MSD (SL-155-SA5DN-SS-0.0-0.5)	2,4,5-T	-	-	10.00-156.00	36 (35.00)	2,4,5-T	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-155-SA5DN-SS-0.0-0.5MSD (SL-155-SA5DN-SS-0.0-0.5)	4-CHLOROANILINE	-	-	23.00-95.00	33 (30.00)	4-CHLOROANILINE	J(all detects)
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (SL-155-SA5DN-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (SL-155-SA5DN-SS-0.0-0.5)	1,4-DICHLOROBENZENE	-	69	70.00-100.00	-	1,4-DICHLOROBENZENE	J(all detects) UJ(all non-detects)
	2,4,5-TRICHLOROPHENOL	-	76	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	-	77	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	77	76	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2-METHYLNAPHTHALENE	72	71	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	-	73	75.00-111.00	-	2-METHYLPHENOL	
	4-CHLORO-3-METHYLPHENOL	74	74	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	77	74	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	68	65	71.00-111.00	-	4-METHYLPHENOL	
	ACENAPHTHYLENE	80	77	81.00-110.00	-	ACENAPHTHYLENE	
	FLUORENE	76	74	77.00-111.00	-	FLUORENE	
	N-NITROSODIPHENYLAMINE	82	81	86.00-145.00	-	N-NITROSODIPHENYLAMINE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5)	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	275 154 178 235 191 216 242 182 163 163 293 412	210 144 160 194 176 193 204 159 154 149 251 346	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - - - - - -	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	J(all detects) V, Zn, No Qual, >4x
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5)	ANTIMONY	66	66	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5)	SELENIUM	143	138	75.00-125.00	-	SELENIUM	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

***Method:* 6020**
***Matrix:* SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5)	MOLYBDENUM	175	163	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5)	BARIUM	-159	-227	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

***Method:* 6010B**
***Matrix:* SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5)	ALUMINUM CALCIUM MAGNESIUM POTASSIUM TITANIUM	1984 184 241 143 476	1712 195 181 129 583	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM MAGNESIUM POTASSIUM TITANIUM	No Qual, >4x
SL-155-SA5DN-SS-0.0-0.5MS SL-155-SA5DN-SS-0.0-0.5MSD (DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5)	IRON	-661	2110	75.00-125.00	-	IRON	No Qual, >4x

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

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-155-SA5DN-SS-0.0-0.5MSD (SL-155-SA5DN-SS-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT N-NITROSODIMETHYLAMINE	- -	205 -	39.00-167.00 48.00-113.00	58 (30.00) 48 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA N-NITROSODIMETHYLAMINE	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

***Method:* 300.0**

***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-155-SA5DN-SS-0.0-0.5MS (SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5)	FLUORIDE	56	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-166-SA5DN-SS-0.0-0.5MS (DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-14.0-15.0 SL-027-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5)	FLUORIDE	48	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE173 Laboratory: LL

EDD Filename: DE173_v2 eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-155-SA5DN-SS-0.0-0.5DUP (SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5)	FLUORIDE	25	20.00	No Qual, OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-155-SA5DN-SS-0.0-0.5DUP	ARSENIC	23	20.00	
(DUP-13-SA5DN-QC-060311	BARIUM	26	20.00	
SL-019-SA5DN-SB-4.0-5.0	BERYLLIUM	26	20.00	
SL-019-SA5DN-SB-9.0-10.0	CADMIUM	26	20.00	
SL-027-SA5DN-SB-14.0-15.0	COBALT	25	20.00	
SL-027-SA5DN-SB-4.0-5.0	LEAD	27	20.00	J(all detects)
SL-052-SA5DN-SB-4.0-5.0	MOLYBDENUM	27	20.00	UJ(all non-detects)
SL-052-SA5DN-SB-9.0-10.0	SELENIUM	22	20.00	
SL-152-SA5DN-SS-0.0-0.5	SILVER	24	20.00	
SL-153-SA5DN-SS-0.0-0.5	THALLIUM	28	20.00	
SL-154-SA5DN-SS-0.0-0.5				
SL-155-SA5DN-SS-0.0-0.5				
SL-156-SA5DN-SS-0.0-0.5				
SL-157-SA5DN-SS-0.0-0.5				Cd, Se, Ag, Tl,
SL-158-SA5DN-SS-0.0-0.5				No Qual,
SL-159-SA5DN-SS-0.0-0.5				OK by Difference
SL-160-SA5DN-SS-0.0-0.5				
SL-162-SA5DN-SS-0.0-0.5				
SL-166-SA5DN-SS-0.0-0.5				
SL-207-SA5DN-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-155-SA5DN-SS-0.0-0.5DUP (DUP-13-SA5DN-QC-060311 SL -019-SA5DN-SB-4.0-5.0 SL -019-SA5DN-SB-9.0-10.0 SL -027-SA5DN-SB-14.0-15.0 SL -027-SA5DN-SB-4.0-5.0 SL -052-SA5DN-SB-4.0-5.0 SL -052-SA5DN-SB-9.0-10.0 SL -152-SA5DN-SS-0.0-0.5 SL -153-SA5DN-SS-0.0-0.5 SL -154-SA5DN-SS-0.0-0.5 SL -155-SA5DN-SS-0.0-0.5 SL -156-SA5DN-SS-0.0-0.5 SL -157-SA5DN-SS-0.0-0.5 SL -158-SA5DN-SS-0.0-0.5 SL -159-SA5DN-SS-0.0-0.5 SL -160-SA5DN-SS-0.0-0.5 SL -162-SA5DN-SS-0.0-0.5 SL -166-SA5DN-SS-0.0-0.5 SL -207-SA5DN-SS-0.0-0.5)	HEXAVALENT CHROMIUM	69	20.00	No Qual, OK by Difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11570AQ242021A P11570AY242034A (EB13-SA5DN-SS-060311)	4,4'-DDE ENDOSULFAN I	142 130	142 130	66.00-130.00 68.00-128.00	- -	4,4'-DDE ENDOSULFAN I	J (all detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WELCSY260343 (EB13-SA5DN-SS-060311 EB14-SA5DN-SB-060311)	Di-n-octylphthalate	-	148	57.00-145.00	43 (30.00)	Di-n-octylphthalate	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WILCSQ261304 P8WILCSY261354 (EB13-SA5DN-SS-060311 EB14-SA5DN-SB-060311)	1,2,4-TRICHLOROBENZENE	114	114	71.00-112.00	-	1,2,4-TRICHLOROBENZENE	J(all detects)
	1,2-Diphenylhydrazine/Azobenzen	140	137	78.00-116.00	-	1,2-Diphenylhydrazine/Azobenz	
	2,4,5-TRICHLOROPHENOL	131	134	79.00-107.00	-	2,4,5-TRICHLOROPHENOL	
	2,4,6-TRICHLOROPHENOL	133	134	81.00-113.00	-	2,4,6-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	129	133	80.00-109.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	126	130	72.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROPHENOL	142	149	52.00-131.00	-	2,4-DINITROPHENOL	
	2,4-DINITROTOLUENE	131	132	81.00-115.00	-	2,4-DINITROTOLUENE	
	2,6-DINITROTOLUENE	130	131	85.00-115.00	-	2,6-DINITROTOLUENE	
	2-CHLOROPHENOL	130	132	77.00-108.00	-	2-CHLOROPHENOL	
	2-METHYLPHENOL	120	122	64.00-101.00	-	2-METHYLPHENOL	
	2-NITROANILINE	134	135	83.00-116.00	-	2-NITROANILINE	
	2-NITROPHENOL	131	134	86.00-120.00	-	2-NITROPHENOL	
	3-NITROANILINE	126	125	74.00-113.00	-	3-NITROANILINE	
	4,6-DINITRO-2-METHYLPHENOL	143	145	78.00-119.00	-	4,6-DINITRO-2-METHYLPHEN	
	4-BROMOPHENYL-PHENYLETH	127	129	82.00-117.00	-	4-BROMOPHENYL-PHENYLET	
	4-CHLORO-3-METHYLPHENOL	127	131	70.00-123.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	127	123	82.00-111.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	105	107	61.00-103.00	-	4-METHYLPHENOL	
	4-NITROANILINE	109	105	59.00-100.00	-	4-NITROANILINE	
	ANILINE	109	110	49.00-101.00	-	ANILINE	
	BENZYL ALCOHOL	109	107	66.00-97.00	-	BENZYL ALCOHOL	
	BIS(2-CHLOROETHOXY)METHA	127	131	74.00-124.00	-	BIS(2-CHLOROETHOXY)METH	
	BIS(2-CHLOROETHYL) ETHER	121	126	77.00-108.00	-	BIS(2-CHLOROETHYL) ETHER	
	CARBAZOLE	129	130	81.00-114.00	-	CARBAZOLE	
	DIBENZOFURAN	128	126	83.00-108.00	-	DIBENZOFURAN	
	HEXACHLOROBENZENE	130	131	81.00-118.00	-	HEXACHLOROBENZENE	
	ISOPHORONE	128	132	74.00-117.00	-	ISOPHORONE	
	NITROBENZENE	123	129	75.00-109.00	-	NITROBENZENE	
	N-NITROSO-DI-N-PROPYLAMIN	126	127	69.00-110.00	-	N-NITROSO-DI-N-PROPYLAMI	
	PENTACHLOROPHENOL	128	129	53.00-110.00	-	PENTACHLOROPHENOL	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11604AQ242321A (DUP-13-SA5DN -QC-060311 SL -019-SA5DN -SB-4.0-5.0 SL -019-SA5DN -SB-9.0-10.0 SL -027-SA5DN -SB-14.0-15.0 SL -027-SA5DN -SB-4.0-5.0 SL -052-SA5DN -SB-4.0-5.0 SL -052-SA5DN -SB-9.0-10.0 SL -152-SA5DN -SS-0.0-0.5 SL -153-SA5DN -SS-0.0-0.5 SL -154-SA5DN -SS-0.0-0.5 SL -155-SA5DN -SS-0.0-0.5 SL -156-SA5DN -SS-0.0-0.5 SL -157-SA5DN -SS-0.0-0.5 SL -158-SA5DN -SS-0.0-0.5 SL -159-SA5DN -SS-0.0-0.5 SL -160-SA5DN -SS-0.0-0.5 SL -162-SA5DN -SS-0.0-0.5 SL -166-SA5DN -SS-0.0-0.5 SL -207-SA5DN -SS-0.0-0.5)	Aroclor 5442	112	-	36.00-106.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11612AQ241935A (DUP-13-SA5DN -QC-060311 SL -152-SA5DN -SS-0.0-0.5 SL -153-SA5DN -SS-0.0-0.5 SL -154-SA5DN -SS-0.0-0.5 SL -155-SA5DN -SS-0.0-0.5 SL -156-SA5DN -SS-0.0-0.5 SL -157-SA5DN -SS-0.0-0.5 SL -158-SA5DN -SS-0.0-0.5 SL -159-SA5DN -SS-0.0-0.5 SL -160-SA5DN -SS-0.0-0.5 SL -162-SA5DN -SS-0.0-0.5 SL -166-SA5DN -SS-0.0-0.5 SL -207-SA5DN -SS-0.0-0.5)	HEPTACHLOR	130	-	43.00-124.00	-	HEPTACHLOR	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11678AQ240711A	2,4,6-TRINITROTOLUENE	128	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	J(all detects)
(SL-019-SA5DN -SB-4.0-5.0	2,6-DINITROTOLUENE	123	-	80.00-120.00	-	2,6-DINITROTOLUENE	
SL -019-SA5DN -SB-9.0-10.0	2-AMINO-4,6-DINITROTOLUENE	125	-	80.00-120.00	-	2-AMINO-4,6-DINITROTOLUEN	
SL -027-SA5DN -SB-14.0-15.0	4-AMINO-2,6-DINITROTOLUENE	122	-	80.00-120.00	-	4-AMINO-2,6-DINITROTOLUEN	
SL -027-SA5DN -SB-4.0-5.0	NITROBENZENE	127	-	80.00-120.00	-	NITROBENZENE	
SL -207-SA5DN -SS-0.0-0.5)	PETN	126	-	80.00-120.00	-	PETN	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0LELCSQ261213	3,3'-DICHLOROBENZIDINE	116	-	24.00-101.00	-	3,3'-DICHLOROBENZIDINE	J(all detects)
(DUP-13-SA5DN-QC-060311	ANILINE	101	-	34.00-94.00	-	ANILINE	
SL-019-SA5DN-SB-4.0-5.0							
SL-019-SA5DN-SB-9.0-10.0							
SL-027-SA5DN-SB-14.0-15.0							
SL-027-SA5DN-SB-4.0-5.0							
SL-052-SA5DN-SB-4.0-5.0							
SL-052-SA5DN-SB-9.0-10.0							
SL-152-SA5DN-SS-0.0-0.5							
SL-153-SA5DN-SS-0.0-0.5							
SL-154-SA5DN-SS-0.0-0.5							
SL-155-SA5DN-SS-0.0-0.5							
SL-156-SA5DN-SS-0.0-0.5							
SL-157-SA5DN-SS-0.0-0.5							
SL-158-SA5DN-SS-0.0-0.5							
SL-159-SA5DN-SS-0.0-0.5							
SL-160-SA5DN-SS-0.0-0.5							
SL-162-SA5DN-SS-0.0-0.5							
SL-166-SA5DN-SS-0.0-0.5							
SL-207-SA5DN-SS-0.0-0.5)							

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16426BQ221133A	ANTIMONY	135	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits
(DUP-13-SA5DN-QC-060311							
SL-019-SA5DN-SB-4.0-5.0							
SL-019-SA5DN-SB-9.0-10.0							
SL-027-SA5DN-SB-14.0-15.0							
SL-027-SA5DN-SB-4.0-5.0							
SL-052-SA5DN-SB-4.0-5.0							
SL-052-SA5DN-SB-9.0-10.0							
SL-152-SA5DN-SS-0.0-0.5							
SL-153-SA5DN-SS-0.0-0.5							
SL-154-SA5DN-SS-0.0-0.5							
SL-155-SA5DN-SS-0.0-0.5							
SL-156-SA5DN-SS-0.0-0.5							
SL-157-SA5DN-SS-0.0-0.5							
SL-158-SA5DN-SS-0.0-0.5							
SL-159-SA5DN-SS-0.0-0.5							
SL-160-SA5DN-SS-0.0-0.5							
SL-162-SA5DN-SS-0.0-0.5							
SL-166-SA5DN-SS-0.0-0.5							
SL-207-SA5DN-SS-0.0-0.5)							

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P7LDLCSQ262010	Di-n-butylphthalate	74	-	84.00-132.00	-	Di-n-butylphthalate	J(all detects) UJ(all non-detects)
(DUP-13-SA5DN -QC-060311 SL -019-SA5DN -SB-4.0-5.0 SL -019-SA5DN -SB-9.0-10.0 SL -027-SA5DN -SB-14.0-15.0 SL -027-SA5DN -SB-4.0-5.0 SL -052-SA5DN -SB-4.0-5.0 SL -052-SA5DN -SB-9.0-10.0 SL -152-SA5DN -SS-0.0-0.5 SL -153-SA5DN -SS-0.0-0.5 SL -154-SA5DN -SS-0.0-0.5 SL -155-SA5DN -SS-0.0-0.5 SL -156-SA5DN -SS-0.0-0.5 SL -157-SA5DN -SS-0.0-0.5 SL -158-SA5DN -SS-0.0-0.5 SL -159-SA5DN -SS-0.0-0.5 SL -160-SA5DN -SS-0.0-0.5 SL -162-SA5DN -SS-0.0-0.5 SL -166-SA5DN -SS-0.0-0.5 SL -207-SA5DN -SS-0.0-0.5)	FLUORANTHENE	77	-	78.00-120.00	-	FLUORANTHENE	

Surrogate Outlier Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-207-SA5DN-SS-0.0-0.5	n-Triacontane-d62	14	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-153-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	48	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-166-SA5DN-SS-0.0-0.5	TETRACHLORO-M-XYLENE	35	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-159-SA5DN-SS-0.0-0.5	DECACHLOROBIPHENYL	122	45.00-120.00	All Target Analytes	J(all detects)

Method: 8151A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-156-SA5DN-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	277	36.00-156.00	All Target Analytes	J(all detects)

Method: 8315A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-019-SA5DN-SB-4.0-5.0	Butyraldehyde	59	64.00-126.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-027-SA5DN-SB-14.0-15.0	Butyraldehyde	49	64.00-126.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-027-SA5DN-SB-4.0-5.0	Butyraldehyde	42	64.00-126.00	All Target Analytes	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
MOISTURE	4.4	4.6	4		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
FLUORIDE	1.6	1.7	6	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
ALUMINUM	19800	20400	3	50.00	
CALCIUM	4280	4440	4	50.00	
IRON	27800	26400	5	50.00	
LITHIUM	23.8	24.9	5	50.00	
MAGNESIUM	5850	6170	5	50.00	
MANGANESE	421	428	2	50.00	
PHOSPHORUS	530	575	8	50.00	No Qualifiers Applied
POTASSIUM	5630	5850	4	50.00	
SODIUM	90.7	92.0	1	50.00	
STRONTIUM	27.6	28.3	3	50.00	
TIN	3.35	3.19	5	50.00	
TITANIUM	1500	1510	1	50.00	
Zirconium	7.52	7.67	2	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
ANTIMONY	0.339	0.252	29	50.00	
ARSENIC	7.79	6.29	21	50.00	
BARIUM	144	116	22	50.00	
BERYLLIUM	0.815	0.636	25	50.00	
CADMIUM	0.423	0.365	15	50.00	
CHROMIUM	33.0	27.8	17	50.00	
COBALT	12.0	9.72	21	50.00	
COPPER	17.5	14.7	17	50.00	
LEAD	11.8	8.67	31	50.00	No Qualifiers Applied
MOLYBDENUM	0.903	0.736	20	50.00	
NICKEL	20.5	17.7	15	50.00	
SELENIUM	0.247	0.204	19	50.00	
SILVER	0.0436	0.0381	13	50.00	
THALLIUM	0.419	0.298	34	50.00	
VANADIUM	55.3	47.4	15	50.00	
ZINC	87.7	75.6	15	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
HEXAVALENT CHROMIUM	0.32	1.0 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
MERCURY	0.0998 U	0.0175	200	50.00	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Chlordane	2.5	4.0	46	50.00	No Qualifiers Applied
4,4'-DDE	0.29	0.45 U	200	50.00	J(all detects) UJ(all non-detects)
4,4'-DDT	0.37	0.36 U	200	50.00	
DELTA-BHC	0.063	0.17 U	200	50.00	
ENDOSULFAN II	0.15	0.36 U	200	50.00	
ENDRIN ALDEHYDE	0.23	0.36 U	200	50.00	
ENDRIN KETONE	0.36 U	0.075	200	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
AROCLOR 1260	1.6	1.6	0	50.00	No Qualifiers Applied
Aroclor 5460	3.5	2.7	26	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
BENZO(A)PYRENE	1.1	1.1	0	50.00	No Qualifiers Applied
BENZO(B)FLUORANTHENE	4.1	3.5	16	50.00	
BENZO(K)FLUORANTHENE	0.73	0.82	12	50.00	
FLUORANTHENE	2.6	2.5	4	50.00	
NAPHTHALENE	0.96	0.88	9	50.00	
PHENANTHRENE	1.6	1.7	6	50.00	
PYRENE	1.7	1.5	12	50.00	
BENZO(A)ANTHRACENE	1.7 U	0.79	200	50.00	J(all detects) UJ(all non-detects)
CHRYSENE	5.4	1.9	96	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
BIS(2-ETHYLHEXYL)PHTHALATE	23	22	4	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
PH	7.00	7.06	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB13-SA5DN-SS-060311	LEAD	J	0.000062	0.0010	PQL	mg/L	J (all detects)
EB14-SA5DN-SB-060311	LEAD	J	0.000064	0.0010	PQL	mg/L	J (all detects)

Method: 8081A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB13-SA5DN-SS-060311	HEPTACHLOR	J	0.0086	0.010	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB13-SA5DN-SS-060311	1-METHYLNAPHTHALENE	J	0.026	0.053	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.026	0.053	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.055	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.065	1.1	PQL	ug/L	
EB14-SA5DN-SB-060311	1-METHYLNAPHTHALENE	J	0.028	0.051	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.026	0.051	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.057	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.067	1.0	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-019-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)
SL-019-SA5DN-SB-9.0-10.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5DN-QC-060311	SODIUM	J	92.0	101	PQL	mg/Kg	J (all detects)
	TIN	J	3.19	10.1	PQL	mg/Kg	
SL-019-SA5DN-SB-4.0-5.0	TIN	J	3.37	11.4	PQL	mg/Kg	J (all detects)
SL-019-SA5DN-SB-9.0-10.0	TIN	J	3.22	10.9	PQL	mg/Kg	J (all detects)
SL-027-SA5DN-SB-14.0-15.0	TIN	J	3.33	10.8	PQL	mg/Kg	J (all detects)
SL-027-SA5DN-SB-4.0-5.0	TIN	J	3.29	11.5	PQL	mg/Kg	J (all detects)
SL-052-SA5DN-SB-4.0-5.0	TIN	J	3.13	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.50	5.58	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5DN-SB-9.0-10.0	BORON TIN	J J	10.4 3.27	28.1 11.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-152-SA5DN-SS-0.0-0.5	BORON TIN	J J	14.0 4.34	26.3 10.5	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-153-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	87.4 3.34	106 10.6	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-154-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	94.4 3.45	108 10.8	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-155-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	90.7 3.35	104 10.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-156-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	79.6 3.31	108 10.8	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-157-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	90.7 3.24	108 10.8	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-158-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	87.7 3.26	106 10.6	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-159-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	93.5 3.40	108 10.8	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-160-SA5DN-SS-0.0-0.5	TIN	J	3.29	10.2	PQL	mg/Kg	J (all detects)
SL-162-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	98.6 3.70	108 10.8	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-166-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	87.7 3.40	108 10.8	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-207-SA5DN-SS-0.0-0.5	SODIUM TIN	J J	94.7 3.47	105 10.5	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5DN-QC-060311	SELENIUM SILVER	J J	0.204 0.0381	0.411 0.103	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-019-SA5DN-SB-4.0-5.0	SILVER	J	0.0629	0.115	PQL	mg/Kg	J (all detects)
SL-019-SA5DN-SB-9.0-10.0	ANTIMONY SILVER	J J	0.212 0.0445	0.218 0.109	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-027-SA5DN-SB-14.0-15.0	ANTIMONY SILVER	J J	0.117 0.0434	0.213 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-027-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0939 0.0659	0.446 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-052-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.136 0.0528	0.429 0.107	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-152-SA5DN-SS-0.0-0.5	SELENIUM	J	0.369	0.425	PQL	mg/Kg	J (all detects)
SL-153-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.176 0.0737	0.423 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-154-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.257 0.0571	0.427 0.107	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-155-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.247 0.0436	0.406 0.102	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-156-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.226 0.0398	0.442 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-157-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.253 0.0381	0.434 0.109	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-158-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.242 0.0290	0.424 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-159-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.223 0.0268	0.436 0.109	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-160-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.257 0.0232	0.399 0.0996	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-162-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.270 0.0322	0.429 0.107	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-166-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.267 0.0656	0.428 0.107	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-207-SA5DN-SS-0.0-0.5	SELENIUM SILVER	J J	0.208 0.0572	0.421 0.105	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.53	1.1	PQL	mg/Kg	J (all detects)
SL-052-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.33	1.1	PQL	mg/Kg	J (all detects)
SL-152-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.65	1.1	PQL	mg/Kg	J (all detects)
SL-154-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-155-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.0	PQL	mg/Kg	J (all detects)
SL-157-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-160-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.0	PQL	mg/Kg	J (all detects)
SL-162-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.69	1.1	PQL	mg/Kg	J (all detects)
SL-207-SA5DN-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.37	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5DN-QC-060311	MERCURY	J	0.0175	0.0989	PQL	mg/Kg	J (all detects)
SL-019-SA5DN-SB-4.0-5.0	MERCURY	J	0.0294	0.115	PQL	mg/Kg	J (all detects)
SL-019-SA5DN-SB-9.0-10.0	MERCURY	J	0.0162	0.108	PQL	mg/Kg	J (all detects)
SL-027-SA5DN-SB-14.0-15.0	MERCURY	J	0.0119	0.110	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA5DN-SB-4.0-5.0	MERCURY	J	0.0185	0.109	PQL	mg/Kg	J (all detects)
SL-052-SA5DN-SB-9.0-10.0	MERCURY	J	0.0044	0.111	PQL	mg/Kg	J (all detects)
SL-152-SA5DN-SS-0.0-0.5	MERCURY	J	0.0136	0.104	PQL	mg/Kg	J (all detects)
SL-153-SA5DN-SS-0.0-0.5	MERCURY	J	0.0496	0.103	PQL	mg/Kg	J (all detects)
SL-156-SA5DN-SS-0.0-0.5	MERCURY	J	0.0247	0.106	PQL	mg/Kg	J (all detects)
SL-157-SA5DN-SS-0.0-0.5	MERCURY	J	0.0110	0.110	PQL	mg/Kg	J (all detects)
SL-159-SA5DN-SS-0.0-0.5	MERCURY	J	0.0261	0.105	PQL	mg/Kg	J (all detects)
SL-160-SA5DN-SS-0.0-0.5	MERCURY	J	0.0165	0.0991	PQL	mg/Kg	J (all detects)
SL-162-SA5DN-SS-0.0-0.5	MERCURY	J	0.0274	0.111	PQL	mg/Kg	J (all detects)
SL-166-SA5DN-SS-0.0-0.5	MERCURY	J	0.0316	0.111	PQL	mg/Kg	J (all detects)
SL-207-SA5DN-SS-0.0-0.5	MERCURY	J	0.0657	0.103	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-207-SA5DN-SS-0.0-0.5	EFH (C15-C20)	J	7.4	13	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5DN-QC-060311	ENDRIN KETONE	J	0.075	0.36	PQL	ug/Kg	J (all detects)
SL-152-SA5DN-SS-0.0-0.5	4,4'-DDD	J	0.26	0.91	PQL	ug/Kg	J (all detects)
SL-153-SA5DN-SS-0.0-0.5	4,4'-DDE	J	0.093	0.37	PQL	ug/Kg	J (all detects)
	Chlordane	J	1.8	3.7	PQL	ug/Kg	
	ENDOSULFAN II	J	0.099	0.37	PQL	ug/Kg	
SL-154-SA5DN-SS-0.0-0.5	BETA-BHC	J	0.15	0.18	PQL	ug/Kg	J (all detects)
	Chlordane	J	3.1	3.7	PQL	ug/Kg	
	ENDRIN KETONE	J	0.14	0.37	PQL	ug/Kg	
SL-155-SA5DN-SS-0.0-0.5	4,4'-DDE	J	0.29	0.36	PQL	ug/Kg	J (all detects)
	Chlordane	J	2.5	3.6	PQL	ug/Kg	
	DELTA-BHC	J	0.063	0.17	PQL	ug/Kg	
	ENDOSULFAN II	J	0.15	0.36	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.23	0.36	PQL	ug/Kg	
SL-156-SA5DN-SS-0.0-0.5	4,4'-DDT	J	0.27	0.38	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.14	0.38	PQL	ug/Kg	
SL-157-SA5DN-SS-0.0-0.5	Chlordane	J	3.5	3.8	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.048	0.19	PQL	ug/Kg	
SL-158-SA5DN-SS-0.0-0.5	4,4'-DDT	J	0.35	0.37	PQL	ug/Kg	J (all detects)
	Chlordane	J	2.1	3.7	PQL	ug/Kg	
	DELTA-BHC	J	0.058	0.18	PQL	ug/Kg	
	ENDRIN KETONE	J	0.084	0.37	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-159-SA5DN-SS-0.0-0.5	Chlordane DELTA-BHC	J J	3.3 0.067	3.8 0.19	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-160-SA5DN-SS-0.0-0.5	4,4'-DDE Chlordane ENDOSULFAN I	J J J	0.16 1.1 0.064	0.35 3.5 0.17	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-162-SA5DN-SS-0.0-0.5	4,4'-DDD BETA-BHC DELTA-BHC	J J J	0.31 0.14 0.042	0.38 0.19 0.19	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-166-SA5DN-SS-0.0-0.5	Chlordane ENDRIN ALDEHYDE	J J	1.1 0.13	3.8 0.38	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5DN-QC-060311	AROCLOR 1260 Aroclor 5460	J J	1.6 2.7	1.8 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-027-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	0.46	2.0	PQL	ug/Kg	J (all detects)
SL-052-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	0.57	1.9	PQL	ug/Kg	J (all detects)
SL-152-SA5DN-SS-0.0-0.5	Aroclor 5460	J	1.3	3.5	PQL	ug/Kg	J (all detects)
SL-154-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	0.70	1.9	PQL	ug/Kg	J (all detects)
SL-155-SA5DN-SS-0.0-0.5	AROCLOR 1260	J	1.6	1.8	PQL	ug/Kg	J (all detects)
SL-156-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.2 2.3	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-157-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.3 1.5	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-158-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.1 1.8	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-159-SA5DN-SS-0.0-0.5	Aroclor 5460	J	3.4	3.7	PQL	ug/Kg	J (all detects)
SL-162-SA5DN-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.3 1.9	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-157-SA5DN-SS-0.0-0.5	DICAMBA	J	0.46	1.3	PQL	ug/Kg	J (all detects)
SL-207-SA5DN-SS-0.0-0.5	MCPA	J	220	270	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-019-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.2	4.6	PQL	ug/Kg	J (all detects)
SL-027-SA5DN-SB-14.0-15.0	TOLUENE	J	0.09	4.2	PQL	ug/Kg	J (all detects)
SL-027-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.2	4.2	PQL	ug/Kg	J (all detects)
SL-052-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.4	4.5	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5DN-QC-060311	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	350	PQL	ug/Kg	J (all detects)
SL-019-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)
SL-027-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	380	PQL	ug/Kg	J (all detects)
SL-152-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	44	360	PQL	ug/Kg	J (all detects)
SL-153-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	360	PQL	ug/Kg	J (all detects)
SL-154-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	360	PQL	ug/Kg	J (all detects)
SL-155-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	350	PQL	ug/Kg	J (all detects)
SL-156-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	44	370	PQL	ug/Kg	J (all detects)
SL-157-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	61	370	PQL	ug/Kg	J (all detects)
SL-158-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	360	PQL	ug/Kg	J (all detects)
SL-159-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	370	PQL	ug/Kg	J (all detects)
SL-166-SA5DN-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-13-SA5DN-QC-060311	BENZO(A)ANTHRACENE	J	0.79	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.82	1.7	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.88	1.7	PQL	ug/Kg	
	PYRENE	J	1.5	1.7	PQL	ug/Kg	
SL-019-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	0.78	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	
	PYRENE	J	0.80	1.9	PQL	ug/Kg	
SL-019-SA5DN-SB-9.0-10.0	PYRENE	J	0.97	1.8	PQL	ug/Kg	J (all detects)
SL-152-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.79	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.81	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-153-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.79	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.99	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.90	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.8	PQL	ug/Kg	
	PYRENE	J	1.6	1.8	PQL	ug/Kg	
SL-154-SA5DN-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.77	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.84	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.75	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.98	1.8	PQL	ug/Kg	
	PYRENE	J	1.6	1.8	PQL	ug/Kg	
SL-155-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.73	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.96	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.7	PQL	ug/Kg	
SL-156-SA5DN-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.90	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	
SL-157-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	0.76	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.99	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.9	PQL	ug/Kg	
	PYRENE	J	1.3	1.9	PQL	ug/Kg	
SL-158-SA5DN-SS-0.0-0.5	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.97	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	
	PYRENE	J	1.0	1.8	PQL	ug/Kg	
SL-159-SA5DN-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
SL-160-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.1	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.71	1.7	PQL	ug/Kg	
SL-162-SA5DN-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
SL-166-SA5DN-SS-0.0-0.5	BENZO(A)PYRENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.86	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.92	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.9	PQL	ug/Kg	
	PYRENE	J	1.6	1.9	PQL	ug/Kg	
SL-207-SA5DN-SS-0.0-0.5	Di-n-butylphthalate	J	6.9	19	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.5	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE173 **Laboratory: LL**

EDD Filename: DE173_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8315A**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-207-SA5DN-SS-0.0-0.5	FORMALDEHYDE	J	1500	1600	PQL	ug/Kg	J (all detects)

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 3, 2011
LDC Report Date:	October 6, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE173

Sample Identification

SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-052-SA5DN-SB-4.0-5.0
TB-060311

Introduction

This data review covers 5 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/8/11	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	51 49 56 64 45	All soil samples in SDG DE173	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB78	6/8/11	Acetone Methylene chloride	8.7 ug/Kg 1.0 ug/Kg	All soil samples in SDG DE173

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-019-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	14 ug/Kg 1.2 ug/Kg	14U ug/Kg 4.6U ug/Kg
SL-019-SA5DN-SB-9.0-10.0	Acetone Methylene chloride	12 ug/Kg 5.0 ug/Kg	12U ug/Kg 5.0U ug/Kg
SL-027-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	9.0 ug/Kg 1.2 ug/Kg	9.0U ug/Kg 4.2U ug/Kg
SL-027-SA5DN-SB-14.0-15.0	Acetone Methylene chloride	11 ug/Kg 5.5 ug/Kg	11U ug/Kg 5.5U ug/Kg
SL-052-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	10 ug/Kg 1.4 ug/Kg	10U ug/Kg 4.5U ug/Kg

Sample TB-060311 was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0	Acetone 2-Butanone 4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE173	SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 TB-060311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE173

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE173	SL-019-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	14U ug/Kg 4.6U ug/Kg	A	B
DE173	SL-019-SA5DN-SB-9.0-10.0	Acetone Methylene chloride	12U ug/Kg 5.0U ug/Kg	A	B
DE173	SL-027-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	9.0U ug/Kg 4.2U ug/Kg	A	B
DE173	SL-027-SA5DN-SB-14.0-15.0	Acetone Methylene chloride	11U ug/Kg 5.5U ug/Kg	A	B
DE173	SL-052-SA5DN-SB-4.0-5.0	Acetone Methylene chloride	10U ug/Kg 4.5U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D1a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11

SDG #: DE173 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20%
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 6

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

Validated Samples: soil + water

1 1	SL-019-SA5DN-SB-4.0-5.0	11 1	VBLKB78	21		31	
2 1	SL-019-SA5DN-SB-9.0-10.0	12 2	VBLKL89	22		32	
3 1	SL-027-SA5DN-SB-4.0-5.0	13		23		33	
4 1	SL-027-SA5DN-SB-14.0-15.0	14		24		34	
5 1	SL-052-SA5DN-SB-4.0-5.0	15		25		35	
6 2	TB-060311	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26277D1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

DC #: 26277Dla

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26277P/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <25.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	6/8/11	BU08C01-CCV	F	51		All soils	J/UJ/A (C)
			M	49			
			Y	56			
			Z	64			
			MM	45			

LDC #: 26277D1a

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 6/8/11
Conc. units: ug/Kg Associated Samples: All 8015

Compound	Blank ID	10X	Sample Identification							
	VBLKB78		1	2	3	4	5			
F	8.7	87	14/4	12/4	9.0/4	11/4	10/4			
E	1.0	10	1.2/4.6U	5.0/4	1.2/4.2U	5.5/4	1.4/4.5U			
CRQL										

Blank analysis date:
Conc. units: Associated Samples:

Compound	Blank ID	Sample Identification								
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277D1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	C (1st internal standard)	0.3569	0.3569	0.3517	0.3517	7	7
			CC (2nd internal standard)	0.9017	0.9017	0.8572	0.8572	5	5
			BB (3rd internal standard)	0.6820	0.6820	0.6887	0.6887	7	7
			(4th internal standard)						
2	ICAL	4/21/11	C (1st internal standard)	0.3956	0.3956	0.4093	0.4093	4	4
			CC (2nd internal standard)	1.0058	1.0058	1.0092	1.0092	2	2
			BB (3rd internal standard)	1.1471	1.1471	1.1204	1.1204	3	3
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	BU08C01	6/8/11	C (1st internal standard)	0.3517	0.3174	0.3174	10	10
			CC (2nd internal standard)	0.8572	0.8595	0.8595	0	0
			BB (3rd internal standard)	0.6887	0.7811	0.7811	13	13
			(4th internal standard)					
2	LU07C05	6/7/11	C (1st internal standard)	0.4093	0.4103	0.4103	0	0
			CC (2nd internal standard)	1.0092	1.0098	1.0098	0	0
			BB (3rd internal standard)	1.1204	1.1050	1.1050	1	1
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26577D1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	52.391	105	105	0
1,2-Dichloroethane-d4	↓	51.434	103	103	↓
Toluene-d8		49.635	99	99	
Bromofluorobenzene		47.484	95	95	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS/D 1378

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20.0	20.0	21.68	21.26	108	108	106	106	2	2
Trichloroethene	↓	↓	20.64	20.2	103	103	101	101	2	2
Benzene			21.39	21.06	107	107	105	105	2	2
Toluene			20.68	20.46	103	103	102	102	1	1
Chlorobenzene			20.85	20.22	104	104	101	101	3	3

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26 2770/a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1 , E :

Conc. = $\frac{(4603)(50)(5.0)}{(100)(2740)(0.2290)(5.01)(0.86)}$

=

1.16 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 10, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-052-SA5DN-SB-4.0-5.0
TB-060311

Introduction

This data review covers 5 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-060311 was identified as a trip blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 TB-060311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D1b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/2/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FT
2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 6

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

Validated Samples: soil + water

1	SL-019-SA5DN-SB-4.0-5.0	11	VBLKE48	21		31	
2	SL-019-SA5DN-SB-9.0-10.0	12	VBLKE47	22		32	
3	SL-027-SA5DN-SB-4.0-5.0	13		23		33	
4	SL-027-SA5DN-SB-14.0-15.0	14		24		34	
5	SL-052-SA5DN-SB-4.0-5.0	15		25		35	
6	TB-060311	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

DC #: 262770 1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.				
VI. Surrogate Spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

DC #: 2627701b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓		✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26277D1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1st internal standard)	1.3392	1.3392	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
2	ICAL	11/01/10	↓ (1st internal standard)	1.3359	1.3359	1.3219	1.3219	1	1
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	6/7/11	1,4-Dioxane (1st internal standard)	1.3396	1.4362	1.4362	7	7
	9:24		(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
2	CCV	6/6/11	↓ (1st internal standard)	1.3219	1.3970	1.3970	6	6
	8:55		(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277P1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8	10	9.412	94	94	0
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCSE48/LCSD

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene										
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										
1,4-Dioxane	125	125	131.13	143.27	105	105	115	115	9	9

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____ , _____:

Conc. = ( ) ( ) ( ) / ( ) ( ) ( ) ( )

=

NP

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 7, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-152-SA5DN-SS-0.0-0.5
SL-153-SA5DN-SS-0.0-0.5
SL-154-SA5DN-SS-0.0-0.5
SL-155-SA5DN-SS-0.0-0.5
SL-156-SA5DN-SS-0.0-0.5
SL-157-SA5DN-SS-0.0-0.5
SL-158-SA5DN-SS-0.0-0.5
SL-159-SA5DN-SS-0.0-0.5
SL-160-SA5DN-SS-0.0-0.5
SL-162-SA5DN-SS-0.0-0.5
SL-166-SA5DN-SS-0.0-0.5
SL-207-SA5DN-SS-0.0-0.5
DUP-13-SA5DN-QC-060311
EB14-SA5DN-SB-060311
EB13-SA5DN-SS-060311
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-052-SA5DN-SB-4.0-5.0
SL-052-SA5DN-SB-9.0-10.0
SL-155-SA5DN-SS-0.0-0.5MS
SL-155-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

Samples EB14-SA5DN-SB-060311 and EB13-SA5DN-SS-060311 were identified as equipment blanks. No semivolatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-155-SA5DN-SS-0.0-0.5MS/MSD (SL-155-SA5DN-SS-0.0-0.5)	Benzidine	0 (35-141)	0 (35-141)	-	J (all detects) R (all non-detects)	A
SL-155-SA5DN-SS-0.0-0.5MS/MSD (SL-155-SA5DN-SS-0.0-0.5)	1,4-Dichlorobenzene	-	69 (70-100)	-	J (all detects) UJ (all non-detects)	A
	2-Methylphenol	-	73 (75-111)	-		
	4-Methylphenol	68 (71-111)	65 (71-111)	-		
	2,4-Dimethylphenol	77 (78-110)	76 (78-110)	-		
	2,4-Dichlorophenol	-	77 (78-117)	-		
	4-Chloro-3-methylphenol	74 (76-110)	74 (76-110)	-		
	2-Methylnaphthalene	72 (76-114)	71 (76-114)	-		
	2,4,5-Trichlorophenol	-	76 (78-109)	-		
	Acenaphthylene	80 (81-110)	77 (81-110)	-		
	Fluorene	76 (77-111)	74 (77-111)	-		
	4-Chlorophenyl-phenyl ether	77 (80-109)	74 (80-109)	-		
	N-Nitrosodiphenylamine	82 (86-145)	81 (86-145)	-		
SL-155-SA5DN-SS-0.0-0.5MS/MSD (SL-155-SA5DN-SS-0.0-0.5)	4-Chloroaniline	-	-	33 (≤30)	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
160LELCS (All soil samples in SDG DE173)	Aniline	101 (34-94)	NA	NA	J (all detects)	P
	3,3'-Dichlorobenzidine	116 (24-101)	NA	NA	J (all detects)	

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
158WILCS/D (All water samples in SDG DE173)	Aniline	109 (49-101)	110 (49-101)	-	J (all detects)	P
	Bis(2-chloroethyl) ether	121 (77-108)	126 (77-108)	-	J (all detects)	
	2-Chlorophenol	130 (77-108)	132 (77-108)	-	J (all detects)	
	Benzyl alcohol	109 (66-97)	107 (66-97)	-	J (all detects)	
	2-Methylphenol	120 (64-101)	122 (64-101)	-	J (all detects)	
	4-Methylphenol	105 (61-103)	107 (61-103)	-	J (all detects)	
	N-Nitroso-di-n-propylamine	126 (69-110)	127 (69-110)	-	J (all detects)	
	Nitrobenzene	123 (75-109)	129 (75-109)	-	J (all detects)	
	Isophorone	128 (74-117)	132 (74-117)	-	J (all detects)	
	2-Nitrophenol	131 (86-120)	134 (86-120)	-	J (all detects)	
	2,4-Dimethylphenol	126 (72-110)	130 (72-110)	-	J (all detects)	
	Bis(2-chloroethoxy)methane	127 (74-124)	131 (74-124)	-	J (all detects)	
	2,4-Dichlorophenol	129 (80-109)	133 (80-109)	-	J (all detects)	
	1,2,4-Trichlorobenzene	114 (71-112)	114 (71-112)	-	J (all detects)	
	4-Chloro-3-methylphenol	127 (70-123)	131 (70-123)	-	J (all detects)	
	2,4,6-Trichlorophenol	133 (81-113)	134 (81-113)	-	J (all detects)	
	2,4,5-Trichlorophenol	131 (79-107)	134 (79-107)	-	J (all detects)	
	2-Nitroaniline	134 (83-116)	135 (83-116)	-	J (all detects)	
	2,6-Dinitrotoluene	130 (85-115)	131 (85-115)	-	J (all detects)	
	3-Nitroaniline	126 (74-113)	125 (74-113)	-	J (all detects)	
	2,4-Dinitrophenol	142 (52-131)	149 (52-131)	-	J (all detects)	
	2,4-Dinitrotoluene	131 (81-115)	132 (81-115)	-	J (all detects)	
	Dibenzofuran	128 (83-108)	126 (83-108)	-	J (all detects)	
	4-Chlorophenyl-phenyl ether	127 (82-111)	123 (82-111)	-	J (all detects)	
	4-Nitroaniline	109 (59-100)	105 (59-100)	-	J (all detects)	
	4,6-Dinitro-2-methylphenol	143 (78-119)	145 (78-119)	-	J (all detects)	
	1,2-Diphenylhydrazine	140 (78-116)	137 (78-116)	-	J (all detects)	
	4-Bromophenyl-phenyl ether	127 (82-117)	129 (82-117)	-	J (all detects)	
	Hexachlorobenzene	130 (81-118)	131 (81-118)	-	J (all detects)	
	Pentachlorophenol	128 (53-110)	129 (53-110)	-	J (all detects)	
	Carbazole	129 (81-114)	130 (81-114)	-	J (all detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-155-SA5DN-SS-0.0-0.5 and DUP-13-SA5DN-QC-060311 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Bis(2-ethylhexyl)phthalate	23	22	4 (≤50)	-	-

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-155-SA5DN-SS-0.0-0.5	Benzidine	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE173	SL-155-SA5DN-SS-0.0-0.5	1,4-Dichlorobenzene 2-Methylphenol 4-Methylphenol 2,4-Dimethylphenol 2,4-Dichlorophenol 4-Chloro-3-methylphenol 2-Methylnaphthalene 2,4,5-Trichlorophenol Acenaphthylene Fluorene 4-Chlorophenyl-phenyl ether N-Nitrosodiphenylamine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE173	SL-155-SA5DN-SS-0.0-0.5	4-Chloroaniline	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Aniline 3,3'-Dichlorobenzidine	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311	Aniline Bis(2-chloroethyl) ether 2-Chlorophenol Benzyl alcohol 2-Methylphenol 4-Methylphenol N-Nitroso-di-n-propylamine Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Bis(2-chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene 4-Chloro-3-methylphenol 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Nitroaniline 2,6-Dinitrotoluene 3-Nitroaniline 2,4-Dinitrophenol 2,4-Dinitrotoluene Dibenzofuran 4-Chlorophenyl-phenyl ether 4-Nitroaniline 4,6-Dinitro-2-methylphenol 1,2-Diphenylhydrazine 4-Bromophenyl-phenyl ether Hexachlorobenzene Pentachlorophenol Carbazole	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D2a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: KJ
2nd Reviewer: CA

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D/RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	~~A~~ ND	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation (RL/LOQ/LODs)	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 4, 13
XVII.	Field blanks	ND	EB = 14, 15

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

Validated Samples: SOIL + water

1	SL-152-SA5DN-SS-0.0-0.5	11	SL-166-SA5DN-SS-0.0-0.5	21	SL-052-SA5DN-SB-9.0-10.0	31	SBLKLE160
2	SL-153-SA5DN-SS-0.0-0.5	12	SL-207-SA5DN-SS-0.0-0.5	22	SL-155-SA5DN-SS-0.0-0.5MS	32	SBLKWT158
3	SL-154-SA5DN-SS-0.0-0.5	13	DUP-13-SA5DN-QC-060311	23	SL-155-SA5DN-SS-0.0-0.5MSD	33	
4	SL-155-SA5DN-SS-0.0-0.5	14	EB14-SA5DN-SB-060311 W	24		34	
5	SL-156-SA5DN-SS-0.0-0.5	15	EB13-SA5DN-SS-060311 W	25		35	
6	SL-157-SA5DN-SS-0.0-0.5	16	SL-019-SA5DN-SB-4.0-5.0	26		36	
7	SL-158-SA5DN-SS-0.0-0.5	17	SL-019-SA5DN-SB-9.0-10.0	27		37	
8	SL-159-SA5DN-SS-0.0-0.5	18	SL-027-SA5DN-SB-4.0-5.0	28		38	
9	SL-160-SA5DN-SS-0.0-0.5	19	SL-027-SA5DN-SB-14.0-15.0	29		39	
10	SL-162-SA5DN-SS-0.0-0.5	20	SL-052-SA5DN-SB-4.0-5.0	30		40	

LDC #: 26271D2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277D2c

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Reported Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26277D2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		22 o 23	all	following pages			4	code (Q) (All)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

Lancaster Laboratories

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: DE173
Matrix: SOLID

GC/MS Semivolatiles
Fraction: Semivolatiles by GC/MS

22 + 23 (Q)

UNSPK: 6306836 MS: 6306837 MSD: 6306838 Analyte	Batch: 11160SLE026 (Sample numbers: 6306833-6306838, 6306840-6306848, 6306851-6306856)								
	Spike Added ug/kg	Unspiked Conc ug/kg	MS Conc ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	%Rec Limits	%RPD	%RPD Limits
N-Nitrosodimethylamine	1644.74	N.D.	1238.9	1144.57	75	69	47-116	8	30
Phenol	1644.74	N.D.	1166.98	1123.8	71	68	58-126	4	30
Aniline	1644.74	N.D.	718.78	769.	44	46	35-95	7	30
bis(2-Chloroethyl)ether	1644.74	N.D.	1233.56	1191.08	75	72	60-116	4	30
2-Chlorophenol	1644.74	N.D.	1309.06	1279.6	80	77	73-121	2	30
1,3-Dichlorobenzene	1644.74	N.D.	1129.88	1125.44	69	68	63-109	0	30
1,4-Dichlorobenzene E	1644.74	N.D.	1146.82	1148.55	70	69 *	70-100	0	30
Benzyl alcohol	1644.74	N.D.	1233.73	1201.09	75	73	67-115	3	30
1,2-Dichlorobenzene	1644.74	N.D.	1157.09	1138.53	70	69	66-108	2	30
2-Methylphenol G	1644.74	N.D.	1233.27	1201.87	75	73 *	75-111	3	30
bis(2-Chloroisopropyl)ether	1644.74	N.D.	1255.1	1210.44	76	73	55-142	4	30
4-Methylphenol I	1644.74	N.D.	1116.62	1082.27	68 *	65 *	71-111	3	30
N-Nitroso-di-n-propylamine	1644.74	N.D.	1203.51	1177.22	73	71	60-116	2	30
Hexachloroethane	1644.74	N.D.	1099.4	1083.06	67	65	57-109	1	30
Nitrobenzene	1644.74	N.D.	1314.48	1287.81	80	78	72-106	2	30
Isophorone	1644.74	N.D.	1272.57	1254.79	77	76	73-102	1	30
2-Nitrophenol	1644.74	N.D.	1288.9	1280.96	78	77	74-115	1	30
2,4-Dimethylphenol O	1644.74	N.D.	1270.65	1251.59	77 *	76 *	78-110	2	30
Benzoic acid	1644.74	N.D.	710.53	941.3	43	57	10-173	28	30
3,5-Dimethylphenol	1644.74	N.D.	1710.35	1702.98	104	103	70-130	0	30
bis(2-Chloroethoxy)methane	1644.74	N.D.	1291.62	1257.78	79	76	75-104	3	30
2,4-Dichlorophenol Q	1644.74	N.D.	1299.47	1277.93	79	77 *	78-117	2	30
1,2,4-Trichlorobenzene	1644.74	N.D.	1298.39	1276.84	79	77	72-115	2	30
Naphthalene	1644.74	N.D.	1246.94	1246.97	76	75	72-116	0	30
4-Chloroaniline T	1644.74	N.D.	551.61	773.41	34	47	23-95	33 *	30
Hexachlorobutadiene	1644.74	N.D.	1287.06	1284.42	78	78	62-120	0	30
4-Chloro-3-methylphenol V	1644.74	N.D.	1216.33	1229.48	74 *	74 *	76-110	1	30
2-Methylnaphthalene W	1644.74	N.D.	1186.14	1176.63	72 *	71 *	76-114	1	30
1-Methylnaphthalene	1644.74	N.D.	1242.25	1247.94	76	75	73-112	0	30
Hexachlorocyclopentadiene	3289.47	N.D.	1524.37	1442.	46	44	10-153	6	30
2,4,6-Trichlorophenol	1644.74	N.D.	1366.32	1332.31	83	80	77-115	3	30
2,4,5-Trichlorophenol Z	1644.74	N.D.	1274.69	1258.88	78	76 *	78-109	1	30
2-Chloronaphthalene	1644.74	N.D.	1240.39	1178.21	75	71	50-141	5	30
2-Nitroaniline	1644.74	N.D.	1309.68	1293.99	80	78	67-125	1	30
Dimethylphthalate	1644.74	N.D.	1294.05	1262.36	79	76	64-118	2	30
2,6-Dinitrotoluene	1644.74	N.D.	1284.68	1251.65	78	76	69-123	3	30
Acenaphthylene DD	1644.74	N.D.	1323.93	1278.44	80 *	77 *	81-110	3	30
3-Nitroaniline	1644.74	N.D.	1135.59	1128.54	69	68	59-122	1	30
Acenaphthene	1644.74	N.D.	1297.09	1280.82	79	77	75-115	1	30
2,4-Dinitrophenol	3289.47	N.D.	889.48	844.21	27	25	20-143	5	30
4-Nitrophenol	1644.74	N.D.	1014.83	1003.31	62	61	54-113	1	30
2,4-Dinitrotoluene	1644.74	N.D.	1217.99	1203.06	74	73	73-113	1	30

DE173 3032

Results are being reported on an as received basis.

Lancaster Laboratories

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: DE173
Matrix: SOLID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 6306836 MS: 6306837 MSD: 6306838 Analyte	Batch: 11160SLE026 (Sample numbers: 6306833-6306838, 6306840-6306848, 6306851-6306856)									
	Spike Added ug/kg	Unspiked Conc ug/kg	MS Conc ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	%Rec Limits	%RPD	%RPD Limits	
Dibenzofuran	1644.74	N.D.	1285.92	1255.9	78	76	71-112	2	30	
Diethylphthalate	1644.74	N.D.	1278.5	1254.28	78	76	66-118	2	30	
Fluorene NN	1644.74	N.D.	1244.41	1230.29	76 *	74 *	77-111	1	30	J/UJ/R
4-Chlorophenyl-phenylether MM	1644.74	N.D.	1271.36	1231.77	77 *	74 *	80-109	3	30	
4-Nitroaniline	1644.74	N.D.	942.29	1011.9	57	61	52-112	7	30	
4,6-Dinitro-2-methylphenol	1644.74	N.D.	831.79	810.13	51	49	24-116	3	30	
N-Nitrosodiphenylamine & Q	1644.74	N.D.	1354.83	1345.24	82 *	81 *	86-145	1	30	J/UJ/R
1,2-Diphenylhydrazine	1644.74	N.D.	1497.55	1485.33	91	90	71-129	1	30	
4-Bromophenyl-phenylether	1644.74	N.D.	1377.33	1367.07	84	83	67-129	1	30	
Hexachlorobenzene	1644.74	N.D.	1380.97	1328.82	84	80	77-114	4	30	
Pentachlorophenol	1644.74	N.D.	1038.45	976.09	63	59	28-127	6	30	
Phenanthrene	1644.74	N.D.	1266.67	1254.85	77	76	65-125	1	30	
Anthracene	1644.74	N.D.	1293.54	1284.26	79	78	75-115	1	30	
Carbazole	1644.74	N.D.	1254.33	1245.9	76	75	64-120	1	30	
Di-n-butylphthalate	1644.74	N.D.	1334.5	1338.03	81	81	67-123	0	30	
Fluoranthene	1644.74	N.D.	1202.14	1212.69	73	73	73-112	1	30	
Benzidine SSS	8223.68	N.D.	N.D.	N.D.	0 *	0 *	35-141	0	30	J/R/R
Pyrene	1644.74	N.D.	1402.73	1359.12	85	82	74-126	3	30	
Butylbenzylphthalate	1644.74	N.D.	1472.48	1431.29	90	86	73-134	3	30	
bis(2-Ethylhexyl)phthalate	1644.74	21.59	1461.53	1427.59	88	85	63-122	2	30	
3,3'-Dichlorobenzidine	1644.74	N.D.	798.23	813.54	49	49	16-119	2	30	
Benzo(a)anthracene	1644.74	N.D.	1348.88	1310.28	82	79	65-122	3	30	
Chrysene	1644.74	N.D.	1319.08	1287.81	80	78	62-128	2	30	
Di-n-octylphthalate	1644.74	N.D.	1317.82	1302.21	80	79	56-126	1	30	
Benzo(b)fluoranthene	1644.74	N.D.	1122.01	1073.19	68	65	59-125	4	30	
Benzo(k)fluoranthene	1644.74	N.D.	1189.7	1183.94	72	72	56-132	0	30	
Benzo(a)pyrene	1644.74	N.D.	1148.33	1130.09	70	68	57-126	2	30	
Indeno(1,2,3-cd)pyrene	1644.74	N.D.	1222.73	1177.91	74	71	61-126	4	30	
Dibenz(a,h)anthracene	1644.74	N.D.	1229.37	1183.15	75	71	65-125	4	30	
Benzo(g,h,i)perylene	1644.74	N.D.	1219.56	1158.73	74	70	59-127	5	30	

DE173 1922

Results are being reported on an as received basis.

LDC #: 26277D2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		160LELCS	NNN	101 (34-94)	( )	( )	All soils	J/Pdet (L)
			BBB	116 (24-101)	( )	( )	↓	↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		158WILCS/D	see	following	pages	( )	all waters	cond (L)
				( )	( )	( )		all J/Pdet
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		

Lancaster Laboratories

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate (LCSD)

SDG: DE173
Matrix: LIQUID

all J/Pdet(L)

GC/MS Semivolatiles
Fraction: Semivolatiles by GC/MS

LCS: 158WILCS LCSD: 158WILCSD Analyte	Batch: 11158WAI026 (Sample numbers: 6306849-6306850) Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
Phenol ~~AAA~~	50	30.6	30.55	61	61	21-67	0	30
Aniline NNN	50	54.5	55.1	109 *	110 *	49-101	1	30
bis(2-Chloroethyl)ether B	50	60.61	62.96	121 *	126 *	77-108	4	30
2-Chlorophenol C	50	64.86	65.82	130 *	132 *	77-108	1	30
1,3-Dichlorobenzene	50	52.4	48.83	105	98	50-119	7	30
1,4-Dichlorobenzene	50	52.24	48.82	104	98	53-119	7	30
Benzyl alcohol QQQ	50	54.67	53.69	109 *	107 *	66-97	2	30
1,2-Dichlorobenzene	50	52.63	50.17	105	100	55-118	5	30
2-Methylphenol G	50	60.13	61.23	120 *	122 *	64-101	2	30
bis(2-Chloroisopropyl)ether	50	59.6	61.47	119	123	62-127	3	30
4-Methylphenol I	50	52.74	53.61	105 *	107 *	61-103	2	30
N-Nitroso-di-n-propylamine J	50	63.16	63.73	126 *	127 *	69-110	1	30
Hexachloroethane	50	49.8	45.93	100	92	52-113	8	30
Nitrobenzene L	50	61.31	64.61	123 *	129 *	75-109	5	30
Isophorone M	50	64.12	65.96	128 *	132 *	74-117	3	30
2-Nitrophenol N	50	65.52	66.83	131 *	134 *	86-120	2	30
2,4-Dimethylphenol O	50	62.95	65.25	126 *	130 *	72-110	4	30
Benzoic acid	50	29.97	30.93	60	62	10-69	3	30
3,5-Dimethylphenol	50	52.42	54.72	105	109	70-130	4	30
bis(2-Chloroethoxy)methane P	50	63.31	65.26	127 *	131 *	74-124	3	30
2,4-Dichlorophenol Q	50	64.39	66.72	129 *	133 *	80-109	4	30
1,2,4-Trichlorobenzene R	50	57.08	57.05	114 *	114 *	71-112	0	30
4-Chloroaniline	50	47.95	46.97	96	94	42-124	2	30
Hexachlorobutadiene	50	55.77	54.27	112	109	57-124	3	30
4-Chloro-3-methylphenol V	50	63.34	65.44	127 *	131 *	70-123	3	30
Hexachlorocyclopentadiene	100	110.57	107.08	111	107	36-118	3	30
2,4,6-Trichlorophenol Y	50	66.66	67.09	133 *	134 *	81-113	1	30
2,4,5-Trichlorophenol Z	50	65.39	67.11	131 *	134 *	79-107	3	30
2-Chloronaphthalene	50	55.66	56.76	111	114	54-132	2	30
2-Nitroaniline BB	50	66.92	67.25	134 *	135 *	83-116	0	30
2,6-Dinitrotoluene EE	50	65.06	65.54	130 *	131 *	85-115	1	30
3-Nitroaniline FF	50	63.16	62.27	126 *	125 *	74-113	1	30
2,4-Dinitrophenol HH	100	141.99	149.1	142 *	149 *	52-131	5	30
4-Nitrophenol	50	26.68	25.41	53	51	16-78	5	30
2,4-Dinitrotoluene KK	50	65.28	66.02	131 *	132 *	81-115	1	30
Dibenzofuran JJ	50	64.06	63.11	128 *	126 *	83-108	1	30
4-Chlorophenyl-phenylether MM	50	63.59	61.68	127 *	123 *	82-111	3	30
4-Nitroaniline OO	50	54.31	52.5	109 *	105 *	59-100	3	30
4,6-Dinitro-2-methylphenol PP	50	71.5	72.59	143 *	145 *	78-119	2	30
N-Nitrosodiphenylamine	50	64.57	65.8	129	132	67-136	2	30
1,2-Diphenylhydrazine	50	70.12	68.74	140 *	137 *	78-116	2	30
4-Bromophenyl-phenylether RR	50	63.52	64.3	127 *	129 *	82-117	1	30

Lancaster Laboratories

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate (LCSD)

SDG: DE173
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 158WILCS LCSD: 158WILCSD Analyte	Batch: 11158WAI026 (Sample numbers: 6306849-6306850) Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
Hexachlorobenzene SS	50	65.02	65.32	130 *	131 *	81-118	0	30
Pentachlorophenol TT	50	63.94	64.32	128 *	129 *	53-110	1	30
Carbazole WW	50	64.6	65.13	129 *	130 *	81-114	1	30
Benzidine	250	248.64	255.01	99	102	34-117	3	30
3,3'-Dichlorobenzidine	50	52.15	49.9	104	100	49-111	4	30

DE173 1324

LDC #: 26277D2a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ug/kg)		RPD
	4	13	
EEE	23	22	4

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 26277D29

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/01/11	Phenol (1st internal standard)	2.987	2.987	2.948	2.948	3	3
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.496	0.496	0.488	0.488	3	3
			~~Fluorene~~ 2-Methylnaphthalene (3rd internal standard)	0.409	0.409	0.401	0.401	5	5
			Pentachlorophenol (4th internal standard)	0.108	0.108	0.104	0.104	6	6
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.979	0.979	0.948	0.948	5	5
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.996	1.996	1.855	1.855	9	9
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	EF0601	6/14/11	Phenol (1st internal standard)	2.948	2.676	2.676	9	9
			Nitrobenzene (2nd internal standard)	0.488	0.517	0.517	6	6
			2-Nitroaniline Fluorene (3rd internal standard)	0.401	0.422	0.422	5	5
			Pentachlorophenol (4th internal standard)	0.104	0.100	0.100	3	3
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.948	1.039	1.039	10	10
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)	1.853	2.130	2.130	15	15
2	EF0631	6/15/11	Phenol (1st internal standard)		2.717	2.717	8	8
			Nitrobenzene Naphthalene (2nd internal standard)		0.493	0.493	1	1
			2-Nitroaniline Fluorene (3rd internal standard)		0.416	0.416	4	4
			Pentachlorophenol (4th internal standard)		0.091	0.091	12	12
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.929	0.929	2	2
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)		1.950	1.950	5	5
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	83.597	84	84	0
2-Fluorobiphenyl	↓	87.329	87	87	
Terphenyl-d14	↓	86.913	87	87	
Phenol-d5	200	167.674	84	84	
2-Fluorophenol	↓	173.370	87	87	
2,4,6-Tribromophenol	↓	158.825	79	79	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26277V2 9

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD samples: 22723

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1644.74	1644.74	ND	1166.98	1123.8	71	71	68	68	4	4
N-Nitroso-di-n-propylamine				1203.51	1177.22	73	73	71	71	2	2
4-Chloro-3-methylphenol				1216.33	1229.48	74	74	74	74	1	1
Acenaphthene				1297.09	1280.82	79	79	77	77	1	1
Pentachlorophenol				1038.45	976.09	63	63	59	59	6	6
Pyrene				1402.73	1359.12	85	85	82	82	3	3

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D29

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 160L ELC5

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1433.33	NA	1164.83	NA	81	81				
N-Nitroso-di-n-propylamine	1666.67		1236.11		74	74				
4-Chloro-3-methylphenol	1466.67		1308.74		89	89				
Acenaphthene	1466.67		1286.17		88	88				
Pentachlorophenol	1366.67		1174.46		86	86				
Pyrene	1566.67		1410.66		90	90	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26 27702q

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, EET:

Conc. = (17339)(40)(1000)(____)(____) / (59777)(0.948)(30)(0.93)(____)

=

44 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 7, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-152-SA5DN-SS-0.0-0.5
SL-153-SA5DN-SS-0.0-0.5
SL-154-SA5DN-SS-0.0-0.5
SL-155-SA5DN-SS-0.0-0.5
SL-156-SA5DN-SS-0.0-0.5
SL-157-SA5DN-SS-0.0-0.5
SL-158-SA5DN-SS-0.0-0.5
SL-159-SA5DN-SS-0.0-0.5
SL-160-SA5DN-SS-0.0-0.5
SL-162-SA5DN-SS-0.0-0.5
SL-166-SA5DN-SS-0.0-0.5
SL-207-SA5DN-SS-0.0-0.5
DUP-13-SA5DN-QC-060311
EB14-SA5DN-SB-060311
EB13-SA5DN-SS-060311
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-052-SA5DN-SB-4.0-5.0
SL-052-SA5DN-SB-9.0-10.0
SL-155-SA5DN-SS-0.0-0.5MS
SL-155-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKD167	6/17/11	Bis(2-ethylhexyl)phthalate	71 ug/Kg	SL-162-SA5DN-SS-0.0-0.5 SL-019-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

Samples EB14-SA5DN-SB-060311 and EB13-SA5DN-SS-060311 were identified as equipment blanks. No semivolatile contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB14-SA5DN-SB-060311	6/3/11	Bis(2-ethylhexyl)phthalate	0.057 ug/L	SL-019-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0
EB14-SA5DN-SB-060311	6/3/11	Di-n-butylphthalate 1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	0.067 ug/L 0.028 ug/L 0.026 ug/L 0.15 ug/L	SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0
EB13-SA5DN-SS-060311	6/3/11	Bis(2-ethylhexyl)phthalate	0.055 ug/L	SL-162-SA5DN-SS-0.0-0.5
EB13-SA5DN-SS-060311	6/3/11	Di-n-butylphthalate 1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	0.065 ug/L 0.026 ug/L 0.026 ug/L 0.16 ug/L	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-154-SA5DN-SS-0.0-0.5	Naphthalene	0.75 ug/Kg	1.8U ug/Kg
SL-160-SA5DN-SS-0.0-0.5	Naphthalene	0.71 ug/Kg	1.7U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-155-SA5DN-SS-0.0-0.5MS/MSD (SL-155-SA5DN-SS-0.0-0.5)	N-Nitrosodimethylamine	-	-	48 (≤30)	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
157WELCS/LCSD (All water samples in SDG DE173)	Di-n-octylphthalate	-	148 (57-145)	43 (≤30)	J (all detects) UJ (all non-detects)	P
167LDLCS (All soil samples in SDG DE173)	Di-n-butylphthalate	74 (75-137)	NA	NA	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-155-SA5DN-SS-0.0-0.5 and DUP-13-SA5DN-QC-060311 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Benzo(a)anthracene	1.7U	0.79	200 (≤50)	J (all detects) UJ (all non-detects)	A
Benzo(a)pyrene	1.1	1.1	0 (≤50)	-	-
Benzo(b)fluoranthene	4.1	3.5	16 (≤50)	-	-
Benzo(k)fluoranthene	0.73	0.82	12 (≤50)	-	-
Chrysene	5.4	1.9	96 (≤50)	J (all detects)	A
Fluoranthene	2.6	2.5	4 (≤50)	-	-
Naphthalene	0.96	0.88	9 (≤50)	-	-

Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Phenanthrene	1.6	1.7	6 (≤50)	-	-
Pyrene	1.7	1.5	12 (≤50)	-	-

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-155-SA5DN-SS-0.0-0.5	N-Nitrosodimethylamine	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE173	EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311	Di-n-octylphthalate	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)(RPD) (L,E)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Di-n-butylphthalate	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	All TCL compounds	J (all detects)	A	Compound quantitation and RLs (Z)
DE173	SL-155-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	Benzo(a)anthracene	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)
DE173	SL-155-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	Chrysene	J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE173	SL-154-SA5DN-SS-0.0-0.5	Naphthalene	1.8U ug/Kg	A	F
DE173	SL-160-SA5DN-SS-0.0-0.5	Naphthalene	1.7U ug/Kg	A	F

LDC #: 26277D2b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11

SDG #: DE173 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FT

SUOA 2nd Reviewer:

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ (EPA SW 846 Method 8270C-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 4, 13
XVII.	Field blanks	SW	EB = 14, 15

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

Validated Samples:

soil + water

1	SL-152-SA5DN-SS-0.0-0.5	11	SL-166-SA5DN-SS-0.0-0.5	21	SL-052-SA5DN-SB-9.0-10.0	31	SBLKLD167
2	SL-153-SA5DN-SS-0.0-0.5	12	SL-207-SA5DN-SS-0.0-0.5	22	SL-155-SA5DN-SS-0.0-0.5MS	32	SBLKW5157
3	SL-154-SA5DN-SS-0.0-0.5	13	DUP-13-SA5DN-QC-060311	23	SL-155-SA5DN-SS-0.0-0.5MSD	33	
4	SL-155-SA5DN-SS-0.0-0.5	14	EB14-SA5DN-SB-060311 W	24		34	
5	SL-156-SA5DN-SS-0.0-0.5	15	EB13-SA5DN-SS-060311 W	25		35	
6	SL-157-SA5DN-SS-0.0-0.5	16	SL-019-SA5DN-SB-4.0-5.0	26		36	
7	SL-158-SA5DN-SS-0.0-0.5	17	SL-019-SA5DN-SB-9.0-10.0	27		37	
8	SL-159-SA5DN-SS-0.0-0.5	18	SL-027-SA5DN-SB-4.0-5.0	28		38	
9	SL-160-SA5DN-SS-0.0-0.5	19	SL-027-SA5DN-SB-14.0-15.0	29		39	
10	SL-162-SA5DN-SS-0.0-0.5	20	SL-052-SA5DN-SB-4.0-5.0	30		40	

LDC #: 26277D2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277102-b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26277D2-b

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 6/17/11 **Blank analysis date:** 6/21/11
Conc. units: ug/kg Associated Samples: 10, 16, 19 → 21 (ND)

Compound	Blank ID	Sample Identification							
[redacted]	SBLK D167								
EEE	71								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277D2h
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** ug/kg

Sampling date: 6/3/17

Field blank type: (circle one) Field Blank / Rinsate / Other: EB

14 = 10, ~~16, 19 - 21~~ (ND)
15 = 16, 19 - 21

Compound	Blank ID	Blk ID	Sample Identification							
	14	15								
~~Diethylphthalate~~										
~~Di-n-butylphthalate~~										
Bis(2-ethylhexyl)phthalate	0.057	0.055								
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 26277025
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** ug/kg

Sampling date: 6/3/11

Field blank type: (circle one) Field Blank / Rinsate / Other: EB

14: 16-21
15: 1-13
~~All SOILS~~ N/A

Compound	Blank ID	BLK ID	Sample Identification							
	14	15		3	9					
Diethylphthalate XX	0.067	0.065								
Di-n-butylphthalate TTT	0.028	0.026								
Bis(2-ethylhexyl)phthalate W	0.026	0.026								
S	0.15	0.16		0.75 J-8U	0.71 J-7U					
—	—	—								
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 26277D2b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 2
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		22+23	~~DEG~~	( )	( )	48 (30)	4	J/A def Q
			~~000~~	( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		

LDC #: 26277D2b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		157WELCS/LCSD	FFF	( )	148 (57-145)	43 (30)	All water	J/UJ/P (L,E)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		167LDLCS	XX	74 (75-137)	( )	( )	All soil	J/UJ/P (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC#: 26277D2b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: EJ
2nd Reviewer:

METHOD: SVOA (EPA Method 8270C-SIM)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

(fd)

Compound	Concentration (ug/Kg)		≤50 RPD	
	4	13		
CCC	1.7U	0.79	200	J/UJ/A
III	1.1	1.1	0	
GGG	4.1	3.5	16	
HHH	0.73	0.82	12	
DDD	5.4	1.9	96	J/Adet
YY	2.6	2.5	4	
S	0.96	0.88	9	
UU	1.6	1.7	6	
ZZ	1.7	1.5	12	

V:\FIELD DUPLICATES\templates\26277D2b.wpd

LDC #: 26272D2b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (/ std)	Recalculated RRF (/ std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/20/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.048	1.048	1.066	1.066	4	4
			Fluorene (3rd internal standard)	1.285	1.285	1.309	1.309	7	7
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.125	1.125	1.126	1.126	4	4
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.178	1.178	1.196	1.196	2	2
			Benzo(a)pyrene (6th internal standard)	1.068	1.068	1.114	1.114	7	7
2	ICAL	6/29/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.074	1.074	1.074	1.074	4	4
			Fluorene (3rd internal standard)	1.098	1.098	1.301	1.301	9	9
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.014	1.014	1.142	1.142	9	9
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.264	1.264	1.274	1.274	2	2
			Benzo(a)pyrene (6th internal standard)	1.160	1.160	1.147	1.147	6	6
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D2b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	IF079	6/21/11	~~Phenol (1st internal standard)~~					
	18:33		Naphthalene (2nd internal standard)	1.066	1.070	1.070	0	0
			Fluorene (3rd internal standard)	1.309	1.299	1.299	1	1
			~~Pentachlorophenol (4th internal standard)~~ Anthracene	1.126	1.181	1.181	5	5
			~~Bis(2-ethylhexyl)phthalate (5th internal standard)~~ Chrysene	1.196	1.187	1.187	1	1
			Benzo(a)pyrene (6th internal standard)	1.114	1.091	1.091	2	2
2	IF104	6/30/11	~~Phenol (1st internal standard)~~					
	06:59		Naphthalene (2nd internal standard)	1.074	1.099	1.099	2	2
			Fluorene (3rd internal standard)	1.301	1.331	1.331	2	2
			~~Pentachlorophenol (4th internal standard)~~ Anthracene	1.142	1.163	1.163	2	2
			~~Bis(2-ethylhexyl)phthalate (5th internal standard)~~ Chrysene	1.274	1.257	1.257	1	1
			Benzo(a)pyrene (6th internal standard)	1.147	1.174	1.174	2	2
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277025

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.844	85	85	0
2-Fluorobiphenyl	↓	0.897	90	90	0
Terphenyl-d14	↓	0.807	81	81	0
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26211D2D

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 22 + 23

Compound	Spike Added (ug/Kg)		Sample Concentration (ug/Kg)	Spiked Sample Concentration (ug/Kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.11	33.11	NO	29.43	30.11	89	89	91	91	2	2
Pentachlorophenol											
Pyrene	33.11	33.11	1.66	28.35	30.63	81	81	87	87	8	8

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277N2D

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 167 LDC)

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	29.2	NA	88	88				
Pentachlorophenol										
Pyrene	33.33	↓	30.71	↓	92	92	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D2h

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1 , III

Conc. = $\frac{(27525)(1.0)(1000)(\quad)(\quad)}{(35507)(1.147)(30)(0.93)(\quad)}$

=

2.446 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 10, 2011

Matrix: Soil

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-207-SA5DN-SS-0.0-0.5
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0%.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKB160	6/9/11	N-Nitrosodimethylamine	18.9 ng/Kg	All samples in SDG DE173

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-019-SA5DN-SB-9.0-10.0	N-Nitrosodimethylamine	40.2 ng/Kg	40.2U ng/Kg
SL-027-SA5DN-SB-4.0-5.0	N-Nitrosodimethylamine	45.4 ng/Kg	45.4U ng/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-027-SA5DN-SB-14.0-15.0	N-Nitrosodimethylamine	41.7 ng/Kg	41.7U ng/Kg

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-207-SA5DN-SS-0.0-0.5 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE173

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE173	SL-019-SA5DN-SB-9.0-10.0	N-Nitrosodimethylamine	40.2U ng/Kg	A	B
DE173	SL-027-SA5DN-SB-4.0-5.0	N-Nitrosodimethylamine	45.4U ng/Kg	A	B
DE173	SL-027-SA5DN-SB-14.0-15.0	N-Nitrosodimethylamine	41.7U ng/Kg	A	B

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D2c **VALIDATION COMPLETENESS WORKSHEET** Date: 10/02/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FD
2nd Reviewer: [illegible]

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	GC/MS Instrument performance check	A/N	not required
III.	Initial calibration	A	%RSD ≤ 30
IV.	Continuing calibration/ICV	A	~~RRF~~ CCV ≤ 20 ICV ≤ 30
V.	Blanks	SW	
VI.	Surrogate spikes	A ~~ND~~	~~not required~~
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples: SOIL

1	SL-207-SA5DN-SS-0.0-0.5	11	SBLKLB160	21		31	
2	SL-019-SA5DN-SB-4.0-5.0	12		22		32	
3	SL-019-SA5DN-SB-9.0-10.0	13		23		33	
4	SL-027-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-027-SA5DN-SB-14.0-15.0	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 27702C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate recoveries				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277D2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?				
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?				
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.		✓		
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26277D2C

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 6/9/11 **Blank analysis date:** 6/28/11

Conc. units: ng/kg Associated Samples: All

Compound	Blank ID	5x	Sample Identification						
	SBLKLB1	60	3	4	5				
N-Nitrosodimethylamine	18.9	94.5	40.2 /U	45.4 /U	41.7/U				

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277D2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (25 std)	Recalculated RRF (25 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/27/11	~~Phenol (1st internal standard)~~ NDMA	1.00320	1.00320	0.96558	0.96558	17.466	17.466
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
2	ICAL	6/29/11	~~Phenol (1st internal standard)~~ NDMA	1.144	1.144	1.176	1.176	10	10
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	6/28/11 6:52	~~Phenol (1st internal standard)~~ NDMA	0.96558	1.08069	1.08069	11.92162	11.92162
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2	CCV	6/29/11 14:54	~~Phenol (1st internal standard)~~ NDMA	1.17602	1.09173	1.09173	7.16703	7.16703
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D2C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Nitrobenzene-d5~~ NDMA-d6	25.0	31.06	124	124	0
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
~~1,2-Dichlorobenzene-d4~~					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26277D2C

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ng/Kg)		Spike Concentration (ng/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
NDMA	833.33	NA	872.33	NA	105	105	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_t = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 3 , NDMA

Conc. = $\frac{(4052)(50)(1000)(\quad)(\quad)}{(96847)(0.9655)(30)(0.90)(25)}$

=

40 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 7, 2011

Matrix: Soil/Water

Parameters: Chlorinated Pesticides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-152-SA5DN-SS-0.0-0.5
SL-153-SA5DN-SS-0.0-0.5
SL-154-SA5DN-SS-0.0-0.5
SL-155-SA5DN-SS-0.0-0.5
SL-156-SA5DN-SS-0.0-0.5
SL-157-SA5DN-SS-0.0-0.5
SL-158-SA5DN-SS-0.0-0.5
SL-159-SA5DN-SS-0.0-0.5
SL-160-SA5DN-SS-0.0-0.5
SL-162-SA5DN-SS-0.0-0.5
SL-166-SA5DN-SS-0.0-0.5
SL-207-SA5DN-SS-0.0-0.5
DUP-13-SA5DN-QC-060311
EB13-SA5DN-SS-060311
SL-155-SA5DN-SS-0.0-0.5MS
SL-155-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 15 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Column	Compound	%RSD	Associated Samples	Flag	A or P
6/11/11	RTX-CLP	Endrin	24.0	All water samples in SDG DE173	J (all detects) UJ (all non-detects)	A

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
6/13/11	2P6162.19R	RTX-CLPI	4,4'-DDE 4,4'-DDD Endosulfan II Endrin aldehyde 4,4'-DDT Endosulfan sulfate Methoxychlor	36.5 38.4 26.9 35.5 20.8 24.8 24.3	All water samples in SDG DE173	J (all detects) UJ (all non-detects)	A
6/24/11	1P10174.52R	RTX-CLPI	Endosulfan I Endrin 4,4'-DDD 4,4'-DDT Endrin aldehyde Endosulfan sulfate	21.4 24.1 25.6 25.0 22.1 26.0	SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
6/24/11	1P10174.52R	RTX-CLPII	alpha-BHC gamma-BHC beta-BHC delta-BHC Heptachlor Aldrin Heptachlor epoxide Endosulfan I 4,4'-DDE Dieldrin Endrin Endosulfan II 4,4'-DDT Endrin aldehyde Endosulfan sulfate Methoxychlor Endrin ketone	78.5 81.6 92.7 76.0 67.1 114.4 88.4 82.5 102.0 89.2 51.0 63.5 28.7 44.7 49.8 35.0 26.8	SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	P
6/24/11	1P10174.53R	RTX-CLP1	Mirex	21.8	SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
6/24/11	1P10174.53R	RTX-CLP2	Mirex	65.3	SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
6/24/11	1P10174.54R	RTX-CLP2	Toxaphene	53.3	SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
6/24/11	1P10174.55R	RTX-CLP2	Chlordane (Technical)	134.8	SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
6/25/11	1P10174B.69R	RTX-CLPII	alpha-BHC gamma-BHC beta-BHC delta-BHC Heptachlor Aldrin Heptachlor epoxide Endosulfan I 4,4'-DDE Dieldrin Endrin Endosulfan II Endosulfan sulfate Methoxychlor Endrin ketone	85.3 85.8 104.8 82.4 71.8 131.1 102.6 104.5 122.7 102.9 68.1 78.4 67.8 46.6 42.8	SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	J (all detects) UJ (all non-detects)	P
6/25/11	1P10174B.69R	RTX-CLPII	4,4'-DDT Endrin aldehyde	40.5 61.1	DUP-13-SA5DN-QC-060311	J (all detects) UJ (all non-detects)	P

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
6/25/11	1P10174B.70R	RTX-CLPII	Mirex	82.5	SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	J (all detects) UJ (all non-detects)	A
6/25/11	1P10174.71R	RTX-CLPI	Toxaphene	22.0	SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	J (all detects) UJ (all non-detects)	A
6/25/11	1P10174.71R	RTX-CLPII	Toxaphene	50.3	SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	J (all detects) UJ (all non-detects)	A
6/25/11	1P10174.72R	RTX-CLPII	Chlordane (Technical)	129	SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
6/11/11	1P6162-ICV	RTX-CLPI	Endrin	28.9	All water samples in SDG DE173	J (all detects) UJ (all non-detects)	A
6/11/11	1P6162-ICV	RTX-CLPII	4,4'-DDE	57.8	All water samples in SDG DE173	J (all detects) UJ (all non-detects)	A

Retention times (RT) of all compounds in the calibration standards were within QC limits.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

Sample EB13-SA5DN-SS-060311 was identified as an equipment blank. No chlorinated pesticide contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB13-SA5DN-SS-060311	6/3/11	Heptachlor	0.0086 ug/L	All soil samples in SDG DE173

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-153-SA5DN-SS-0.0-0.5	Not specified	Tetrachloro-m-xylene	48 (50-130)	All TCL compounds	J (all detects) UJ (all non-detects)	A
SL-166-SA5DN-SS-0.0-0.5	Not specified	Tetrachloro-m-xylene	35 (50-130)	All TCL compounds	J (all detects) UJ (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-155-SA5DN-SS-0.0-0.5MS/MSD (SL-155-SA5DN-SS-0.0-0.5)	Heptachlor	130 (13-126)	142 (13-126)	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS/D20157 (All water samples In SDG DE173)	4,4'-DDE Endosulfan I	142 (66-130) 130 (68-128)	142 (66-130) 130 (68-128)	- -	J (all detects) J (all detects)	P
LCS02161 (All soil samples In SDG DE173)	Heptachlor	130 (43-124)	-	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-152-SA5DN-SS-0.0-0.5	beta-BHC 4,4'-DDD	49.61 71	J (all detects) J (all detects)	A
SL-153-SA5DN-SS-0.0-0.5	Chlordane (Technical)	59.57	J (all detects)	A
SL-154-SA5DN-SS-0.0-0.5	beta-BHC Chlordane (Technical)	83.17 58.54	J (all detects) J (all detects)	A
SL-155-SA5DN-SS-0.0-0.5	4,4'-DDE Endrin aldehyde	74.50 94.53	J (all detects) J (all detects)	A
SL-156-SA5DN-SS-0.0-0.5	4,4'-DDE 4,4'-DDD 4,4'-DDT Endrin ketone Chlordane (Technical)	68.9 79.0 60.91 45.14 59.61	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
SL-157-SA5DN-SS-0.0-0.5	delta-BHC 4,4'-DDE	50.27 75.87	J (all detects) J (all detects)	A
SL-158-SA5DN-SS-0.0-0.5	delta-BHC 4,4'-DDE 4,4'-DDT	62.20 72.83 56.27	J (all detects) J (all detects) J (all detects)	A
SL-159-SA5DN-SS-0.0-0.5	delta-BHC	56.68	J (all detects)	A
SL-160-SA5DN-SS-0.0-0.5	4,4'-DDE Chlordane (Technical)	73.56 70.13	J (all detects) J (all detects)	A

Sample	Compound	RPD	Flag	A or P
SL-162-SA5DN-SS-0.0-0.5	delta-BHC 4,4'-DDD	42.76 74.0	J (all detects) J (all detects)	A
SL-166-SA5DN-SS-0.0-0.5	Chlordane (Technical)	98.03	J (all detects)	A
SL-207-SA5DN-SS-0.0-0.5	Chlordane (Technical) Endrin aldehyde	48.71 70.11	J (all detects) J (all detects)	A
DUP-13-SA5DN-QC-060311	Endrin ketone	59.11	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

Samples SL-155-SA5DN-SS-0.0-0.5 and DUP-13-SA5DN-QC-060311 were identified as field duplicates. No chlorinated pesticides were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Chlordane (Technical)	2.5	4.0	46 (≤50)	-	-
4,4'-DDE	0.29	0.45U	200 (≤50)	J (all detects) UJ (all non-detects)	A
4,4'-DDT	0.37	0.36U	200 (≤50)	J (all detects) UJ (all non-detects)	A
delta-BHC	0.063	0.17U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Endosulfan II	0.15	0.36U	200 (≤50)	J (all detects) UJ (all non-detects)	A

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Endrin aldehyde	0.23	0.36U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Endrin ketone	0.36U	0.075	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Chlorinated Pesticides - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	EB13-SA5DN-SS-060311	Endrin	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD) (C)
DE173	EB13-SA5DN-SS-060311	4,4'-DDE 4,4'-DDD Endosulfan II Endrin aldehyde 4,4'-DDT Endosulfan sulfate Methoxychlor	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE173	SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	Endosulfan I Endrin 4,4'-DDD 4,4'-DDT Endrin aldehyde Endosulfan sulfate Mirex Toxaphene Chlordane (Technical)	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE173	SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	alpha-BHC gamma-BHC beta-BHC delta-BHC Heptachlor Aldrin Heptachlor epoxide Endosulfan I 4,4'-DDE Dieldrin Endrin Endosulfan II 4,4'-DDT Endrin aldehyde Endosulfan sulfate Methoxychlor Endrin ketone	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)
DE173	SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	alpha-BHC gamma-BHC beta-BHC delta-BHC Heptachlor Aldrin Heptachlor epoxide Endosulfan I 4,4'-DDE Dieldrin Endrin Endosulfan II Endosulfan sulfate Methoxychlor Endrin ketone Mirex Toxaphene Chlordane (Technical)	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	DUP-13-SA5DN-QC-060311	4,4'-DDT Endrin aldehyde	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)
DE173	EB13-SA5DN-SS-060311	Endrin 4,4'-DDE	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE173	SL-153-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate spikes (%R) (S)
DE173	SL-155-SA5DN-SS-0.0-0.5	Heptachlor	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE173	EB13-SA5DN-SS-060311	4,4'-DDE Endosulfan I	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	Heptachlor	J (all detects)	P	Laboratory control samples (%R) (L)
DE173	SL-152-SA5DN-SS-0.0-0.5	beta-BHC 4,4'-DDD	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-153-SA5DN-SS-0.0-0.5	Chlordane (Technical)	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-154-SA5DN-SS-0.0-0.5	beta-BHC Chlordane (Technical)	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-155-SA5DN-SS-0.0-0.5	4,4'-DDE Endrin aldehyde	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-156-SA5DN-SS-0.0-0.5	4,4'-DDE 4,4'-DDD 4,4'-DDT Endrin ketone Chlordane (Technical)	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-157-SA5DN-SS-0.0-0.5	delta-BHC 4,4'-DDE	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-158-SA5DN-SS-0.0-0.5	delta-BHC 4,4'-DDE 4,4'-DDT	J (all detects) J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-159-SA5DN-SS-0.0-0.5	delta-BHC	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-160-SA5DN-SS-0.0-0.5	4,4'-DDE Chlordane (Technical)	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-162-SA5DN-SS-0.0-0.5	delta-BHC 4,4'-DDD	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-166-SA5DN-SS-0.0-0.5	Chlordane (Technical)	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-207-SA5DN-SS-0.0-0.5	Chlordane (Technical) Endrin aldehyde	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	DUP-13-SA5DN-QC-060311	Endrin ketone	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB13-SA5DN-SS-060311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)
DE173	SL-155-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	4,4'-DDE 4,4'-DDT delta-BHC Endosulfan II Endrin aldehyde Endrin ketone	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D3a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/7/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer: A

METHOD: GC Chlorinated Pesticides (EPA SW846 Method 8081A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	GC/ECD Instrument Performance Check	A	
III.	Initial calibration	SW	%D ≤ 20, r²
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	SW	D = 4, 13
XVI.	Field blanks	SW	EB = 14

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

Validated Samples: soil + water

1	SL-152-SA5DN-SS-0.0-0.5	11	SL-166-SA5DN-SS-0.0-0.5	21	PBLK02161	31	
2	SL-153-SA5DN-SS-0.0-0.5	12	SL-207-SA5DN-SS-0.0-0.5	22	PBLK20157	32	
3	SL-154-SA5DN-SS-0.0-0.5	13	DUP-13-SA5DN-QC-060311	23		33	
4	SL-155-SA5DN-SS-0.0-0.5	14	EB13-SA5DN-SS-060311	24		34	
5	SL-156-SA5DN-SS-0.0-0.5	15	SL-155-SA5DN-SS-0.0-0.5MS	25		35	
6	SL-157-SA5DN-SS-0.0-0.5	16	SL-155-SA5DN-SS-0.0-0.5MSD	26		36	
7	SL-158-SA5DN-SS-0.0-0.5	17		27		37	
8	SL-159-SA5DN-SS-0.0-0.5	18		28		38	
9	SL-160-SA5DN-SS-0.0-0.5	19		29		39	
10	SL-162-SA5DN-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 26277D3a
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: C

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ____%D or ____%R	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15%.0 for individual breakdown in the Evaluation mix standards?	✓			
Was a continuing calibration analyzed daily?	✓			80-120
Were all percent differences (%D) ~~≤ 15%.0~~ or percent recoveries ~~85-115%~~?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?			✓	
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	✓			
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	

LDC #: 26277D3c
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 26277D3c
SDG #: see cover
METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: EJ
2nd Reviewer: A

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 5 point calibration curve performed?
Y N N/A Was a linear fit used for evaluation? If yes, the acceptance criteria for each compound is %RSD less than or equal to 20.0%.
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? _____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Was initial calibration performed at the required frequency?

Level IV Only

Y N N/A Were the retention time windows properly established for all compounds?
Y N N/A Were compounds run at the required concentrations in the initial calibrations?

#	Date	Standard ID	Column / Detector	Compound	Finding RPD Limit ≤20%	Associated Samples	Qualifications
	6/11/11	ICAL-IP6162	RTX CLP	K	24.0	All water	J/UJ/A (c)

Comments _____

LDC #: 26277D3s

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/11/11	IP6162-1CV	RTX-CLP I	K	28.9	( )	All water	J/UJ/A (C)
			RTX CLP II	J	57.8	( )	↓	↓
						( )		
						( )		
						( )		
						( )		
	6/13/11	2P6162.19R	RTX-CLP I	J	36.5	( )	All water	(C)
				M	38.4	( )	↓	↓
				L	26.9	( )		
				R	35.5	( )		
				O	20.8	( )		
				N	24.8	( )		
				P	24.3	( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 27703S

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 6 of 7
Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer: C

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/24/11	IP10174.52R	RTX CLP1	H	21.4	( )	7 → 11	J/UJ/A (C)
				K	24.1	( )		
				M	25.6	( )		
				O	25.0	( )		
				R	22.1	( )		
				N	26.0	( )		
	↓	↓	RTX CLP2	A	78.5	( )		J/UJ/P (C)
				D	81.6	( )		
				B	92.7	( )		
				C	76.0	( )		
				E	67.1	( )		
				F	114.4	( )		
				G	88.4	( )		
				H	82.5	( )		
				J	102.0	( )		
				I	89.2	( )		
				K	51.0	( )		
				L	63.5	( )		
				O	28.7	( )		
				R	44.7	( )		
				N	49.8	( )		
				P	35.0	( )		
				Q	26.8	( )	↓	↓
						( )		

LDC #: 26277D3 5

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/24/11	IP10174.53R	RTX-CLP1	Mirex	21.8	( )	7 → 11	J/UJ/A (C)
			RTX-CLP2		65.3	( )	↓	↓
						( )		
						( )		
						( )		
	6/24/11	IP10174.54R	RTX-CLP2	U	53.3	( )	↓	J/UJ/A (C)
						( )		
						( )		
	6/24/11	IP10174.55R	RTX-CLP2	chlordane	134.8	( )	↓	J/UJ/A (C)
				(Technical)		( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 26277D3S

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC ___ HPLC

2nd Reviewer: [signature]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/15/17	IP10174B.69R	RTX CLP II	A	85.3	( )	12, 13	J/UJ/A (C)
				D	85.8	( )		P
				B	104.8	( )		
				C	82.4	( )		
				E	71.8	( )		
				F	131.1	( )		
				G	102.6	( )		
				H	104.5	( )		
				J	122.7	( )		
				I	102.9	( )		
				K	68.1	( )		
				L	78.4	( )		
				O	40.5	( )	except # 12 on O	
				R	61.1	( )	except # 12 on R	
				N	67.8	( )		
				P	46.6	( )		
				Q	42.8	( )		
						( )		
	↓	IP10174B.70R	RTX CLP II	Mirex	82.5	( )	↓	J/UJ/A (C)
						( )		
	6/15					( )		
						( )		
						( )		
						( )		

LDC #: 26277D3S

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ **GC** __ **HPLC**

2nd Reviewer: ✓

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/25/11	IP10174.71R	RTX-CLPI	U	22.0	( )	12, 13	J/UJ/A (C)
			RTX-CLPII		50.3	( )	↓	↓
						( )		
						( )		
	6/25/11	IP10174.72R	RTX-CLPII	chlordane (Technical)	129	( )	↓	J/UJ/A (C)
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
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						( )		

LDC #: 26277D3g

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: __ GC __ HPLC
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug/L Associated sample units: ug/kg
Sampling date: 6/3/11
Field blank type: (circle one) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank
Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other: EB
Associated Samples: All soils (ND)

Compound	Blank ID	Blank ID	Sample Identification								
	14										
E	0.0086										
CRQL											

Blank units: _____ Associated sample units: _____
Sampling date: _____
Field blank type: (circle one) Field Blank / Trip Blank/ Atmospheric Blank/ Ambient Blank
Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other: _____
Associated Samples: _____

Compound	Blank ID	Blank ID	Sample Identification								
CRQL											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with compound concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 27703c

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ **GC** __ **HPLC**

Are surrogates required by the method? Yes___ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	2	NS	Y	48 (50-130)	J/UJ/A (S)
				( )	
				( )	
	12	↓	Y	35 (50-130)	J/UJ/A (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277P35

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: / **GC** __ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15 + 16	E	130 (13-126)	142 (13-126)	( )	4	J/A det (E)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277D3g

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D 20157	J	142 (66-139)	142 (66-130)	( )	All water	J/Pdet (L)
		"	130 (68-128)	130 (68-128)	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS02161	E	130 (43-124)	( )	( )	All soils	J/Pdet (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277D3c
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer:

METHOD: ✓ **GC** __ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

* X III

#	Compound Name	Finding (% RPD Bet 2 col. ≤ 40)	Associated Samples	Qualifications
	B	49.61	1	J/A det
	M	71	↓	↓
	Technical chlordane	59.57	2	↓
	B	83.17	3	
	Technical chlordane	58.54	↓	↓
	J	74.50	4	
	R	94.53	↓	↓
	J	68.9	5	
	M	79.0		
	O	60.91		
	Q	45.14		
	Tech chlordane	59.61	↓	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26277D3S
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 4 of 37
Reviewer: F7
2nd Reviewer: r

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

* X 111

#	Compound Name	%RPD Bet 2 col Finding ≤40	Associated Samples	Qualifications
	c	90.27	6	J/A det
	J	75.87		
	c	62.20	7	↓
	J	72.83		
	0	56.27		
	c	56.68	8	↓
	J	73.56	9	↓
	Technical chlordane	~~73.56~~ 70.13		
	c	42.76	10	↓
	M	74.0		

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26277039
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 2 of 3
Reviewer: EJ
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

* X III

#	Compound Name	% RPD Bet 2 columns ≤40 Finding	Associated Samples	Qualifications
	Technical Chlordane	98.03	11	J/A det
	↓	48.71	12	↓
	R	70.11		
	Q	59.11	13	↓

Comments: See sample calculation verification worksheet for recalculations

LDC#: 26277 D3g **VALIDATION FINDINGS WORKSHEET**
Field Duplicates

Page: 1 of 1
Reviewer: EJ
2nd Reviewer: A

METHOD: Chlorinated Pesticide (EPA Method 8081A)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

(FD)

Compound	Concentration (ug/Kg)		≤ 50 RPD	
	4	13		
Chlordane (tech. g)	2.5	4.0	46	
J	0.29	0.45U	200	J/UJ/A
O	0.37	0.36U	200	
C	0.063	0.17U	200	
L	0.15	0.36U	200	
R	0.23	0.36U	200	
Q	0.36U	0.075	200	

V:\FIELD DUPLICATES\templates\26277D3a.wpd

LDC #: 26277D3S
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JTC
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 10^3 CF (std)	Recalculated 10^3 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL-IP6162	6/11/11	gamma-BHC RTX CLP I	5.34×10^3	5.34×10^3	5.40×10^3	5.4×10^3	2.7	2.7
			4,4-DDT	1.54×10^3	1.54×10^3	1.61×10^3	1.61×10^3	8.1	8.1
2			↓ RTX CLP II	6.51×10^3	6.51×10^3	6.59×10^3	6.59×10^3	3.0	3.0
				2.97×10^3	2.97×10^3	3.05×10^3	3.05×10^3	4.9	4.9
3	ICAL IP10174	6/24/11	↓	6.91×10^3	6.91×10^3	8.70×10^3	8.70×10^3	7.1	7.1
				3.49×10^3	3.49×10^3	3.35×10^3	3.35×10^3	7.2	7.2
4			↓	3.30×10^3	3.30×10^3	3.26×10^3	3.26×10^3	3.3	3.3
				1.68×10^3	1.68×10^3	1.69×10^3	1.67×10^3	5.2	5.2

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results:

LDC #: 76277N3s
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (10 std)	Recalculated CF (10 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL IP10182	6/30/11	gamma-BHC RTXCLP1	6.29×10^3	6.29×10^3	6.16×10^3	6.16×10^3	2.4	2.4
			4,4-DDT	3.09×10^3	3.09×10^3	3.02×10^3	3.02×10^3	3.3	3.3
2			↓ RTXCLP2	6.42×10^3	6.42×10^3	6.43×10^3	6.43×10^3	5.1	5.1
				2.85×10^3	2.85×10^3	2.84×10^3	2.84×10^3	3.3	3.3
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D3c
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: P
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	2P6162.19R	6/13/11	gamma-BHC RTX CLP1	10.0	11.20	11.20	12.0	12.0
			4,4'-DDT	20.03	24.19	24.19	20.8	20.8
			↓	10.0	10.67	10.67	6.7	6.7
2			↓	20.03	18.80	18.80	6.1	6.1
	IP10174.52R	6/24/11	↓	10.0	8.94 ~~9.45~~	8.94	10.6	10.6
			↓	20.03	15.02	15.02	25.0	25.0
3			↓	10.0	18.16	18.16	81.6	81.6
			↓	20.03	~~28~~.78	25.78	28.7	28.7
	IP10174.69R	6/25/11	↓	10.0	9.02	9.02	9.8	9.8
4			↓	20.03	16.36	16.36	18.3	18.3
			↓	10.0	18.58	18.58	85.8	85.8
			↓	20.03	28.15	28.15	40.5	40.5

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26271109
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #8 1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene	RTXCLP1	1.04	0.550653	53	53	0
Decachlorobiphenyl	↓	↓	1.053663	101	101	0
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes: _____

LDC #: 26272039
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: 1
2nd Reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = | MS - MSD | * 2/(MS + MSD)

MS = Matrix spike percent recovery
MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
gamma-BHC	0.33	0.33	NO	0.24	0.24	73	73	73	73	0	0
4,4'-DDT	0.77	0.77	0.35	0.87	0.85	68	68	65	65	2	2

Comments: Refer ot Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D3g
SDG #: pu conv

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = l LCS - LCSD l * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS0216/

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma-BHC	0.33	NA	0.36	NA	109					
4,4'-DDT	0.33	"	0.36	"	109	NA				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D3 5
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: P
2nd reviewer: P

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

Sample I.D. #1 Beta: BHC

$$\text{Conc.} = \frac{(37491)\ (\cancel{40,000})\ 4}{(2.64 \times 10^3)\ (60)\ (0.932)}$$

=

1.02 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 6, 2011

Matrix: Soil/Water

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-152-SA5DN-SS-0.0-0.5
SL-153-SA5DN-SS-0.0-0.5
SL-154-SA5DN-SS-0.0-0.5
SL-155-SA5DN-SS-0.0-0.5
SL-156-SA5DN-SS-0.0-0.5
SL-157-SA5DN-SS-0.0-0.5
SL-158-SA5DN-SS-0.0-0.5
SL-159-SA5DN-SS-0.0-0.5
SL-160-SA5DN-SS-0.0-0.5
SL-162-SA5DN-SS-0.0-0.5
SL-166-SA5DN-SS-0.0-0.5
SL-207-SA5DN-SS-0.0-0.5
DUP-13-SA5DN-QC-060311
EB14-SA5DN-SB-060311
EB13-SA5DN-SS-060311
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-052-SA5DN-SB-4.0-5.0
SL-052-SA5DN-SB-9.0-10.0
SL-155-SA5DN-SS-0.0-0.5MS
SL-155-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
6/8/11	CCV (01:03)	ZBMultiR1	Aroclor-1242	24.6	All water samples in SDG DE173	Aroclor-1242 Aroclor-1016 Aroclor-1221 Aroclor-1232	J (all detects) UJ (all non-detects)	A
6/8/11	CCV (01:22)	ZBMultiR2	Aroclor-5460	39.9	All water samples in SDG DE173	Aroclor-5460	J (all detects) UJ (all non-detects)	A
6/14/11	CCV (15:01)	ZBMultiR2	Aroclor-5460	30.0	PBLK14160	Aroclor-5460	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
6/14/11	CCV (22:07)	ZBMultiR1	Aroclor-1260	20.3	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	J (all detects) UJ (all non-detects)	A
6/15/11	CCV (05:31)	ZBMultiR1	Aroclor-1260	26.2	SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	J (all detects) UJ (all non-detects)	A
6/15/11	CCV (05:49)	ZBMultiR1	Aroclor-5432	21.7	SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Aroclor-5432	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Samples EB14-SA5DN-SB-060311 and EB13-SA5DN-SS-060311 were identified as equipment blanks. No polychlorinated biphenyl contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-159-SA5DN-SS-0.0-0.5	Not specified	Decachlorobiphenyl	122 (45-120)	All TCL compounds	J (all detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Affected Compound	Flag	A or P
LCS/D14160 (All soil samples in SDG DE173)	Aroclor-5442	112 (36-106)	-	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-154-SA5DN-SS-0.0-0.5	Aroclor-1260	40.29	J (all detects)	A
SL-162-SA5DN-SS-0.0-0.5	Aroclor-1260	66.01	J (all detects)	A

Sample	Compound	RPD	Flag	A or P
SL-027-SA5DN-SB-4.0-5.0	Aroclor-1260	48.48	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

Samples SL-155-SA5DN-SS-0.0-0.5 and DUP-13-SA5DN-QC-060311 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Aroclor-5460	3.5	2.7	26 (≤50)	-	-
Aroclor-1260	1.6	1.6	0 (≤50)	-	-

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311	Aroclor-1242 Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-5460	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE173	SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260 Aroclor-5432	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE173	SL-159-SA5DN-SS-0.0-0.5	All TCL compounds	J (all detects)	P	Surrogate spikes (%R)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE173	SL-154-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-027-SA5DN-SB-4.0-5.0	Aroclor-1260	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D3b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD ≤ 20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	SW	D = 4, 13
XVI.	Field blanks	ND	EB = 14, 15

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

Validated Samples: soil + water

1	SL-152-SA5DN-SS-0.0-0.5	11	SL-166-SA5DN-SS-0.0-0.5	21	SL-052-SA5DN-SB-9.0-10.0	31	PBLK14160
2	SL-153-SA5DN-SS-0.0-0.5	12	SL-207-SA5DN-SS-0.0-0.5	22	SL-155-SA5DN-SS-0.0-0.5MS	32	PBLK21157
3	SL-154-SA5DN-SS-0.0-0.5	13	DUP-13-SA5DN-QC-060311	23	SL-155-SA5DN-SS-0.0-0.5MSD	33	
4	SL-155-SA5DN-SS-0.0-0.5	14	EB14-SA5DN-SB-060311 W	24		34	
5	SL-156-SA5DN-SS-0.0-0.5	15	EB13-SA5DN-SS-060311 W	25		35	
6	SL-157-SA5DN-SS-0.0-0.5	16	SL-019-SA5DN-SB-4.0-5.0	26		36	
7	SL-158-SA5DN-SS-0.0-0.5	17	SL-019-SA5DN-SB-9.0-10.0	27		37	
8	SL-159-SA5DN-SS-0.0-0.5	18	SL-027-SA5DN-SB-4.0-5.0	28		38	
9	SL-160-SA5DN-SS-0.0-0.5	19	SL-027-SA5DN-SB-14.0-15.0	29		39	
10	SL-162-SA5DN-SS-0.0-0.5	20	SL-052-SA5DN-SB-4.0-5.0	30		40	

Notes:

DC #: 2027703b
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓	✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 26277036
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 26277D3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD

Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/8/11	8CV	ZB multi R1	Y	24.6	( )	All water	J/UJ/A (C)
	1:03					( )		qual Y, W, X
						( )		
	6/8/11	CCV	ZB multi R2	Aroclor 5460	39.9	( )	↓	J/UJ/A (C)
	1:22					( )		qual 5460 only
						( )		
	6/14/11	CCV	ZB multi R2	↓	30.0	( )	PBLK141600	J/UJ/A (C)
	15:01					( )		qual 5460 only
						( )		
	6/14/11	CCV	ZB multi R1	BB	20.3	( )	1→13, 16→19,	J/UJ/A (C)
	22:07					( )	22, 23	qual Y, Z, AA,
						( )		BB
						( )		
	6/15/11	CCV	ZB multi R1	BB	26.2	( )	20, 21	J/UJ/A (C)
	5:37					( )		qual Y, Z, AA, BB
						( )		
						( )		
	6/15/11	CCV	ZB multi R1	Aroclor 5432	21.7	( )	20, 21	J/UJ/A (C)
	5:49					( )		qual 5432 only
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 27703b

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: ✓ **GC** __ **HPLC**

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	8	NS	O	122 (45-120)	J/Pdet (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277P3b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/P14160	Aroclor 5442	112 (36-106)	( )	( )	All soils	J/Pdet (L)
			( )	( )	( )		qual 5442 only
			( )	( )	( )		5432
			( )	( )	( )		5460
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277P36
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: / GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD But > w/. ≤40 Finding	Associated Samples	Qualifications
	BB	40.29	3	J/A det (a x III)
	BB	66.01	10	↓
			78	
	BB	48.48	18	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26277D3b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: ✓ GC __ HPLC

Y N N/A Were field duplicate pairs identified in this SDG?

Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		%RPD Limit ≤ 50	Qualification Parent only / All Samples
	4	13		
Aroclor 5460	3.5	2.7	26	
~~PCB~~ 1260	1.6	1.6	0	

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 26277D3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (20ng std)	Recalculated CF (20ng std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL IC20144B	5/24/11	Aroclo 1260-1 2BMultiR1	36	36	37	37	9.3	9.3
			↓ 7BMultiR2	212	212	219	219	9.6	9.6
2	ICAL IP20164	6/13/11	↓	37	37	37	37	2.9	2.9
				206	206	204	204	8.5	8.5
3	~~ICAL~~ IP20164	6/14/11	↓	37					
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277P3b
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	6/8/11	Aroclo 1260 ZBR1	200	220.13	220.13	10.1	10.1
	1:03		R2	200.0	186.85	186.85	6.6	6.6
2	CCV	6/14/11	↓	200	237.99	237.99	19.0	19.0
	14:43		↓	200	192.66	129.66	3.7	3.7
3	CCV	6/14/11	↓	200	240.59	240.59	20.3	20.3
	23:07		↓	200	226.34	226.34	13.2	13.2
4	CCV	6/15/11	↓	200.0	252.44	252.44	26.2	26.2
	5:31		↓	200.0	236.78	236.78	18.4	18.4

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TCMX	8:ZB-R2	1.0437	0.855869	82	82	0
PCB	↓	↓	1.041867	100	100	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #:_____ SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: EZ
2nd Reviewer: [signature]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 22 + 23

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB 1260	16.67	16.67	1.57	13.55	15.43	72	72	83	83	13	13

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D3h
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: FJ
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: lcs/D 141610

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)		NA								
PCB 1260	16.67	~~16.67~~	17.89	NA	107	107	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D3J
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name 1260

Concentration = 1.79 / (0.932)

= 1.92 ug/kg

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications
	1260-1 = 16758.582 (2000) / 204 (60)(1000) = 2.738		1260-1	1 = 2.738	
				2 = 2.1124	
				3 = 0.9313	
				4 = 1.3248	
				5 = 2.01909	
				6 = 1.61869	
				Ave = 1.79	

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 6, 2011

Matrix: Soil/Water

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-152-SA5DN-SS-0.0-0.5
SL-153-SA5DN-SS-0.0-0.5
SL-154-SA5DN-SS-0.0-0.5
SL-155-SA5DN-SS-0.0-0.5
SL-156-SA5DN-SS-0.0-0.5
SL-157-SA5DN-SS-0.0-0.5
SL-158-SA5DN-SS-0.0-0.5
SL-159-SA5DN-SS-0.0-0.5
SL-160-SA5DN-SS-0.0-0.5
SL-162-SA5DN-SS-0.0-0.5
SL-166-SA5DN-SS-0.0-0.5
SL-207-SA5DN-SS-0.0-0.5
DUP-13-SA5DN-QC-060311
EB14-SA5DN-SB-060311
EB13-SA5DN-SS-060311
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-052-SA5DN-SB-4.0-5.0
SL-052-SA5DN-SB-9.0-10.0
SL-155-SA5DN-SS-0.0-0.5MS
SL-155-SA5DN-SS-0.0-0.5MSD
SL-155-SA5DN-SS-0.0-0.5DUP

Introduction

This data review covers 22 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, 7470A, and 7471A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Magnesium Mercury	19.500 ug/L 0.116 ug/L	All water samples in SDG DE173
ICB/CCB	Magnesium Titanium	41.2 ug/L 0.60 ug/L	All water samples in SDG DE173
PB (prep blank)	Aluminum Antimony Calcium Phosphorus Tin Mercury	9.318 mg/Kg 0.097 mg/Kg 11.040 mg/Kg 1.800 mg/Kg 1.736 mg/Kg 0.004 mg/Kg	All soil samples in SDG DE173

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Mercury	0.075 ug/L	SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0
ICB/CCB	Aluminum	104 ug/L	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5
ICB/CCB	Aluminum Zirconium	110 ug/L 8.2 ug/L	DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0
ICB/CCB	Titanium	1.5 ug/L	SL-152-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5
ICB\CCB	Titanium	2.3 ug/L	SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-152-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.26 mg/Kg 4.3 mg/Kg 0.014 mg/Kg	0.26U mg/Kg 4.3U mg/Kg 0.014U mg/Kg
SL-153-SA5DN-SS-0.0-0.5	Antimony Tin	0.24 mg/Kg 3.3 mg/Kg	0.24U mg/Kg 3.3U mg/Kg
SL-154-SA5DN-SS-0.0-0.5	Antimony Tin	0.40 mg/Kg 3.4 mg/Kg	0.40U mg/Kg 3.4U mg/Kg
SL-155-SA5DN-SS-0.0-0.5	Antimony Tin	0.34 mg/Kg 3.3 mg/Kg	0.34U mg/Kg 3.3U mg/Kg
SL-156-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.34 mg/Kg 3.3 mg/Kg 0.025 mg/Kg	0.34U mg/Kg 3.3U mg/Kg 0.025U mg/Kg
SL-157-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.34 mg/Kg 3.2 mg/Kg 0.011 mg/Kg	0.34U mg/Kg 3.2U mg/Kg 0.011U mg/Kg
SL-158-SA5DN-SS-0.0-0.5	Antimony Tin	0.29 mg/Kg 3.3 mg/Kg	0.29U mg/Kg 3.3U mg/Kg
SL-159-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.26 mg/Kg 3.4 mg/Kg 0.026 mg/Kg	0.26U mg/Kg 3.4U mg/Kg 0.026U mg/Kg
SL-160-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.31 mg/Kg 3.3 mg/Kg 0.017 mg/Kg	0.31U mg/Kg 3.3U mg/Kg 0.017U mg/Kg
SL-162-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.33 mg/Kg 3.7 mg/Kg 0.027 mg/Kg	0.33U mg/Kg 3.7U mg/Kg 0.027U mg/Kg
SL-166-SA5DN-SS-0.0-0.5	Tin Mercury	3.04 mg/Kg 0.032 mg/Kg	3.04U mg/Kg 0.032U mg/Kg
SL-207-SA5DN-SS-0.0-0.5	Tin Mercury	3.5 mg/Kg 0.066 mg/Kg	3.5U mg/Kg 0.066U mg/Kg
DUP-13-SA5DN-QC-060311	Antimony Tin Mercury	0.25 mg/Kg 3.2 mg/Kg 0.017 mg/Kg	0.25U mg/Kg 3.2U mg/Kg 0.017U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-019-SA5DN-SB-4.0-5.0	Antimony Tin Mercury	0.30 mg/Kg 3.4 mg/Kg 0.029 mg/Kg	0.30U mg/Kg 3.4U mg/Kg 0.029U mg/Kg
SL-019-SA5DN-SB-9.0-10.0	Antimony Tin Mercury	0.21 mg/Kg 3.2 mg/Kg 0.016 mg/Kg	0.21U mg/Kg 3.2U mg/Kg 0.016U mg/Kg
SL-027-SA5DN-SB-4.0-5.0	Antimony Tin Mercury	0.25 mg/Kg 3.3 mg/Kg 0.019 mg/Kg	0.25U mg/Kg 3.3U mg/Kg 0.019U mg/Kg
SL-027-SA5DN-SB-14.0-15.0	Antimony Tin Mercury	0.12 mg/Kg 3.3 mg/Kg 0.012 mg/Kg	0.12U mg/Kg 3.3U mg/Kg 0.012U mg/Kg
SL-052-SA5DN-SB-4.0-5.0	Antimony Tin	0.27 mg/Kg 3.1 mg/Kg	0.27U mg/Kg 3.1U mg/Kg
SL-052-SA5DN-SB-9.0-10.0	Antimony Tin Mercury	0.23 mg/Kg 3.3 mg/Kg 0.0044 mg/Kg	0.23U mg/Kg 3.3U mg/Kg 0.0044U mg/Kg

Samples EB14-SA5DN-SB-060311 and EB13-SA5DN-SS-060311 were identified as equipment blanks. No metal contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB14-SA5DN-SB-060311	6/8/11	Lead	0.064 ug/L	All soil samples in SDG DE173
EB13-SA5DN-SS-060311	6/8/11	Lead	0.062 ug/L	All soil samples in SDG DE173

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-155-SA5DN-SS-0.0-0.5MS/MSD (All soil samples in SDG DE173)	Antimony	66 (75-125)	66 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-155-SA5DN-SS-0.0-0.5MS/MSD (All soil samples in SDG DE173)	Arsenic	275 (75-125)	210 (75-125)	-	J (all detects)	A
	Beryllium	154 (75-125)	144 (75-125)	-	J (all detects)	
	Cadmium	178 (75-125)	160 (75-125)	-	J (all detects)	
	Chromium	235 (75-125)	194 (75-125)	-	J (all detects)	
	Cobalt	191 (75-125)	176 (75-125)	-	J (all detects)	
	Copper	216 (75-125)	193 (75-125)	-	J (all detects)	
	Lead	242 (75-125)	204 (75-125)	-	J (all detects)	
	Molybdenum	175 (75-125)	163 (75-125)	-	J (all detects)	
	Nickel	182 (75-125)	159 (75-125)	-	J (all detects)	
	Selenium	143 (75-125)	138 (75-125)	-	J (all detects)	
	Silver	163 (75-125)	154 (75-125)	-	J (all detects)	
	Thallium	163 (75-125)	149 (75-125)	-	J (all detects)	

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-155-SA5DN-SS-0.0-0.5DUP (All soil samples in SDG DE173)	Arsenic	23 (≤20)	-	J (all detects)	A
	Barium	26 (≤20)	-	UJ (all non-detects)	
	Beryllium	26 (≤20)	-		
	Cobalt	25 (≤20)	-		
	Lead	27 (≤20)	-		
	Molybdenum	27 (≤20)	-		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-155-SA5DN-SS-0.0-0.5	Barium Nickel	11 (≤10) 11 (≤10)	All soil samples in SDG DE173	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE173	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples SL-155-SA5DN-SS-0.0-0.5 and DUP-13-SA5DN-QC-060311 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Aluminum	19800	20400	3 (≤50)	-	-
Antimony	0.34	0.25	31 (≤50)	-	-
Arsenic	7.8	6.3	21 (≤50)	-	-
Barium	144	116	22 (≤50)	-	-
Beryllium	0.81	0.64	23 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Cadmium	0.42	0.37	13 (≤50)	-	-
Calcium	4280	4440	4 (≤50)	-	-
Chromium	33.0	27.8	17 (≤50)	-	-
Cobalt	12.0	9.7	21 (≤50)	-	-
Copper	17.5	14.7	17 (≤50)	-	-
Iron	27800	26400	5 (≤50)	-	-
Lead	11.8	8.7	30 (≤50)	-	-
Lithium	23.8	24.9	5 (≤50)	-	-
Magnesium	5850	6170	5 (≤50)	-	-
Manganese	421	428	2 (≤50)	-	-
Mercury	0.0030U	0.017	200 (≤50)	J (all detects) UJ (all non-detects)	A
Molybdenum	0.90	0.74	20 (≤50)	-	-
Nickel	20.5	17.7	15 (≤50)	-	-
Phosphorus	530	575	8 (≤50)	-	-
Potassium	5630	5850	4 (≤50)	-	-
Selenium	0.25	0.20	22 (≤50)	-	-
Silver	0.044	0.038	15 (≤50)	-	-
Sodium	90.7	92.0	1 (≤50)	-	-
Strontium	27.6	28.3	3 (≤50)	-	-
Thallium	0.42	0.30	33 (≤50)	-	-
Tin	3.3	3.2	3 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Titanium	1500	1510	1 (≤50)	-	-
Vanadium	55.3	47.4	15 (≤50)	-	-
Zinc	87.7	75.6	15 (≤50)	-	-
Zirconium	7.5	7.7	3 (≤50)	-	-

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE173

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Arsenic Beryllium Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Arsenic Barium Beryllium Cobalt Lead Molybdenum	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Barium Nickel	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
DE173	SL-155-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	Mercury	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE173

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE173	SL-152-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.26U mg/Kg 4.3U mg/Kg 0.014U mg/Kg	A	B
DE173	SL-153-SA5DN-SS-0.0-0.5	Antimony Tin	0.24U mg/Kg 3.3U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE173	SL-154-SA5DN-SS-0.0-0.5	Antimony Tin	0.40U mg/Kg 3.4U mg/Kg	A	B
DE173	SL-155-SA5DN-SS-0.0-0.5	Antimony Tin	0.34U mg/Kg 3.3U mg/Kg	A	B
DE173	SL-156-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.34U mg/Kg 3.3U mg/Kg 0.025U mg/Kg	A	B
DE173	SL-157-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.34U mg/Kg 3.2U mg/Kg 0.011U mg/Kg	A	B
DE173	SL-158-SA5DN-SS-0.0-0.5	Antimony Tin	0.29U mg/Kg 3.3U mg/Kg	A	B
DE173	SL-159-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.26U mg/Kg 3.4U mg/Kg 0.026U mg/Kg	A	B
DE173	SL-160-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.31U mg/Kg 3.3U mg/Kg 0.017U mg/Kg	A	B
DE173	SL-162-SA5DN-SS-0.0-0.5	Antimony Tin Mercury	0.33U mg/Kg 3.7U mg/Kg 0.027U mg/Kg	A	B
DE173	SL-166-SA5DN-SS-0.0-0.5	Tin Mercury	3.04U mg/Kg 0.032U mg/Kg	A	B
DE173	SL-207-SA5DN-SS-0.0-0.5	Tin Mercury	3.5U mg/Kg 0.066U mg/Kg	A	B
DE173	DUP-13-SA5DN-QC-060311	Antimony Tin Mercury	0.25U mg/Kg 3.2U mg/Kg 0.017U mg/Kg	A	B
DE173	SL-019-SA5DN-SB-4.0-5.0	Antimony Tin Mercury	0.30U mg/Kg 3.4U mg/Kg 0.029U mg/Kg	A	B
DE173	SL-019-SA5DN-SB-9.0-10.0	Antimony Tin Mercury	0.21U mg/Kg 3.2U mg/Kg 0.016U mg/Kg	A	B
DE173	SL-027-SA5DN-SB-4.0-5.0	Antimony Tin Mercury	0.25U mg/Kg 3.3U mg/Kg 0.019U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE173	SL-027-SA5DN-SB-14.0-15.0	Antimony Tin Mercury	0.12U mg/Kg 3.3U mg/Kg 0.012U mg/Kg	A	B
DE173	SL-052-SA5DN-SB-4.0-5.0	Antimony Tin	0.27U mg/Kg 3.1U mg/Kg	A	B
DE173	SL-052-SA5DN-SB-9.0-10.0	Antimony Tin Mercury	0.23U mg/Kg 3.3U mg/Kg 0.0044U mg/Kg	A	B
DE173	SL-088-SA5DN-SB-4.0-5.0	Tin	3.1UU mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-4-11

SDG #: DE173 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: OR

2nd Reviewer: W

METHOD: Metals (EPA SW 846 Method 6010B/6020~~A~~/~~7000~~ 7471A/7000A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	
VII.	Duplicate Sample Analysis	SW	
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	SW	(4, 13)
XV	Field Blanks	SW	EB= 14, 15

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

Validated Samples: Soil/water

1	SL-152-SA5DN-SS-0.0-0.5	11	SL-166-SA5DN-SS-0.0-0.5	21	SL-052-SA5DN-SB-9.0-10.0	31	
2	SL-153-SA5DN-SS-0.0-0.5	12	SL-207-SA5DN-SS-0.0-0.5	22	SL-155-SA5DN-SS-0.0-0.5MS	32	
3	SL-154-SA5DN-SS-0.0-0.5	13	DUP-13-SA5DN-QC-060311	23	SL-155-SA5DN-SS-0.0-0.5MSD	33	
4	SL-155-SA5DN-SS-0.0-0.5	14	EB14-SA5DN-SB-060311 W	24	SL-155-SA5DN-SS-0.0-0.5DUP	34	
5	SL-156-SA5DN-SS-0.0-0.5	15	EB13-SA5DN-SS-060311 W	25		35	
6	SL-157-SA5DN-SS-0.0-0.5	16	SL-019-SA5DN-SB-4.0-5.0	26		36	
7	SL-158-SA5DN-SS-0.0-0.5	17	SL-019-SA5DN-SB-9.0-10.0	27		37	
8	SL-159-SA5DN-SS-0.0-0.5	18	SL-027-SA5DN-SB-4.0-5.0	28		38	
9	SL-160-SA5DN-SS-0.0-0.5	19	SL-027-SA5DN-SB-14.0-15.0	29		39	
10	SL-162-SA5DN-SS-0.0-0.5	20	SL-052-SA5DN-SB-4.0-5.0	30		40	

Notes:

DC #: 26277D4

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: W

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

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.				
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were < 5X the RL.		✓		
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?	✓			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data	✓			
Overall assessment of data was found to be acceptable.				
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
XV. Field blanks	✓			
Field blanks were identified in this SDG.	✓			
Target analytes were detected in the field blanks.	✓			

LDC #: 26277R4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-21		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
QC-22-24		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: M

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x; Hg:167
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Water Reason: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Mg		19.500	41.2	206										
Hg		0.116		0.58										
Ti			0.60	3										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Action Limit	1	2	3	4	5	6	7	8	9	10	11	12	13	16	17	18	19	20	21
Al	9.318	46.59																			
Sb	0.097	0.485	0.26	0.24	0.40	0.34	0.34	0.34	0.29	0.26	0.31	0.33			0.25	0.30	0.21	0.25	0.12	0.27	0.23
Ca	11.040	55.2																			
P	1.800	9																			
Sn	1.736	8.68	4.3	3.3	3.4	3.3	3.3	3.2	3.3	3.4	3.3	3.7	3.4	3.5	3.2	3.4	3.2	3.3	3.3	3.1	3.3
Hg	0.004	0.02	0.014					0.011			0.017				0.017		0.016	0.019	0.012		0.0044

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 5-13, 16-21

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	5	6	8	9	10	11	12	13	16	17	18	19	21	
Hg			0.075	0.06	0.025	See PB	0.026	See PB	0.027	0.032	0.066	See PB	0.029	See PB	See PB	See PB	See PB	

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-12

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Al			104	52										

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 6 of 6
Reviewer: OZ
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x; Hg:167
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 13, 16-21

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Al			110	55										
Zr			8.2	4.1										

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 1, 4

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			1.5	0.75										

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 2, 3, 5-12, 16-21

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			2.3	1.15										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U". Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CZ
2nd Reviewer: M

METHOD: Trace Metals (EPA SW846 6010B/7000)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target analytes detected in the field blanks? Reason: F

Blank units: ug/L **Associated sample units:** mg/Kg

Sampling date: 6/8/11 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: All Soil

Analyte	Blank ID	Blank ID	Sample Identification										
	14	15	Action Level	No Qualifiers									
Pb	0.064	0.062	0.032										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 26270H

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: [illegible]

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were ICP interference check samples performed as required?
Y N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	6/10/11	ICSA (12:29/13:25)	Mn	5	0.84	All Water	No Qual (<90% ICSA)
	6/14/11	ICSA (16:50/19:04	Mn	5	0.78	All Soil	No Qual (<10x)

Comments:

LDC #: 26277DJ

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	22/23	S	Sb	66	66		All Soils	J/UJ/A (Q)
			As	275	210			J det/A
			Be	154	144			
			Cd	178	160			
			Cr	235	194			
			Co	191	176			
			Cu	216	193			
			Pb	242	204			
			Mo	175	163			
			Ni	182	159			
			Se	143	138			
			Ag	163	154			
			Tl	163	149			

Comments: _____

LDC #: 26277D1

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Reviewer: CR
2nd Reviewer: CR

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤ 35% for soil samples? If no, see qualifications below. A control limit of ±R.L. (±2X R.L. for soil) was used for sample values that were <5X the R.L., including the case when only one of the duplicate sample values was <5X R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
		24	S	AS	23 (≤20)		All Soil	J (J/A (E)
				Ba	26			
				Be	26			
				Co	25			
				Pb	27			
				Mo	27			

Comments:

LDC #: 26277J4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Reviewer: CR
2nd Reviewer: [signature]

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?

Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?

Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		4	S	Ba	11	J/UJ/A all Sb	J/UJ/A (A)
				Ni	11		

Comments:

LDC#: 26277D4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: OK
2nd Reviewer: V

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	4	13		
Aluminum	19800	20400	3	
Antimony	0.34	0.25	31	
Arsenic	7.8	6.3	21	
Barium	144	116	22	
Beryllium	0.81	0.64	23	
Cadmium	0.42	0.37	13	
Calcium	4280	4440	4	
Chromium	33.0	27.8	17	
Cobalt	12.0	9.7	21	
Copper	17.5	14.7	17	
Iron	27800	26400	5	
Lead	11.8	8.7	30	
Lithium	23.8	24.9	5	
Magnesium	5850	6170	5	
Manganese	421	428	2	
Mercury	0.0030U	0.017	~~440~~ 200	J/UJ/A
Molybdenum	0.90	0.74	20	
Nickel	20.5	17.7	15	
Phosphorus	530	575	8	

LDC#: 26277D4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: d2
2nd Reviewer: W

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	4	13		
Potassium	5630	5850	4	
Selenium	0.25	0.20	22	
Silver	0.044	0.038	15	
Sodium	90.7	92.0	1	
Strontium	27.6	28.3	3	
Thallium	0.42	0.30	33	
Tin	3.3	3.2	3	
Titanium	1500	1510	1	
Vanadium	55.3	47.4	15	
Zinc	87.7	75.6	15	
Zirconium	7.5	7.7	3	

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: CS
2nd Reviewer: [illegible]

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

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found / True x 100 Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Al	28359.03	30000	94.6	94.6	Y
ICV	ICP/MS (Initial calibration)	As	493.80	500	98.8	98.8	
ICV	CVAA (Initial calibration)	Hg	2.64	2.5	105.6	105.6	
CCV	ICP (Continuing calibration)	Zn	508.77	5000	101.8	101.8	
CCV	ICP/MS (Continuing calibration)	Tl	23.25	25.0	93.0	93.0	
CCV	CVAA (Continuing calibration)	Hg	1.01	1	10.1	101	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
2nd Reviewer: [illegible]

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

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Ag	20.3	20	101.5	101.5	Y
LCS	Laboratory control sample	Cr	1042.2	1000	104	104	
22	Matrix spike	Pb	(SSR-SR) 7.3588	3.0467	242	242	
24	Duplicate	Ba	27.6461	28.2488	2	2	
4	ICP serial dilution	P	517.96	5041.7	1	1	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: AR
2nd reviewer: ✓

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for AS were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{(100mL)(2)(70.53\mu g/L)}{0.932(1.01g)(1000)} = 14.99 mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	19200	19200	Y
		Sb	0.26	0.26	
		As	15.0	15.0	
		Ba	151	151	
		Be	1.3	1.3	
		B	14.0	14.0	
		Cd	0.28	0.28	
		Ca	17800	17800	
		Cr	36.5	36.5	
		Co	15.4	15.4	
		Cu	26.5	26.5	
		Fe	32800	32800	
		Pb	12.4	12.4	
		Li	48.2	48.2	
		Mg	10200	10200	
		Mn	510	510	
		Hg	0.014	0.014	
		Mo	1.3	1.3	
		Ni	226.6	226.6	
		P	516	516	✓

Note:

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: AR
2nd reviewer: ✓

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$4 = \frac{100mL\,(191.17529\,mg/L)}{0.956\,(1.01g)} = 19799.4\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	4070	4070	Y
		Se	0.37	0.37	
		Ag	0.15	0.15	
		Na	239	239	
		Sr	38.5	38.5	
		Tl	0.42	0.42	
		Sn	4.3	4.3	
		Ti	1480	1480	
		V	56.3	56.3	
		Zn	121	121	
		Zr	6.7	6.7	
	4	Al	19800	19800	
		Sb	0.34	0.34	
		As	7.8	7.8	
		Ba	144	144	
		Be	0.81	0.81	
		Cd	0.42	0.42	
		Ca	4280	4280	
		Cr	33.0	33.0	✓

Note:

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: AR
2nd reviewer: ✓

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

See Previous Page

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	4	Co	12.0	12.0	Y
		Cu	17.5	17.5	
		Fe	27800	27800	
		Pb	11.8	11.8	
		Li	23.8	23.8	
		Mg	5850	5850	
		Mn	421	421	
		Mo	0.90	0.90	
		Ni	20.5	20.5	
		P	530	530	
		Se K	5630	5630	
		As Se	0.25	0.25	
		Na As	0.044	0.044	
		K Na	90.7	90.7	
		Ti Sr	27.6	27.6	
		Sb Tl	0.42	0.42	
		V Sn	3.3	3.3	
		Y Ti	1500	1500	
		Zn V	55.3	55.3	
		Zr Zn	87.7	87.7	
			26 7.5	7.5	

Note: _____

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: AR
2nd reviewer:

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Hg were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL\,(0.154\ ug/L)}{0.862\,(0.61g)(1000)} = 0.029\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	16	Al	33700	33700	Y
		Sb	0.30	0.30	
		As	6.8	6.8	
		Ba	143	143	
		Be	0.91	0.91	
		Cd	0.16	0.16	
		Ca	34600	34600	
		Cr	31.9	31.9	
		Co	6.5	6.5	
		Cu	31.5	31.5	
		Fe	32900	32900	
		~~Li~~ Pb	8.4	8.4	
		~~Mg~~ Li	31.8	31.8	
		~~Mn~~ Mg	7110	7110	
		~~Hg~~ Mn	210	210	
		~~Mo~~ Hg	0.029	0.029	
		~~Ni~~ Mo	0.59	0.59	
		~~P~~ Ni	19.8	19.8	
		~~K~~ P	271	271	
		~~Ag~~ K	3640	3640	

Note:

LDC #: 26277D4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

Recalculation: See Previous Page

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	16	Ag	0.063	0.063	Y
		Na	688	688	
		Sb	54.3	54.3	
		Tl	0.28	0.28	
		Sn	3.4	3.4	
		Ti	1450	1450	
		V	51.1	51.1	
		Zn	67.7	67.7	
		Zr	8.6	8.6	

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 6, 2011

Matrix: Soil/Water

Parameters: Herbicides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-152-SA5DN-SS-0.0-0.5
SL-153-SA5DN-SS-0.0-0.5
SL-154-SA5DN-SS-0.0-0.5
SL-155-SA5DN-SS-0.0-0.5
SL-156-SA5DN-SS-0.0-0.5
SL-157-SA5DN-SS-0.0-0.5
SL-158-SA5DN-SS-0.0-0.5
SL-159-SA5DN-SS-0.0-0.5
SL-160-SA5DN-SS-0.0-0.5
SL-162-SA5DN-SS-0.0-0.5
SL-166-SA5DN-SS-0.0-0.5
SL-207-SA5DN-SS-0.0-0.5
DUP-13-SA5DN-QC-060311
EB13-SA5DN-SS-060311
SL-155-SA5DN-SS-0.0-0.5MS
SL-155-SA5DN-SS-0.0-0.5MSD

Introduction

This data review covers 15 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151A for Herbicides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No herbicide contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
PBLK15166	6/16/11	MCPP	150 ug/Kg	All soil samples in SDG DE173

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

Sample EB13-SA5DN-SS-060311 was identified as an equipment blank. No herbicide contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-156-SA5DN-SS-0.0-0.5	Not specified	2,4-Dichlorophenyl acetic acid	277 (36-156)	All TCL compounds	J (all detects)	A

VI. Matrix Spike/(Matrix Spike) Duplicate

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-155-SA5DN-SS-0.0-0.5MS/MSD (SL-155-SA5DN-SS-0.0-0.5)	2,4,5-T	-	-	36 (≤35)	J (all detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-153-SA5DN-SS-0.0-0.5	MCPA	62.86	J (all detects)	A
SL-157-SA5DN-SS-0.0-0.5	Dicamba	90.35	J (all detects)	A

Sample	Compound	RPD	Flag	A or P
SL-160-SA5DN-SS-0.0-0.5	MCPA	81.90	J (all detects)	A
SL-207-SA5DN-SS-0.0-0.5	MCPA	47.49	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Herbicides - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-156-SA5DN-SS-0.0-0.5	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE173	SL-155-SA5DN-SS-0.0-0.5	2,4,5-T	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE173	SL-153-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5	MCPA	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE173	SL-157-SA5DN-SS-0.0-0.5	Dicamba	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB13-SA5DN-SS-060311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Herbicides - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Herbicides - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D5 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FT
2nd Reviewer: A

METHOD: GC Herbicides (EPA SW 846 Method 8151A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II	Initial calibration	A	%D RSD ≤ 20, r^2
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	SW	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS ID
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	SW	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates ND	SW	D = 4, 11, 13
XIII.	Field blanks	ND	EB = 14

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

Validated Samples: soil & water

1	SL-152-SA5DN-SS-0.0-0.5	11	SL-166-SA5DN-SS-0.0-0.5	21	PBLK15166	31	
2	SL-153-SA5DN-SS-0.0-0.5	12	SL-207-SA5DN-SS-0.0-0.5	22	PBLK18159	32	
3	SL-154-SA5DN-SS-0.0-0.5	13	DUP-13-SA5DN-QC-060311	23		33	
4	SL-155-SA5DN-SS-0.0-0.5	14	EB13-SA5DN-SS-060311 W	24		34	
5	SL-156-SA5DN-SS-0.0-0.5	15	SL-155-SA5DN-SS-0.0-0.5MS	25		35	
6	SL-157-SA5DN-SS-0.0-0.5	16	SL-155-SA5DN-SS-0.0-0.5MSD	26		36	
7	SL-158-SA5DN-SS-0.0-0.5	17		27		37	
8	SL-159-SA5DN-SS-0.0-0.5	18		28		38	
9	SL-160-SA5DN-SS-0.0-0.5	19		29		39	
10	SL-162-SA5DN-SS-0.0-0.5	20		30		40	

Notes:

DC #: M2775

SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ

2nd Reviewer: C

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓	NA		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification.				
Were the retention times of reported detects within the RT windows?	✓		•	
XI. Compound quantitation/CRQLs.				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance.				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data.				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates.				
Field duplicate pairs were identified in this SDG.				
Target compounds were detected in the field duplicates.				
XV. Field blanks.				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ____HPLC

8310	8330	8151	8141	8141 (Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2.4.6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotolune	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	
O. Phenanthrene	O.		O. Chlorpyrifos		
P. Pyrene	P.		P. Fenthion		
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichloronate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes:_____

LDC #: 26277D5

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 6/16/11 **Blank analysis date:** 6/18/11 **Associated samples:** All soils (ND)
Conc. units: ug/kg

Compound	Blank ID	Sample Identification						
	PBLK1516							
MCPA I	150							

Blank extraction date: ___ **Blank analysis date:** ___ **Associated samples:** ___
Conc. units: ___

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26277D5

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: C

METHOD: __ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	5	NS	Q	277 (36-156)	J/A det (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277D5

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15 & 16	C	( )	( )	36 (35)	4	J/A det (Q)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277D5
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet 2 column Finding ± 40	Associated Samples	Qualifications
	J	62.86	2	J/A det * IX
	G	90.35	~~8~~ 6	↓
			~~8~~	
	J	81.90	~~X~~ 9	↓
	J	47.49	~~X~~ 12	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26277D5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 200.6/100.7 CF (std)	Recalculated 200.6/100.7 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/6/11	2,4-DB RTX cuP 1	7.68×10^{-2}	7.68×10^{-2}	7.65×10^{-2}	7.65×10^{-2}	6.3	6.3
			Dinoseb	3.70×10^{-1}	3.70×10^{-1}	4.14×10^{-1}	4.14×10^{-1}	16.4	16.4
2			↓ RTX cuP II	8.19×10^{-2}	8.19×10^{-2}	8.26×10^{-2}	8.26×10^{-2}	10.8	10.8
			↓	3.66×10^{-1}	3.66×10^{-1}	4.10×10^{-1}	4.10×10^{-1}	17.5	17.5
3	ICAL	6/16/11	↓ ZB-XLB	8.24×10^{-2}	8.24×10^{-2}	7.98×10^{-2}	7.98×10^{-2}	8.0	8.0
			↓	3.81×10^{-1}	3.81×10^{-1}	4.22×10^{-1}	4.22×10^{-1}	16.2	16.2
4			↓ ZB-35	8.71×10^{-2}	8.71×10^{-2}	8.46×10^{-2}	8.46×10^{-2}	7.1	7.1
			↓	3.60×10^{-1}	3.60×10^{-1}	3.99×10^{-1}	3.99×10^{-1}	13.4	13.4

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277DS
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FD
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	2H15157.64R	6/9/11	2,4-DB ZB-XLB	200.60	200.85	200.85	0.1	0.1
	22:17		Dinoseb	100.70	86.62	86.62	14.0	14.0
			ZB-35					
2			↓	200.60	193.73	193.73	3.4	3.4
				100.70	85.09	85.09	15.5	15.5
3	2H15167.16R	6/17/11	↓	200.60	209.00	209.0	4.2	4.2
	23:29		↓	100.70	90.08	90.08	10.5	10.5
4			↓	200.60	209.73	209.73	4.6	4.6
			↓	100.70	94.37	94.37	6.3	6.3

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 76277D5
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	2H15167.28R	6/18/11	2,4-DB ZB-X4B	200.60	192.34	192.34	4.1	4.1
	4:59		Dinoseb	100.70	84.27	84.27	16.3	16.3
2			↓	200.60	194.75	194.75	2.9	2.9
				100.70	88.80	88.80	11.8	11.8
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26217B3

SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: ✓

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2,4-DCAA	ZB-XLB	6.632	5.28553	80	80	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)	8.26	8.26	ND	6.3	7.32	76	76	88	88	15	15
Dinoseb (8151)	14.07	14.07	ND	1.94	2.26	14	14	16	16	15	15
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26121W3
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ___HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 15166

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	8.33	NA	7.42	NA	89	89				
Dinoseb (8151)	14.18	NA	2.57	NA	18	18	NA			
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. # 2 Compound Name MCPA

Concentration = $\frac{(5836)(0.2)(2000)}{(78697)(5.74 \times 10^{-4})(60.4)(0.927)(2)}$

= 460 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 20, 2011

Matrix: Soil/Water

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-152-SA5DN-SS-0.0-0.5
SL-153-SA5DN-SS-0.0-0.5
SL-154-SA5DN-SS-0.0-0.5
SL-155-SA5DN-SS-0.0-0.5
SL-156-SA5DN-SS-0.0-0.5
SL-157-SA5DN-SS-0.0-0.5
SL-158-SA5DN-SS-0.0-0.5
SL-159-SA5DN-SS-0.0-0.5
SL-160-SA5DN-SS-0.0-0.5
SL-162-SA5DN-SS-0.0-0.5
SL-166-SA5DN-SS-0.0-0.5
SL-207-SA5DN-SS-0.0-0.5
DUP-13-SA5DN-QC-060311
EB14-SA5DN-SB-060311
EB13-SA5DN-SS-060311
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-052-SA5DN-SB-4.0-5.0
SL-052-SA5DN-SB-9.0-10.0
SL-155-SA5DN-SS-0.0-0.5MS
SL-155-SA5DN-SS-0.0-0.5DUP
SL-207-SA5DN-SS-0.0-0.5MS
SL-207-SA5DN-SS-0.0-0.5DUP
SL-166-SA5DN-SS-0.0-0.5DUP
SL-166-SA5DN-SS-0.0-0.5MS

Introduction

This data review covers 25 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Samples EB14-SA5DN-SB-060311 and EB13-SA5DN-SS-060311 were identified as equipment blanks. No contaminant concentrations were found.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-155-SA5DN-SS-0.0-0.5MS (SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5)	Fluoride	56 (80-120)	J (all detects) UJ (all non-detects)	A
SL-166-SA5DN-SS-0.0-0.5MS (SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0)	Fluoride	48 (80-120)	J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE173	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

Samples SL-155-SA5DN-SS-0.0-0.5 and DUP-13-SA5DN-QC-060311 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-155-SA5DN-SS-0.0-0.5	DUP-13-SA5DN-QC-060311			
Fluoride	1.6	1.7	6 (≤50)	-	-
Hexavalent chromium	0.32	0.21U	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE173

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE173	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
DE173	SL-155-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311	Hexavalent chromium	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D6
SDG #: DE173
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level IV

Date: 10-5-11
Page: 1 of 1
Reviewer: CR
2nd Reviewer: [signature]

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate/N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), Perchlorate (EPA Method 314.0)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
IIa.	Initial calibration	A	C3
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	Dup
VI.	Laboratory control samples	A	LCS/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	(4,13)
X	Field blanks	ND	EB = 14,15

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

Validated Samples: soil/water

1	SL-152-SA5DN-SS-0.0-0.5	11	SL-166-SA5DN-SS-0.0-0.5	21	SL-052-SA5DN-SB-9.0-10.0	31	
2	SL-153-SA5DN-SS-0.0-0.5	12	SL-207-SA5DN-SS-0.0-0.5	22	SL-155-SA5DN-SS-0.0-0.5MS	32	
3	SL-154-SA5DN-SS-0.0-0.5	13	DUP-13-SA5DN-QC-060311	23	SL-155-SA5DN-SS-0.0-0.5DUP	33	
4	SL-155-SA5DN-SS-0.0-0.5	14	EB14-SA5DN-SB-060311W	24	(#12) MS	34	
5	SL-156-SA5DN-SS-0.0-0.5	15	EB13-SA5DN-SS-060311 W	25	↓ Dup	35	
6	SL-157-SA5DN-SS-0.0-0.5	16	SL-019-SA5DN-SB-4.0-5.0	26	# 11 MS	36	
7	SL-158-SA5DN-SS-0.0-0.5	17	SL-019-SA5DN-SB-9.0-10.0	27	↓ Dup	37	
8	SL-159-SA5DN-SS-0.0-0.5	18	SL-027-SA5DN-SB-4.0-5.0	28		38	
9	SL-160-SA5DN-SS-0.0-0.5	19	SL-027-SA5DN-SB-14.0-15.0	29		39	
10	SL-162-SA5DN-SS-0.0-0.5	20	SL-052-SA5DN-SB-4.0-5.0	30		40	

Notes:

LDC #: 66C1196

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: V

Method: Inorganics (EPA Method See Cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
X. Field blanks				
Field blanks were identified in this SDG.	✓	✓		
Target analytes were detected in the field blanks.		✓		

LDC #: 26277D6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CE
2nd reviewer:

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-11,13-15,20,21		pH TDS (Cl) (F) NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC (CR^{6+}) (ClO_4)
12,16-19		pH TDS Cl F (NO_3) NO_2 SO_4 PO_4 ALK (CN) NH_3 TKN TOC (CR^{6+}) (ClO_4)
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
QC: 22,23		pH TDS Cl (F) NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC (CR^{6+}) (ClO_4)
24,25		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK (CN) NH_3 TKN TOC CR^{6+} ClO_4
26,27		pH TDS Cl (F) NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4

Comments:

LDC #: 26276X

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method SOCOM

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125~~ 80-120 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		22	S	F	56	~~All Soil~~ 1-10	J/UJ/A (1)
		26	S	F	48	11-13, 16-21,	

Comments:

LDC# 26277D6

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: CR
2nd Reviewer: VC

Inorganics, Method See Cover

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/L)		RPD (≤50)	
	4	13		
Fluoride	1.6	1.7	6	
Hexavalent Chromium	0.32	0.21U	200	J/UJ/A (FD)

V:\FIELD DUPLICATES\FD_inorganic\26277D6.wpd

LDC #: 26277D6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: QE
2nd Reviewer: h

Method: Inorganics, Method GOT Seecal2

The correlation coefficient (r) for the calibration of GOT was recalculated. Calibration date: 6/10/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	GOT	s1	0.0	0	*0.9994*	0.9993	Y
		s2	10	0.127661			
		s3	50	0.58			
		s4	100	1.18			
		s5	200	2.22			
		s6	300	3.50			
Calibration verification	F	CCV	1.5	1.5	106	106	
Calibration verification	NO3		1.5	1.4419	96	96	
Calibration verification	CN		0.15	0.1447	96	96	

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer:

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

%R = Found / True x 100 Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = |S-D| / (S+D)/2 x 100 Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	ClO4	103	100	103	-	Y
22	Matrix spike sample	ClO4	(SSR-SR) 547	500	109	109	
23	Duplicate sample	F	1.5	2.0	25	25	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: V

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for F/NO3/SO4 reported with a positive detect were recalculated and verified using the following equation:

Concentration =

F: $y = 0.2018x - 0.0044$

NO_3: $y = 0.3309x - 0.013$

SO_4: $y = 0.012x - 0.001$

Recalculation:

1: $F = \frac{0.03 + 0.0044}{0.2018} \times \frac{50\,mL}{4.985g\,(0.932)} = 1.8\,mg/kg$

12: $NO_3 = \frac{(0.125 + 0.013)(50mL)}{0.3309(5.04g)(0.93)} = 4.4\,mg/kg$

4: $SO_4 = \frac{(0.081181(86.83) - 0.118418)}{25.3(0.931)} = 0.29\,mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
0.932	1	F	1.8	1.8	Y
		SO4	0.65	0.66	
0.93	4	F	1.6	1.6	
		SO4	0.32	0.29	
0.931	12	F	3.8	3.8	
		NO3	4.5	4.4	
		SO4	0.37	0.38	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 3, 2011
LDC Report Date:	October 5, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE173

Sample Identification

SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
TB-060311

Introduction

This data review covers 4 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-060311 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 TB-060311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D7 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/4/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation(RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	TB = 5

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

Validated Samples: soil + water

1 1	SL-019-SA5DN-SB-4.0-5.0	11 1	BLKGC	21		31	
2 1	SL-019-SA5DN-SB-9.0-10.0	12 2	BLKHF	22		32	
3 1	SL-027-SA5DN-SB-4.0-5.0	13		23		33	
4 1	SL-027-SA5DN-SB-14.0-15.0	14		24		34	
5 2	TB-060311	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

DC #: 2627707
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VII. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26277D7
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26277D7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: F?
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (220 std)	Recalculated CF (220 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/29/10	GRO	35488	35488	37329	37329	12.7	12.7
				(550)	(550)				
2	ICAL	5/14/10	GRO	8420	8420	8050	8050	5.2	5.2
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D7
SDG #: fw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	6/7/11 13:14	GRO	220.0	216.86	216.86	1.4	1.4
2	CCV	6/3/11 23:49	✓	550.0	515.38	515.38	6.3	6.3
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TFT	NS	760	565.74/69	74	74	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26277D /
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration
LCS = Laboratory control sample percent recovery
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCSFS / LCSDFS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	11	9.16	10.42	83	83	95	95	13	13
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D7
SDG #: mu power

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

NP

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALow.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 3, 2011
LDC Report Date:	October 5, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE173

Sample Identification

SL-207-SA5DN-SS-0.0-0.5
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-019-SA5DN-SB-4.0-5.0MSD
SL-019-SA5DN-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-207-SA5DN-SS-0.0-0.5 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D8 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/5/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:
SOIL

1	SL-207-SA5DN-SS-0.0-0.5	11	PBLK28158	21		31	
2	SL-019-SA5DN-SB-4.0-5.0	12		22		32	
3	SL-019-SA5DN-SB-9.0-10.0	13		23		33	
4	SL-027-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-027-SA5DN-SB-14.0-15.0	15		25		35	
6	#2 MS	16		26		36	
7	#2 MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

DC #: 262708
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 2627708
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification.				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs.				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance.				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data.				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates.				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks.				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277P8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (288 std)	Recalculated CF (288 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/28/11	C8-C40	20047.437	20047.4	20671-85	20671-85	5.1	5.1
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 76277P8
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 5:40	6/10/11	C8-C40	288.00	313.74	313.74	8.9	8.9
2	ccv 10:38	6/10/11	↓	575.96	575.89	575.89	0	0
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	NS	1.0	0.954628	96	95.4	1
or thoterpheny!	↓	↓	1.027438	103	103	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: EZ
2nd Reviewer: [illegible]

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 7

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EFH (C8-C11)	0.83	083	ND	0.82	0.85	99	99	101	101	4	4

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277W8
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: FO
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS28158

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C8-C11)	0.84	NA	0.64	NA	76	76	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name C_{30}-C_{40}

Concentration = $\frac{34375107\ (1000)\ (10)}{20671.85\ (60.2)\ (0.931)\ (1000)}$

$= 296.7\ mg/kg$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: [illegible]

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 3, 2011
LDC Report Date:	October 10, 2011
Matrix:	Soil
Parameters:	Explosives
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE173

Sample Identification

SL-207-SA5DN-SS-0.0-0.5
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS08167	Nitrobenzene 2,4,6-Trinitrotoluene 4-Amino-2,6-dinitrotoluene 2-Amino-4,6-dinitrotoluene 2,6-Dinitrotoluene PETN	127 (80-120) 128 (80-120) 122 (80-120) 125 (80-120) 123 (80-120) 126 (80-120)	All samples in SDG DE173	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

LDC #: 26277D40 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/4/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer:

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II	Initial calibration	A	%D RSD ≤20, r^2
III.	Calibration verification/ICV	A	%D ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples: Soil

1	SL-207-SA5DN-SS-0.0-0.5	11	PBLK08167	21		31	
2	SL-019-SA5DN-SB-4.0-5.0	12		22		32	
3	SL-019-SA5DN-SB-9.0-10.0	13		23		33	
4	SL-027-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-027-SA5DN-SB-14.0-15.0	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

DC #: 26277040
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?			✓	
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26277040
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ____HPLC

8310	8330	8151	8141	8141(Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2,4,6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotoluene	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	
O. Phenanthrene	O.		O. Chlorpyrifos		
P. Pyrene	P.		P. Fenthion		
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichloronate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes:_____

LDC #: 26277D4O

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS08167	F	127 (80-120)	( )	( )	All	J/Pdet (L)
		G	128 (80-120)	( )	( )		
		H	122 (↓)	( )	( )		
		I	125 (↓)	( )	( )		
		K	123 (↓)	( )	( )		
		PETN	126 (↓)	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 76277040
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: PD
2nd Reviewer:

METHOD: GC _____ HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (493/500.5 std)	Recalculated CF (493/500.5 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL chrompack	5/31/11	1,4-Dinitrobenzen	2.40×10^2	2.40×10^2	2.43×10^2	2.43×10^2	2.3	2.3
			2,6-Dinitrotoluene	1.22×10^2	1.22×10^2	1.23×10^2	1.23×10^2	2.4	2.4
2	capcell	5/31/11	↓	2.61×10^2	2.61×10^2	2.73×10^2	2.73×10^2	17.2	17.2
				3.31×10^2	3.31×10^2	3.32×10^2	3.32×10^2	7.0	7.0
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277040
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC_____HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	6/18/11	1,4-Dinitrobenzene	493.00	499.83	499.83	1.4	1.4
	chrompack	5.04	2,6-Dinitrotoluene	500.50	513.64	513.64	2.6	2.6
2	capcell	↓	↓	493.00	480.19	480.19	2.6	2.6
			↓	NA				
3	ccv	6/18/11	↓	493.00	501.34	501.34	1.7	1.7
	chrompack	22.02	↓	500.50	517.67	517.67	3.4	3.4
4	capcell	↓	↓	493.00	475.39	475.39	3.6	3.6
			↓	NA				

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: __ GC / HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2-nitro-m-xylene	chrompack	2000 1961	2341.8359	119	119	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26277D4U
SDG #: mu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: A

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS08167

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2000	NA	2169.96	NA	108	108				
2,4,6-Trinitrotoluene (8330)	999.2	↓	2556.65	↓	128	128	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D40
SDG #: all gases

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: __ GC __✓ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 3, 2011
LDC Report Date:	October 5, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE173

Sample Identification

SL-207-SA5DN-SS-0.0-0.5
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-207-SA5DN-SS-0.0-0.5	n-Triacontane-d62	14 (50-150)	All TCL compounds	J (all detects) UJ (all non-detects)	P

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

LDC #: 26277D41 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/5/11
SDG #: DE173 Level IV Page: 1 of 2
Laboratory: Lancaster Laboratories Reviewer: JW
2nd Reviewer:

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:

Soil

1	SL-207-SA5DN-SS-0.0-0.5	11	PBLK37159	21		31	
2	SL-019-SA5DN-SB-4.0-5.0	12		22		32	
3	SL-019-SA5DN-SB-9.0-10.0	13		23		33	
4	SL-027-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-027-SA5DN-SB-14.0-15.0	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

DC #: 26277D4|
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26277041
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277D4/

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer:

METHOD: ✓ **GC** __ **HPLC**

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	1	NS	Z	14 (50-150)	J/UJ/P (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	n-Triacontane-d62
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277D4J
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported CF (17.741 std)	Recalculated CF (17.741 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	O-Terphenyl	2.20×10^4	2.20×10^4	2.18×10^4	2.18×10^4	1.6	1.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D4J
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 17:47	6/14/11	o-Terphenyl	35.48	35.50	35.50	0.1	0.1
2	CCV 1:59	6/15/11	✓	35.48	34.49	34.49	2.8	2.8
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Triacontane-d62	NJ	0.326	0.045609	14	14	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26277B4/
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 37159

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline (8015)~~ m-Terphenyl	1.65	NA	1.42	NA	86	86	NA			
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
~~2,4,6-Trinitrotoluene (8330)~~										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277704/
SDG #: pu gomes

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 5, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-207-SA5DN-SS-0.0-0.5
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0
SL-019-SA5DN-SB-4.0-5.0MSD
SL-019-SA5DN-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-207-SA5DN-SS-0.0-0.5 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D43 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/5/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/ICV	A	ICV|CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:

	SOIL						
1	SL-207-SA5DN-SS-0.0-0.5	11	PBLK38158	21		31	
2	SL-019-SA5DN-SB-4.0-5.0	12		22		32	
3	SL-019-SA5DN-SB-9.0-10.0	13		23		33	
4	SL-027-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-027-SA5DN-SB-14.0-15.0	15		25		35	
6	#2MS	16		26		36	
7	#2MS	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

DC #: 26277043
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: F
2nd Reviewer: A

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26277043
SDG #: all cases

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277D43
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported SUM CF (std)	Recalculated SUM CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/19/11	methanol	2.82X10^0	2.82X10^0	2.95X10^0	2.95X10^0	10.3	10.3
2	ICAL	5/27/11	↓						
3	ICAL	5/26/11	↓	9.04X10^0	9.04X10^0	8.95X10^0	8.95X10^0	2.0	2.0
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D43
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 19:08	6/7/11	methanol	10000	9131.12	9131.12	8.7	8.7
	CCV 2236	6/7/11	↓	↓	9529.50	9529.50	4.7	4.7
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	NS	2500	2066.5978	83	83	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: [illegible]
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: __ GC __ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 7

Compound	Spike Added (ug/Kg)		Sample Conc. (ug/Kg)	Spike Sample Concentration (ug/Kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Methanol	2500	2500	NO	2034.94	2042.18	81	81	92	92	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277 W43
SDG #: all cores

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: JS
2nd Reviewer: C

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 38158

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol	2500	NA	2239-83	NA	90	90	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D43
SDG #: pu ones

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: / GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 3, 2011

LDC Report Date: October 5, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE173

Sample Identification

SL-207-SA5DN-SS-0.0-0.5
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-207-SA5DN-SS-0.0-0.5 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D45 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/5/11
SDG #: DE173 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer:

METHOD: GC Glycols (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:
SOIL

1	SL-207-SA5DN-SS-0.0-0.5	11	PBLK011157	21		31	
2	SL-019-SA5DN-SB-4.0-5.0	12		22		32	
3	SL-019-SA5DN-SB-9.0-10.0	13		23		33	
4	SL-027-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-027-SA5DN-SB-14.0-15.0	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

DC #: 46277045
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26277045
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277D45
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

4/

#	Standard ID	Calibration Date	Compound	Reported 191.6874 CF (std)	Recalculated 191.6874 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/6/11	Propylene Glycol	4.54×10^2	4.54×10^2	4.42×10^2	4.42×10^2	5.7	5.7
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D4S
SDG #: fw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 11:55	6/7/11	propylene glycol	95.84	97.99	97.99	2.2	2.2
2	ccv 14:48	6/7/11	↓	↓	97.34	97.34	1.6	1.6
3	ccv 16:43	6/7/11	↓	↓	98.10	98.10	2.4	2.4
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	NS	207	181.149673	87	87	0

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: ___

[redacted] Surrogate #67 SS [illegible] LIT 71 #01	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26271043
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 0057

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Ethylene Glycol	225.43	NA	198.39	NA	88	88	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D4S
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

MD

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 3, 2011
LDC Report Date:	October 5, 2011
Matrix:	Soil
Parameters:	Formaldehyde
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE173

Sample Identification

SL-207-SA5DN-SS-0.0-0.5
SL-019-SA5DN-SB-4.0-5.0
SL-019-SA5DN-SB-9.0-10.0
SL-027-SA5DN-SB-4.0-5.0
SL-027-SA5DN-SB-14.0-15.0

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-019-SA5DN-SB-4.0-5.0	Not specified	Butyraldehyde	59 (64-126)	All TCL compounds	J (all detects) UJ (all non-detects)	A
SL-027-SA5DN-SB-4.0-5.0	Not specified	Butyraldehyde	42 (64-126)	All TCL compounds	J (all detects) UJ (all non-detects)	A
SL-027-SA5DN-SB-14.0-15.0	Not specified	Butyraldehyde	49 (64-126)	All TCL compounds	J (all detects) UJ (all non-detects)	A

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

LDC #: 26277D71 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/4/11

SDG #: DE173 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/~~CCV~~	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples:

SOIL

1	SL-207-SA5DN-SS-0.0-0.5	11	PBLK06159	21		31	
2	SL-019-SA5DN-SB-4.0-5.0	12	PBLK05171	22		32	
3	SL-019-SA5DN-SB-9.0-10.0	13		23		33	
4	SL-027-SA5DN-SB-4.0-5.0	14		24		34	
5	SL-027-SA5DN-SB-14.0-15.0	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

DC #: 26277071
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: EJ
2nd Reviewer: C

Method: ✓ GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓	✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 4627071
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓		•	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277D7/

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ **GC** __ **HPLC**

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were surrogates spiked into all samples and blanks?

Y (N) N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	2	NS	~~59~~ *	59 (64-126)	J/UJ/A (S)
				( )	
				( )	
	4	↓	*	42 (↓)	↓
				( )	
	5	↓	*	49 (↓)	↓
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	*	Butyraldehyde
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277071
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC [illegible] HPLC [illegible]

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported 2002 CF (std)	Recalculated 2002 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/11/11	Formaldehyde	6.13 x10^1	6.13 x10^1	5.97x10^1	5.97x10^1	3.6	3.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277071
SDG #: pw conv

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: GC_____HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	6/11/11	Formaldehyde	2002.00	2018.13	2018.13	0.8	0.8
	18:49							
2	ccv	6/13/11	Formaldehyde	2002.06	2079.04	2079.04	3.8	3.8
	10:19							
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: __ GC __ ~~HPLC~~

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	N3	.2000	3058.298/2	77	76	1

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26 21101

SDG #: all cores

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 0615 9

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde	5010	NA	4527.14	NA	90	90	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26077D71
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: __ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name Formaldehyde

Concentration = $\frac{84733\ (200)\ (0.1)}{5.97 \times 10^{1}\ (20)\ (0.931)}$

= 1524 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 3, 2011
LDC Report Date:	October 5, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE173

Sample Identification

SL-019-SA5DN-SB-4.0-5.0

Introduction

This data review covers one soil sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE173	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE173

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE173	SL-019-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE173

No Sample Data Qualified in this SDG

LDC #: 26277D87 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/4/11

SDG #: DE173 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: EJ

2nd Reviewer: CJ

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/3/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r²
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 15/50 LODV ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples: 501L

1	SL-019-SA5DN-SB-4.0-5.0	11	PBLK 72159	21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26277B87

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer:

LCMS Perchlorate Method 6850

Method: ~~Semivolatiles (EPA SW 846 Method 8270C)~~

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ~~≤ 25%~~ 15/30 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples (LCS)				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277087

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation and CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #25277987
SDG# Sm Com

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: KT
2nd Reviewer: A

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
06/10/2011	LCMS	perchlorate	0.02	0.020	
			0.04	0.040	
			0.09	0.100	
			0.19	0.200	
			0.39	0.400	
			1.01	1.000	
			2.53	2.500	

Regression Output:		Regression Output:	Reported	
Constant		-0.00850		-8.5000E-003
Std Err of Y Est		0.00835		
R Squared		0.99993		0.99999
No. of Observations		7.00000		
Degrees of Freedom		5.00000		
X Coefficient(s)	1.016E+000		0.10160	
Std Err of Coef.	0.003785	0.04		

LDC #: 26277D87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv_21	6/10/11	~~Phenol (1st internal standard)~~ Perchlorate	0.4	0.431	0.431	8	8
			Naphthalene (2nd internal standard)					
	ccv_32	6/10/11	~~Fluorene (3rd internal standard)~~ ↓	4	4	4	0	0
			~~Pentachlorophenol (4th internal standard)~~					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277W8 /

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 22159

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
Perchlorate	100	NA	101	NA	101	101	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277D87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_t	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____, _____:

Conc. = ( )( )( )( )( ) / ( )( )( )( )( )

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE174

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Jun-2011	SL-079-SA8N-SB-4.0-5.0	6308039	N	METHOD	7471A	III
06-Jun-2011	SL-079-SA8N-SB-4.0-5.0	6308039	N	METHOD	8015B	III
06-Jun-2011	SL-079-SA8N-SB-4.0-5.0	6308039	N	METHOD	8015M	III
06-Jun-2011	SL-079-SA8N-SB-4.0-5.0	6308039	N	METHOD	8315A	III
06-Jun-2011	SL-079-SA8N-SB-4.0-5.0	6308039	N	METHOD	9012B	III
06-Jun-2011	TB-060611	6308042	TB	5030B	8015M	III
06-Jun-2011	TB-060611	6308042	TB	5030B	8260B	III
06-Jun-2011	TB-060611	6308042	TB	5030B	8260B SIM	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	3050B	6010B	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	3050B	6020	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	3060A	7199	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	3550B	8082	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	3550B	8270C	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	3550B	8270C SIM	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	5035	8260B	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	5035	8260B SIM	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	METHOD	300.0	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	METHOD	314.0	III
06-Jun-2011	SL-053-SA5DN-SB-4.0-5.0	6308037	N	METHOD	7471A	III
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	3050B	6010B	III
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	3050B	6020	III
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	3060A	7199	III
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	3550B	8082	III
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	3550B	8270C	III
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	3550B	8270C SIM	III
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	METHOD	314.0	III
06-Jun-2011	SL-053-SA5DN-SB-11.5-12.5	6308038	N	METHOD	7471A	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3050B	6010B	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3050B	6020	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3060A	7199	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3546	1625C	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3550B	8015B	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3550B	8015M	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3550B	8082	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3550B	8270C	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	3550B	8270C SIM	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	5035	8015M	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	5035	8260B	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	5035	8260B SIM	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	8330	8330A	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	METHOD	300.0	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	METHOD	314.0	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	METHOD	7471A	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	METHOD	8015B	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	METHOD	8015M	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	METHOD	8315A	III
06-Jun-2011	SL-133-SA8N-SB-4.0-5.0	6308041	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE174 Laboratory: LL

EDD Filename: PrepDE174_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.2		0.87	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	20.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.89	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-053-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	15.9		0.94	MDL	1.2	PQL	mg/Kg	J	Q, E

Sample ID: SL-079-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 12:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.92	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q, E

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.5		0.94	MDL	1.2	PQL	mg/Kg	J	Q, E
Nitrate-NO3	1.5	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5530		6.63	MDL	21.6	PQL	mg/Kg	J	E
MANGANESE	245		0.0844	MDL	0.541	PQL	mg/Kg	J	E, E
POTASSIUM	2800		19.5	MDL	54.1	PQL	mg/Kg	J	Q
TIN	2.94	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.31	J	0.909	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	12300		7.00	MDL	22.8	PQL	mg/Kg	J	E
MANGANESE	327		0.0890	MDL	0.571	PQL	mg/Kg	J	E, E
POTASSIUM	3580		20.5	MDL	57.1	PQL	mg/Kg	J	Q
TIN	3.09	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.53	J	0.959	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4770		6.77	MDL	22.1	PQL	mg/Kg	J	E
MANGANESE	300		0.0862	MDL	0.553	PQL	mg/Kg	J	E, E
POTASSIUM	3220		19.9	MDL	55.3	PQL	mg/Kg	J	Q
TIN	2.95	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.80	J	0.928	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-053-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	18000		7.18	MDL	23.4	PQL	mg/Kg	J	E
MANGANESE	242		0.0913	MDL	0.585	PQL	mg/Kg	J	E, E
POTASSIUM	3170		21.1	MDL	58.5	PQL	mg/Kg	J	Q
TIN	2.94	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	1.98	J	0.984	MDL	5.85	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-079-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 12:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3190		6.97	MDL	22.7	PQL	mg/Kg	J	E
MANGANESE	628		0.0887	MDL	0.568	PQL	mg/Kg	J	E, E
POTASSIUM	2580		20.5	MDL	56.8	PQL	mg/Kg	J	Q
TIN	3.00	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.88	J	0.955	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3660		6.99	MDL	22.8	PQL	mg/Kg	J	E
MANGANESE	175		0.0889	MDL	0.570	PQL	mg/Kg	J	E, E
POTASSIUM	2140		20.5	MDL	57.0	PQL	mg/Kg	J	Q
TIN	3.06	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.62	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	10200		6.94	MDL	22.7	PQL	mg/Kg	J	E
MANGANESE	685		0.0883	MDL	0.566	PQL	mg/Kg	J	E, E
POTASSIUM	2780		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	3.09	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	4.96	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0885	J	0.0630	MDL	0.210	PQL	mg/Kg	J	Z, Q
CHROMIUM	23.0		0.126	MDL	0.420	PQL	mg/Kg	J	A
LEAD	4.98		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, E
SILVER	0.0549	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	35.8		0.0231	MDL	0.105	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.0168	U	0.0168	MDL	0.105	PQL	mg/Kg	UJ	Q

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0978	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.272		0.0665	MDL	0.222	PQL	mg/Kg	J	Q
BERYLLIUM	1.02		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	34.1		0.133	MDL	0.443	PQL	mg/Kg	J	A
LEAD	10.7		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
SILVER	0.0501	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	65.2		0.0244	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0697	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.735		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.0887	J	0.0442	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	24.7		0.133	MDL	0.442	PQL	mg/Kg	J	A
LEAD	9.71		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E
SILVER	0.0286	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	47.1		0.0243	MDL	0.111	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-053-SA5DN-SB-4.0-5.0 ***Collected:*** 6/6/2011 3:50:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.259		0.0703	MDL	0.234	PQL	mg/Kg	J	Q
BERYLLIUM	0.817		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.0861	J	0.0468	MDL	0.117	PQL	mg/Kg	J	Z
CHROMIUM	30.8		0.141	MDL	0.468	PQL	mg/Kg	J	A
LEAD	10.0		0.0122	MDL	0.234	PQL	mg/Kg	J	Q, E
SILVER	0.0428	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	53.4		0.0258	MDL	0.117	PQL	mg/Kg	J	A

Sample ID: SL-079-SA8N-SB-4.0-5.0 ***Collected:*** 6/6/2011 12:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0560	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA8N-SB-4.0-5.0 ***Collected:*** 6/6/2011 12:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.155	J	0.0675	MDL	0.225	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.871		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0801	J	0.0450	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	21.1		0.135	MDL	0.450	PQL	mg/Kg	J	A
LEAD	8.14		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
SILVER	0.0579	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	44.9		0.0248	MDL	0.113	PQL	mg/Kg	J	A

Sample ID: SL-079-SA8N-SB-9.0-10.0 ***Collected:*** 6/6/2011 11:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0621	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA8N-SB-9.0-10.0 ***Collected:*** 6/6/2011 11:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.135	J	0.0690	MDL	0.230	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.673		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	21.7		0.138	MDL	0.460	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.41		0.0120	MDL	0.230	PQL	mg/Kg	J	Q, E
SILVER	0.0280	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	42.5		0.0253	MDL	0.115	PQL	mg/Kg	J	A

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0498	J	0.0466	MDL	0.466	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.209	J	0.0700	MDL	0.233	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.835		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.106	J	0.0466	MDL	0.117	PQL	mg/Kg	J	Z
CHROMIUM	32.9		0.140	MDL	0.466	PQL	mg/Kg	J	A
LEAD	9.15		0.0121	MDL	0.233	PQL	mg/Kg	J	Q, E
SILVER	0.0337	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	63.7		0.0257	MDL	0.117	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7199** ***Matrix:*** **SO**

Sample ID: SL-053-SA5DN-SB-4.0-5.0 ***Collected:*** 6/6/2011 3:50:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA8N-SB-4.0-5.0 ***Collected:*** 6/6/2011 12:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

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

Sample ID: SL-079-SA8N-SB-9.0-10.0 ***Collected:*** 6/6/2011 11:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.0	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-4.0-5.0 ***Collected:*** 6/6/2011 4:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: **METALS**

Method: **7471A** ***Matrix:*** **SO**

Sample ID: SL-022-SA5DN-SB-4.0-5.0 ***Collected:*** 6/6/2011 11:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0106	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-053-SA5DN-SB-4.0-5.0 ***Collected:*** 6/6/2011 3:50:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0035	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-4.0-5.0 ***Collected:*** 6/6/2011 4:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0159	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	53.1		18.0	MDL	36.1	PQL	ng/Kg	U	B

Sample ID: SL-079-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	37.9	J	19.1	MDL	38.3	PQL	ng/Kg	U	B

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	52.8		19.6	MDL	39.1	PQL	ng/Kg	U	B

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	61.8		19.6	MDL	39.3	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.78	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-079-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 12:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.85	J	0.46	MDL	1.4	PQL	mg/Kg	U	B
EFH (C30-C40)	2.0		0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.7		0.47	MDL	1.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	4.2		0.47	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.80	J	0.47	MDL	1.4	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-053-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-053-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	1.9	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-053-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 3:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-079-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.4		6.8	MDL	8.1	PQL	ug/Kg	U	B
CHLOROFORM	0.17	J	0.12	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.1	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-4.0-5.0 ***Collected:*** 6/6/2011 11:40:00 ***Analysis Type:*** RES ***Dilution:*** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.17	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.2	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-053-SA5DN-SB-4.0-5.0 ***Collected:*** 6/6/2011 3:50:00 PM ***Analysis Type:*** RES ***Dilution:*** 1.02

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.9		8.0	MDL	9.6	PQL	ug/Kg	U	B
CHLOROFORM	0.19	J	0.14	MDL	4.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.3	J	0.29	MDL	4.8	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.1	MDL	4.8	PQL	ug/Kg	J	Z

Sample ID: SL-079-SA8N-SB-4.0-5.0 ***Collected:*** 6/6/2011 12:05:00 ***Analysis Type:*** RES ***Dilution:*** 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.0		6.6	MDL	7.9	PQL	ug/Kg	U	B
CHLOROFORM	0.16	J	0.12	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.99	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.22	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-079-SA8N-SB-9.0-10.0 ***Collected:*** 6/6/2011 11:55:00 ***Analysis Type:*** RES ***Dilution:*** 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.9		7.3	MDL	8.7	PQL	ug/Kg	U	B
CHLOROFORM	0.19	J	0.13	MDL	4.3	PQL	ug/Kg	J	Z
TOLUENE	0.40	J	0.09	MDL	4.3	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA8N-SB-4.0-5.0 ***Collected:*** 6/6/2011 4:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.5		6.9	MDL	8.3	PQL	ug/Kg	U	B
CHLOROFORM	0.16	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.2	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.17	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE174

Method Blank Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB16B261008	6/28/2011 10:08:00 AM	N-NITROSODIMETHYLAMINE	18.9 ng/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA5DN-SB-15.0-16.0(RES)	N-NITROSODIMETHYLAMINE	53.1 ng/Kg	53.1U ng/Kg
SL-079-SA8N-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	37.9 ng/Kg	38.3U ng/Kg
SL-079-SA8N-SB-9.0-10.0(RES)	N-NITROSODIMETHYLAMINE	52.8 ng/Kg	52.8U ng/Kg
SL-133-SA8N-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	61.8 ng/Kg	61.8U ng/Kg

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15808BB220530	6/8/2011 5:30:00 AM	PHOSPHORUS TIN	1.09 mg/Kg 1.28 mg/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA5DN-SB-15.0-16.0(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-022-SA5DN-SB-4.0-5.0(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-053-SA5DN-SB-11.5-12.5(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-053-SA5DN-SB-4.0-5.0(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-079-SA8N-SB-4.0-5.0(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-079-SA8N-SB-9.0-10.0(RES)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-133-SA8N-SB-4.0-5.0(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15826DB220423A	6/11/2011 4:23:00 AM	COPPER LEAD	0.152 mg/Kg 0.0660 mg/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE174 Laboratory: LL

EDD Filename: DE174_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P61613AB321415A	6/11/2011 2:15:00 PM	EFH (C21-C30) EFH (C30-C40)	0.43 mg/Kg 0.90 mg/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA5DN-SB-4.0-5.0(REA2)	EFH (C30-C40)	0.78 mg/Kg	1.4U mg/Kg
SL-079-SA8N-SB-4.0-5.0(REA2)	EFH (C21-C30)	0.85 mg/Kg	1.4U mg/Kg
SL-079-SA8N-SB-4.0-5.0(REA2)	EFH (C30-C40)	2.0 mg/Kg	2.0U mg/Kg
SL-079-SA8N-SB-9.0-10.0(REA2)	EFH (C21-C30)	1.7 mg/Kg	1.7U mg/Kg
SL-079-SA8N-SB-9.0-10.0(REA2)	EFH (C30-C40)	4.2 mg/Kg	4.2U mg/Kg
SL-133-SA8N-SB-4.0-5.0(REA2)	EFH (C30-C40)	0.80 mg/Kg	1.4U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB78B211215A	6/8/2011 12:15:00 PM	ACETONE METHYLENE CHLORIDE	8.7 ug/Kg 1.0 ug/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA5DN-SB-15.0-16.0(RES)	ACETONE	8.4 ug/Kg	8.4U ug/Kg
SL-022-SA5DN-SB-15.0-16.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.0U ug/Kg
SL-022-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.1U ug/Kg
SL-053-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.9 ug/Kg	9.9U ug/Kg
SL-053-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.8U ug/Kg
SL-079-SA8N-SB-4.0-5.0(RES)	ACETONE	8.0 ug/Kg	8.0U ug/Kg
SL-079-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.99 ug/Kg	4.0U ug/Kg
SL-079-SA8N-SB-9.0-10.0(RES)	ACETONE	9.9 ug/Kg	9.9U ug/Kg
SL-133-SA8N-SB-4.0-5.0(RES)	ACETONE	8.5 ug/Kg	8.5U ug/Kg
SL-133-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.1U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 300.0**
***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-022-SA5DN-SB-4.0-5.0MS (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	FLUORIDE	33	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-022-SA5DN-SB-4.0-5.0DUP (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	FLUORIDE	22	20.00	J (all detects) UJ (all non-detects)
	Nitrate-NO3	21	20.00	NO3, No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11611AQ241711A P11611AY241652A (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	Aroclor 5442	148	-	36.00-106.00	38 (30.00)	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15826DQ220426A (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	ANTIMONY	132	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0LFLCSQ260127 (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	1,2-DICHLOROBENZENE	77	-	79.00-102.00	-	1,2-DICHLOROBENZENE	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA8N-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	37.9	38.3	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA8N-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-15.0-16.0	TIN Zirconium	J J	2.94 1.31	10.8 5.41	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-022-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	3.09 2.53	11.4 5.71	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-053-SA5DN-SB-11.5-12.5	TIN Zirconium	J J	2.95 1.80	11.1 5.53	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.94 1.98	11.7 5.85	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA8N-SB-4.0-5.0	TIN Zirconium	J J	3.00 2.88	11.4 5.68	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA8N-SB-9.0-10.0	TIN Zirconium	J J	3.06 2.62	11.4 5.70	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-133-SA8N-SB-4.0-5.0	TIN Zirconium	J J	3.09 4.96	11.3 5.66	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-15.0-16.0	ANTIMONY SILVER	J J	0.0885 0.0549	0.210 0.105	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-022-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0978 0.0501	0.443 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-053-SA5DN-SB-11.5-12.5	ANTIMONY CADMIUM SELENIUM SILVER	J J J J	0.160 0.0887 0.0697 0.0286	0.221 0.111 0.442 0.111	PQL PQL PQL PQL	mg/Kg mg/Kg mg/Kg mg/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	CADMIUM SILVER	J J	0.0861 0.0428	0.117 0.117	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA8N-SB-4.0-5.0	ANTIMONY CADMIUM SELENIUM SILVER	J J J J	0.155 0.0801 0.0560 0.0579	0.225 0.113 0.450 0.113	PQL PQL PQL PQL	mg/Kg mg/Kg mg/Kg mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA8N-SB-9.0-10.0	ANTIMONY	J	0.135	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0621	0.460	PQL	mg/Kg	
	SILVER	J	0.0280	0.115	PQL	mg/Kg	
SL-133-SA8N-SB-4.0-5.0	ANTIMONY	J	0.209	0.233	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.106	0.117	PQL	mg/Kg	
	SELENIUM	J	0.0498	0.466	PQL	mg/Kg	
	SILVER	J	0.0337	0.117	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-15.0-16.0	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-022-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.2	PQL	mg/Kg	J (all detects)
SL-079-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-079-SA8N-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	1.0	1.2	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-4.0-5.0	MERCURY	J	0.0106	0.111	PQL	mg/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	MERCURY	J	0.0035	0.109	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-4.0-5.0	MERCURY	J	0.0159	0.111	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.78	1.4	PQL	mg/Kg	J (all detects)
SL-079-SA8N-SB-4.0-5.0	EFH (C21-C30)	J	0.85	1.4	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-4.0-5.0	EFH (C30-C40)	J	0.80	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA8N-SB-4.0-5.0	AROCLOR 1248	J	1.9	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-15.0-16.0	CHLOROFORM	J	0.17	4.0	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.1	4.0	PQL	ug/Kg	
	TOLUENE	J	0.15	4.0	PQL	ug/Kg	
SL-022-SA5DN-SB-4.0-5.0	CHLOROFORM	J	0.17	4.1	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.2	4.1	PQL	ug/Kg	
SL-053-SA5DN-SB-4.0-5.0	CHLOROFORM	J	0.19	4.8	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.3	4.8	PQL	ug/Kg	
	TOLUENE	J	0.15	4.8	PQL	ug/Kg	
SL-079-SA8N-SB-4.0-5.0	CHLOROFORM	J	0.16	4.0	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.99	4.0	PQL	ug/Kg	
	TOLUENE	J	0.22	4.0	PQL	ug/Kg	
SL-079-SA8N-SB-9.0-10.0	CHLOROFORM	J	0.19	4.3	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.40	4.3	PQL	ug/Kg	
SL-133-SA8N-SB-4.0-5.0	CHLOROFORM	J	0.16	4.1	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.2	4.1	PQL	ug/Kg	
	TOLUENE	J	0.17	4.1	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5DN-SB-11.5-12.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	390	PQL	ug/Kg	J (all detects)

LDC #: 26277E4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/14

SDG #: DE174 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: MM

2nd Reviewer:

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	Na, Fe
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	3 DE168
VII.	Duplicate Sample Analysis	SW	
VIII.	Laboratory Control Samples (LCS)	NA	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr, V.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-022-SA5DN-SB-4.0-5.0	11		21		31	
2	SL-022-SA5DN-SB-15.0-16.0	12		22		32	
3	SL-053-SA5DN-SB-4.0-5.0	13		23		33	
4	SL-053-SA5DN-SB-11.5-12.5	14		24		34	
5	SL-079-SA8N-SB-4.0-5.0	15		25		35	
6	SL-079-SA8N-SB-9.0-10.0	16		26		36	
7	SL-133-SA8N-SB-4.0-5.0	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE175

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3050B	6010B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3050B	6020	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3060A	7199	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3546	1625C	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8015B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8015M	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8082	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8270C	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8270C SIM	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	5035	8015M	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	5035	8260B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	5035	8260B SIM	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	8330	8330A	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	300.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	314.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	7471A	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	8015B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	8015M	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	8315A	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	9012B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0DUP	P309746D271425B	DUP	METHOD	300.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0DUP	P309746D271635B	DUP	METHOD	314.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0MS	P309746R271439B	MS	METHOD	300.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0MS	P309746R271658B	MS	METHOD	314.0	III
07-Jun-2011	TB-060711	6309747	TB	5030B	8015M	III
07-Jun-2011	TB-060711	6309747	TB	5030B	8260B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	TB-060711	6309747	TB	5030B	8260B SIM	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3050B	6010B	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3050B	6020	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3060A	7199	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3546	1625C	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8015B	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8015M	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8082	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8270C	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8270C SIM	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	5035	8015M	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	5035	8260B	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	5035	8260B SIM	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	8330	8330A	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	300.0	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	314.0	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	7471A	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	8015B	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	8015M	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	8315A	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	9012B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3050B	6010B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3050B	6020	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3060A	7199	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3546	1625C	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8082	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8270C	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8270C SIM	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	5035	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	5035	8260B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	5035	8260B SIM	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	8330	8330A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	300.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	314.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	7471A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	8315A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	9012B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3050B	6010B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3050B	6020	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3060A	7199	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3546	1625C	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8082	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8270C	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8270C SIM	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	5035	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	5035	8260B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	5035	8260B SIM	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	8330	8330A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	300.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	314.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	7471A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	8315A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	9012B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	3050B	6010B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	3050B	6020	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	3060A	7199	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	METHOD	300.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	METHOD	314.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	METHOD	7471A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	METHOD	9012B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3050B	6010B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3050B	6020	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3060A	7199	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3546	1625C	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8015B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8015M	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8082	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8270C	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8270C SIM	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	5035	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	5035	8260B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	5035	8260B SIM	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	8330	8330A	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	300.0	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	314.0	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	7471A	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	8015B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	8015M	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	8315A	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	9012B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3050B	6010B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3050B	6020	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3060A	7199	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3546	1625C	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8082	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8270C	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8270C SIM	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	5035	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	5035	8260B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	5035	8260B SIM	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	8330	8330A	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	300.0	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	314.0	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	6850	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	7471A	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	8315A	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	9012B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3050B	6010B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3050B	6020	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3060A	7199	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3546	1625C	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8015B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8082	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8270C	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8270C SIM	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	5035	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	5035	8260B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	5035	8260B SIM	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	8330	8330A	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	300.0	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	314.0	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	7471A	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	8015B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	8315A	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	9012B	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3050B	6010B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3050B	6020	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3060A	7199	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3546	1625C	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8015B	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8082	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8270C	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8270C SIM	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	5035	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	5035	8260B	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	5035	8260B SIM	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	8330	8330A	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	300.0	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	314.0	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	7471A	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	8015B	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	8315A	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	9012B	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	3510C	8015B	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	3510C	8015M	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	3520C	1625C	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	5030B	8015M	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	8330	8330A	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	Gen Prep	300.0	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	Gen Prep	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	Gen Prep	8015M	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	METHOD	8315A	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	METHOD	9012B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3050B	6010B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3050B	6020	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3060A	7199	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3546	1625C	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8015B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8015M	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8082	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8270C	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8270C SIM	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	5035	8015M	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	5035	8260B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	5035	8260B SIM	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	8330	8330A	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	300.0	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	314.0	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	7471A	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	8015B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	8015M	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	8315A	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	9012B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3050B	6010B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3050B	6020	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3546	1625C	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8015B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8082	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8270C	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8270C SIM	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	5035	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	5035	8260B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	5035	8260B SIM	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	8330	8330A	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	300.0	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	314.0	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	6850	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	7471A	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	8015B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	8315A	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	9012B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3050B	6010B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3050B	6020	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3060A	7199	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3546	1625C	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8015B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8082	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8270C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8270C SIM	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	5035	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	5035	8260B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	5035	8260B SIM	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	8330	8330A	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	300.0	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	314.0	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	7471A	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	8015B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	8315A	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	9012B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3050B	6010B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3050B	6020	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3060A	7199	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3546	1625C	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8015B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8015M	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8082	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8270C	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8270C SIM	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	5035	8015M	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	5035	8260B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	5035	8260B SIM	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	8330	8330A	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	314.0	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	7471A	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	8015B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	8015M	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	8315A	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 ***Collected:*** 6/7/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	17.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SB-19.0-20.0 ***Collected:*** 6/7/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 9:10:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	15.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-17.0-18.0 ***Collected:*** 6/7/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.5		0.96	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.96	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 2:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	13.1		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5DN-SB-9.0-10.0 ***Collected:*** 6/7/2011 2:45:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.86	U	0.86	MDL	1.1	PQL	mg/Kg	UJ	Q
Nitrate-NO3	1.2	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	8480		6.88	MDL	22.4	PQL	mg/Kg	J	E, E
MANGANESE	567		0.0875	MDL	0.561	PQL	mg/Kg	J	E, E
POTASSIUM	2930		20.2	MDL	56.1	PQL	mg/Kg	J	Q
TIN	2.80	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	4.86	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	16200		6.68	MDL	21.8	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	135		0.0851	MDL	0.545	PQL	mg/Kg	J	E, E
POTASSIUM	2520		19.6	MDL	54.5	PQL	mg/Kg	J	Q
TIN	2.30	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.69	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	13800		6.84	MDL	22.3	PQL	mg/Kg	J	E, E
MANGANESE	365		0.0871	MDL	0.558	PQL	mg/Kg	J	E, E
POTASSIUM	3130		20.1	MDL	55.8	PQL	mg/Kg	J	Q
TIN	2.60	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.58	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3540		6.55	MDL	21.4	PQL	mg/Kg	J	E, E
MANGANESE	615		0.0834	MDL	0.535	PQL	mg/Kg	J	E, E
POTASSIUM	2080		19.2	MDL	53.5	PQL	mg/Kg	J	Q
TIN	2.75	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.26	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6520		7.27	MDL	23.7	PQL	mg/Kg	J	E, E
MANGANESE	491		0.0925	MDL	0.593	PQL	mg/Kg	J	E, E
POTASSIUM	3920		21.3	MDL	59.3	PQL	mg/Kg	J	Q
TIN	2.75	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	2.93	J	0.996	MDL	5.93	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	19500		7.01	MDL	22.9	PQL	mg/Kg	J	E, E
MANGANESE	364		0.0892	MDL	0.572	PQL	mg/Kg	J	E, E
POTASSIUM	2900		20.6	MDL	57.2	PQL	mg/Kg	J	Q
TIN	2.56	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.20	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	19600		6.94	MDL	22.6	PQL	mg/Kg	J	E, E
MANGANESE	220		0.0883	MDL	0.566	PQL	mg/Kg	J	E, E
POTASSIUM	3090		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.70	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.62	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1420		6.55	MDL	21.4	PQL	mg/Kg	J	E, E
MANGANESE	267		0.0834	MDL	0.535	PQL	mg/Kg	J	E, E
POTASSIUM	3050		19.2	MDL	53.5	PQL	mg/Kg	J	Q
SODIUM	69.6	J	39.9	MDL	107	PQL	mg/Kg	J	Z
TIN	2.53	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2890		6.34	MDL	20.7	PQL	mg/Kg	J	E, E
MANGANESE	298		0.0807	MDL	0.518	PQL	mg/Kg	J	E, E
POTASSIUM	3520		18.6	MDL	51.8	PQL	mg/Kg	J	Q
SODIUM	61.0	J	38.6	MDL	104	PQL	mg/Kg	J	Z
TIN	2.41	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.16	J	0.869	MDL	5.18	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5510		6.93	MDL	22.6	PQL	mg/Kg	J	E, E
MANGANESE	254		0.0882	MDL	0.565	PQL	mg/Kg	J	E, E
POTASSIUM	1960		20.4	MDL	56.5	PQL	mg/Kg	J	Q
TIN	2.87	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.76	J	0.950	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2690		6.69	MDL	21.8	PQL	mg/Kg	J	E, E
MANGANESE	275		0.0851	MDL	0.546	PQL	mg/Kg	J	E, E
POTASSIUM	2680		19.6	MDL	54.6	PQL	mg/Kg	J	Q
SODIUM	75.3	J	40.7	MDL	109	PQL	mg/Kg	J	Z
TIN	2.42	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.19	J	0.917	MDL	5.46	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0730	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.333		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.271		0.0667	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	7.52		0.0889	MDL	0.444	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.931		0.0178	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 ***Collected:*** 6/7/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.344		0.0444	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	32.9		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	12.6		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	17.7		0.0733	MDL	0.444	PQL	mg/Kg	J	Q
LEAD	13.2		0.0116	MDL	0.222	PQL	mg/Kg	J	Q
NICKEL	28.5		0.111	MDL	0.444	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0599	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.386		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	57.6		0.0244	MDL	0.111	PQL	mg/Kg	J	E, A

Sample ID: SL-024-SA5DN-SB-19.0-20.0 ***Collected:*** 6/7/2011 9:30:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0758	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-19.0-20.0 ***Collected:*** 6/7/2011 9:30:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.948		0.0545	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SB-19.0-20.0 ***Collected:*** 6/7/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.252		0.0654	MDL	0.218	PQL	mg/Kg	J	Q
ARSENIC	10.5		0.0872	MDL	0.436	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.847		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.368		0.0436	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	28.6		0.131	MDL	0.436	PQL	mg/Kg	J	Q, A
COBALT	29.0		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	16.3		0.0720	MDL	0.436	PQL	mg/Kg	J	Q
LEAD	14.1		0.0113	MDL	0.218	PQL	mg/Kg	J	Q
NICKEL	35.8		0.109	MDL	0.436	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0212	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.449		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	62.9		0.0240	MDL	0.109	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.361		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.255		0.0677	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	7.61		0.0902	MDL	0.451	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.987		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.429		0.0451	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	34.4		0.135	MDL	0.451	PQL	mg/Kg	J	Q, A
COBALT	16.7		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	19.5		0.0744	MDL	0.451	PQL	mg/Kg	J	Q
LEAD	13.5		0.0117	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	35.0		0.113	MDL	0.451	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0547	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.424		0.0338	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	56.6		0.0248	MDL	0.113	PQL	mg/Kg	J	E, A

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.288		0.0419	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0577	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-026-SA5DN-SB-17.0-18.0 ***Collected:*** 6/7/2011 11:45:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.411		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SB-17.0-18.0 ***Collected:*** 6/7/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.110	J	0.0629	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	8.49		0.0839	MDL	0.419	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.700		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	19.2		0.126	MDL	0.419	PQL	mg/Kg	J	Q, A
COBALT	10.3		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	11.1		0.0692	MDL	0.419	PQL	mg/Kg	J	Q
LEAD	8.35		0.0109	MDL	0.210	PQL	mg/Kg	J	Q
NICKEL	23.1		0.105	MDL	0.419	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0167	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.323		0.0315	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	41.6		0.0231	MDL	0.105	PQL	mg/Kg	J	E, A

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.199	J	0.0470	MDL	0.470	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.524		0.0587	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.229	J	0.0704	MDL	0.235	PQL	mg/Kg	J	Z, Q
ARSENIC	6.42		0.0939	MDL	0.470	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.987		0.0188	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.333		0.0470	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	30.6		0.141	MDL	0.470	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	10.7		0.0235	MDL	0.117	PQL	mg/Kg	J	Q, E
COPPER	16.3		0.0775	MDL	0.470	PQL	mg/Kg	J	Q
LEAD	11.5		0.0122	MDL	0.235	PQL	mg/Kg	J	Q
NICKEL	24.5		0.117	MDL	0.470	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0595	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z, Q
THALLIUM	0.430		0.0352	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	48.2		0.0258	MDL	0.117	PQL	mg/Kg	J	E, A

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0464	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.246		0.0566	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.185	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	5.64		0.0906	MDL	0.453	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.21		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.255		0.0453	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	27.5		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	7.89		0.0227	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	12.2		0.0747	MDL	0.453	PQL	mg/Kg	J	Q
LEAD	10.7		0.0118	MDL	0.227	PQL	mg/Kg	J	Q
NICKEL	21.6		0.113	MDL	0.453	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0368	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.345		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	43.6		0.0249	MDL	0.113	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.336		0.0566	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.270		0.0679	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	6.92		0.0906	MDL	0.453	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.959		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.128		0.0453	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	32.3		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	8.54		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	15.9		0.0747	MDL	0.453	PQL	mg/Kg	J	Q
LEAD	8.54		0.0118	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	22.2		0.113	MDL	0.453	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0712	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.362		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	50.7		0.0249	MDL	0.113	PQL	mg/Kg	J	E, A

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.962		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.135	J	0.0629	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	6.79		0.0839	MDL	0.419	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.786		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	0.168		0.0419	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	19.6		0.126	MDL	0.419	PQL	mg/Kg	J	Q, A
COBALT	7.01		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	8.79		0.0692	MDL	0.419	PQL	mg/Kg	J	Q
LEAD	9.46		0.0109	MDL	0.210	PQL	mg/Kg	J	Q
NICKEL	14.4		0.105	MDL	0.419	PQL	mg/Kg	J	Q, Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0615	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.386		0.0315	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	41.7		0.0231	MDL	0.105	PQL	mg/Kg	J	E, A

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.426		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0967	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	6.03		0.0844	MDL	0.422	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.655		0.0169	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.191		0.0422	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	18.9		0.127	MDL	0.422	PQL	mg/Kg	J	Q, A
COBALT	7.05		0.0211	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	10.4		0.0697	MDL	0.422	PQL	mg/Kg	J	Q
LEAD	9.15		0.0110	MDL	0.211	PQL	mg/Kg	J	Q
NICKEL	15.3		0.106	MDL	0.422	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0650	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.336		0.0317	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	37.6		0.0232	MDL	0.106	PQL	mg/Kg	J	E, A

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0507	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.238		0.0560	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.198	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	7.56		0.0896	MDL	0.448	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.873		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.0793	J	0.0448	MDL	0.112	PQL	mg/Kg	J	Z, Q
CHROMIUM	21.6		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	6.64		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	10.6		0.0739	MDL	0.448	PQL	mg/Kg	J	Q
LEAD	10.0		0.0116	MDL	0.224	PQL	mg/Kg	J	Q
NICKEL	15.4		0.112	MDL	0.448	PQL	mg/Kg	J	Q, Q, E
SILVER	0.130		0.0134	MDL	0.112	PQL	mg/Kg	J	Q
THALLIUM	0.346		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	45.9		0.0246	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.295	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.803		0.0546	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.146	J	0.0655	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	6.96		0.0873	MDL	0.437	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.669		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.133		0.0437	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.1		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
COBALT	7.26		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	7.98		0.0720	MDL	0.437	PQL	mg/Kg	J	Q
LEAD	7.61		0.0114	MDL	0.218	PQL	mg/Kg	J	Q
NICKEL	14.8		0.109	MDL	0.437	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0370	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.328		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	42.8		0.0240	MDL	0.109	PQL	mg/Kg	J	E, A

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

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	U	0.23	MDL	1.1	PQL	mg/Kg	UJ	FD

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

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

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0033	U	0.0033	MDL	0.114	PQL	mg/Kg	UJ	FD

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0048	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z, FD

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0278	J	0.0033	MDL	0.117	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0044	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0117	J	0.0031	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0070	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0108	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 1625C **Matrix:** AQ

Sample ID: EB15-SA5DN-SB-060711 *Collected:* 6/7/2011 1:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	1.71		0.526	MDL	1.05	PQL	ng/L	UJ	B, S

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	65.1		19.0	MDL	38.0	PQL	ng/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	18.9	U	18.9	MDL	37.8	PQL	ng/Kg	UJ	FD

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.1	J	18.1	MDL	36.2	PQL	ng/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	20.4	J	19.8	MDL	39.5	PQL	ng/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	29.3	J	19.4	MDL	38.9	PQL	ng/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	23.9	J	19.1	MDL	38.2	PQL	ng/Kg	J	Z

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	33.0	J	17.8	MDL	35.5	PQL	ng/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	26.6	J	17.7	MDL	35.3	PQL	ng/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	24.7	J	18.6	MDL	37.2	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.0	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q
Propylene glycol	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.68	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.2	J	0.95	MDL	2.9	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.51	J	0.47	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.50	J	0.46	MDL	1.4	PQL	mg/Kg	U	B
EFH (C30-C40)	0.85	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.51	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.54	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.87	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.73	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.54	J	0.47	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.4	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q, L
1,3-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
1,4-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2,4,5-TRICHLOROPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2,4,6-TRICHLOROPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DICHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DIMETHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	R	Q
2,4-DINITROTOLUENE	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2-CHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	R	Q
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
4-CHLORO-3-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
4-CHLOROPHENYL-PHENYLETHER	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
4-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q
BIS(2-CHLOROETHOXY)METHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
DIBENZOFURAN	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
HEXACHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
HEXACHLOROBUTADIENE	76	U	76	MDL	190	PQL	ug/Kg	UJ	Q
HEXACHLOROETHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
ISOPHORONE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
N-NITROSODIPHENYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Method Category: SVOA

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

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	Q
Dimethylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	Q

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.74	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.90	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.42	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.82	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.76	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.96	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.53	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.87	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** AQ

Sample ID: EB15-SA5DN-SB-060711 *Collected:* 6/7/2011 1:00:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	230	J	200	MDL	1000	PQL	ug/L	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.0		6.7	MDL	8.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.4	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.16	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.1		6.2	MDL	7.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	11		6.7	MDL	8.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.7	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.20	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.9		6.8	MDL	8.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.4		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.17	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.5		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.1	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-036-SA5DN-SB-9.0-10.0 ***Collected:*** 6/7/2011 2:45:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.4		7.2	MDL	8.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.26	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-071-SA8N-SB-2.0-3.0 ***Collected:*** 6/7/2011 9:05:00 AM ***Analysis Type:*** RES ***Dilution:*** 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	12		7.1	MDL	8.5	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.5	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.13	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-122-SA8N-SB-2.0-3.0 ***Collected:*** 6/7/2011 2:00:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.3		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.24	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-133-SA8N-SB-7.0-8.0 ***Collected:*** 6/6/2011 5:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.7		7.0	MDL	8.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.7	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.19	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-140-SA8N-SB-3.0-4.0 ***Collected:*** 6/7/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.7		6.3	MDL	7.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.5	J	0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.22	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE175

Method Blank Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWB15B261608	6/21/2011 4:08:00 PM	N-NITROSODIMETHYLAMINE	1.84 ng/L	EB15-SA5DN-SB-060711

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB15-SA5DN-SB-060711(RES)	N-NITROSODIMETHYLAMINE	1.71 ng/L	1.71U ng/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16008CB221116	6/14/2011 11:16:00 AM	PHOSPHORUS TIN	1.82 mg/Kg 1.75 mg/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0
P16008CB221207	6/15/2011 12:07:00 PM	BORON	0.406 mg/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5DN-QC-060711(RES)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-024-SA5DN-SB-19.0-20.0(RES)	TIN	2.30 mg/Kg	2.30U mg/Kg
SL-024-SA5DN-SB-4.0-5.0(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-026-SA5DN-SB-17.0-18.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-026-SA5DN-SB-4.0-5.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-036-SA5DN-SB-4.0-5.0(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-036-SA5DN-SB-9.0-10.0(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-071-SA8N-SB-2.0-3.0(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-122-SA8N-SB-2.0-3.0(RES)	TIN	2.41 mg/Kg	2.41U mg/Kg
SL-133-SA8N-SB-7.0-8.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-140-SA8N-SB-3.0-4.0(RES)	TIN	2.42 mg/Kg	2.42U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16026CB220837A	6/11/2011 8:37:00 AM	LEAD VANADIUM	0.0160 mg/Kg 0.0337 mg/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P61613AB321415A	6/11/2011 2:15:00 PM	EFH (C21-C30) EFH (C30-C40)	0.43 mg/Kg 0.90 mg/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5DN-QC-060711(REA2)	EFH (C30-C40)	1.0 mg/Kg	1.4U mg/Kg
SL-024-SA5DN-SB-4.0-5.0(REA2)	EFH (C30-C40)	0.68 mg/Kg	1.4U mg/Kg
SL-036-SA5DN-SB-4.0-5.0(REA2)	EFH (C30-C40)	0.51 mg/Kg	1.4U mg/Kg
SL-036-SA5DN-SB-9.0-10.0(REA2)	EFH (C21-C30)	0.50 mg/Kg	1.4U mg/Kg
SL-036-SA5DN-SB-9.0-10.0(REA2)	EFH (C30-C40)	0.85 mg/Kg	1.4U mg/Kg
SL-133-SA8N-SB-7.0-8.0(REA2)	EFH (C30-C40)	0.87 mg/Kg	1.4U mg/Kg
SL-140-SA8N-SB-3.0-4.0(REA2)	EFH (C30-C40)	0.73 mg/Kg	1.4U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB80B211220A	6/13/2011 12:20:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	9.9 ug/Kg 2.8 ug/Kg 0.10 ug/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5DN-QC-060711(RES)	ACETONE	9.0 ug/Kg	9.0U ug/Kg
DUP13-SA5DN-QC-060711(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.0U ug/Kg
DUP13-SA5DN-QC-060711(RES)	TOLUENE	0.16 ug/Kg	4.0U ug/Kg
SL-024-SA5DN-SB-19.0-20.0(RES)	ACETONE	8.1 ug/Kg	8.1U ug/Kg
SL-024-SA5DN-SB-19.0-20.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.7U ug/Kg
SL-024-SA5DN-SB-19.0-20.0(RES)	TOLUENE	0.14 ug/Kg	3.7U ug/Kg
SL-024-SA5DN-SB-4.0-5.0(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-024-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.0U ug/Kg
SL-024-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.20 ug/Kg	4.0U ug/Kg
SL-026-SA5DN-SB-17.0-18.0(RES)	ACETONE	8.9 ug/Kg	8.9U ug/Kg
SL-026-SA5DN-SB-17.0-18.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg
SL-026-SA5DN-SB-17.0-18.0(RES)	TOLUENE	0.15 ug/Kg	4.0U ug/Kg
SL-026-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.4 ug/Kg	8.4U ug/Kg
SL-026-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.1U ug/Kg
SL-026-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.17 ug/Kg	4.1U ug/Kg
SL-036-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.5 ug/Kg	8.5U ug/Kg
SL-036-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.1U ug/Kg
SL-036-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.1U ug/Kg
SL-036-SA5DN-SB-9.0-10.0(RES)	ACETONE	9.4 ug/Kg	9.4U ug/Kg
SL-036-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.3U ug/Kg
SL-036-SA5DN-SB-9.0-10.0(RES)	TOLUENE	0.14 ug/Kg	4.3U ug/Kg
SL-071-SA8N-SB-2.0-3.0(RES)	ACETONE	12 ug/Kg	12U ug/Kg
SL-071-SA8N-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.2U ug/Kg
SL-071-SA8N-SB-2.0-3.0(RES)	TOLUENE	0.13 ug/Kg	4.2U ug/Kg
SL-122-SA8N-SB-2.0-3.0(RES)	ACETONE	8.3 ug/Kg	8.3U ug/Kg
SL-122-SA8N-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.1U ug/Kg
SL-122-SA8N-SB-2.0-3.0(RES)	TOLUENE	0.24 ug/Kg	4.1U ug/Kg
SL-133-SA8N-SB-7.0-8.0(RES)	ACETONE	8.7 ug/Kg	8.7U ug/Kg
SL-133-SA8N-SB-7.0-8.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.2U ug/Kg
SL-133-SA8N-SB-7.0-8.0(RES)	TOLUENE	0.19 ug/Kg	4.2U ug/Kg
SL-140-SA8N-SB-3.0-4.0(RES)	ACETONE	7.7 ug/Kg	7.7U ug/Kg
SL-140-SA8N-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.8U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: DE175_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-140-SA8N-SB-3.0-4.0(RES)	TOLUENE	0.22 ug/Kg	3.8U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN -SB-4.0-5.0MS SL-024-SA5DN -SB-4.0-5.0MSD (SL-024-SA5DN -SB-4.0-5.0)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	45 - -	27 48 53	59.00-109.00 63.00-107.00 63.00-107.00	49 (20.00) 34 (20.00) 33 (20.00)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)
SL-024-SA5DN -SB-4.0-5.0MSD (SL-024-SA5DN -SB-4.0-5.0)	EFH (C21-C30)	-	-	49.00-123.00	25 (20.00)	EFH (C21-C30)	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN -SB-4.0-5.0MSD (SL-024-SA5DN -SB-4.0-5.0)	PETN	-	128	80.00-121.00	-	PETN	J(all detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN -SB-4.0-5.0MS SL-024-SA5DN -SB-4.0-5.0MSD (SL-024-SA5DN -SB-4.0-5.0)	m-Terphenyl	68	66	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN -SB-4.0-5.0MSD (DUP13 -SA5DN -QC-060711 SL -024-SA5DN -SB-19.0-20.0 SL -024-SA5DN -SB-4.0-5.0 SL -026-SA5DN -SB-17.0-18.0 SL -026-SA5DN -SB-4.0-5.0 SL -036-SA5DN -SB-4.0-5.0 SL -036-SA5DN -SB-9.0-10.0 SL -071-SA8N -SB-2.0-3.0 SL -122-SA8N -SB-2.0-3.0 SL -133-SA8N -SB-7.0-8.0 SL -140-SA8N -SB-3.0-4.0)	BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD SILVER THALLIUM	- - - - - - - -	133 140 160 128 136 215 141 143	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - -	BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD SILVER THALLIUM	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	ANTIMONY ARSENIC NICKEL VANADIUM ZINC	61 - 54 61 51	- 214 160 223 190	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- 21 (20.00) 24 (20.00) 24 (20.00) -	ANTIMONY ARSENIC NICKEL VANADIUM ZINC	J(all detects) UJ(all non-detects) V, Zn, No Qual %R, >4x
SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	MOLYBDENUM	-	135	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	BARIUM	-65	-249	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	ALUMINUM IRON MAGNESIUM POTASSIUM	5628 2370 616 167	5203 2376 442 156	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM IRON MAGNESIUM POTASSIUM	J(all detects) Al, Fe, Mg, No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS **SL-024-SA5DN-SB-4.0-5.0MSD** (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	CALCIUM	-586	-1127	75.00-125.00	24 (20.00)	CALCIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x
SL-024-SA5DN-SB-4.0-5.0MS **SL-024-SA5DN-SB-4.0-5.0MSD** (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	MANGANESE	231	539	75.00-125.00	29 (20.00)	MANGANESE	J(all detects) UJ(all non-detects) No Qual %R, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS **SL-024-SA5DN-SB-4.0-5.0MSD** (SL-024-SA5DN-SB-4.0-5.0)	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHENOL	0 0	0 0	20.00-143.00 24.00-116.00	- -	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHEN	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (SL-024-SA5DN-SB-4.0-5.0)	1,2,4-TRICHLOROBENZENE	61	58	72.00-115.00	-	1,2,4-TRICHLOROBENZENE	J(all detects) UJ(all non-detects)
	1,2-DICHLOROBENZENE	55	52	66.00-108.00	-	1,2-DICHLOROBENZENE	
	1,3-DICHLOROBENZENE	52	50	63.00-109.00	-	1,3-DICHLOROBENZENE	
	1,4-DICHLOROBENZENE	52	50	70.00-100.00	-	1,4-DICHLOROBENZENE	
	1-METHYLNAPHTHALENE	67	68	73.00-112.00	-	1-METHYLNAPHTHALENE	
	2,4,5-TRICHLOROPHENOL	71	71	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4,6-TRICHLOROPHENOL	72	74	77.00-115.00	-	2,4,6-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	72	73	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	70	69	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	69	72	73.00-113.00	-	2,4-DINITROTOLUENE	
	2-CHLOROPHENOL	-	71	73.00-121.00	-	2-CHLOROPHENOL	
	2-METHYLNAPHTHALENE	63	63	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	70	69	75.00-111.00	-	2-METHYLPHENOL	
	2-NITROPHENOL	53	55	74.00-115.00	-	2-NITROPHENOL	
	4-BROMOPHENYL-PHENYLETH	66	-	67.00-129.00	-	4-BROMOPHENYL-PHENYLET	
	4-CHLORO-3-METHYLPHENOL	73	74	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	67	69	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	65	64	71.00-111.00	-	4-METHYLPHENOL	
	ACENAPHTHENE	70	72	75.00-115.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	72	73	81.00-110.00	-	ACENAPHTHYLENE	
	ANTHRACENE	71	74	75.00-115.00	-	ANTHRACENE	
	BENZIDINE	18	22	35.00-141.00	-	BENZIDINE	
	BIS(2-CHLOROETHOXY)METHA	65	67	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	DIBENZOFURAN	70	-	71.00-112.00	-	DIBENZOFURAN	
	FLUORANTHENE	69	72	73.00-112.00	-	FLUORANTHENE	
	FLUORENE	72	74	77.00-111.00	-	FLUORENE	
	HEXACHLOROBENZENE	70	73	77.00-114.00	-	HEXACHLOROBENZENE	
	HEXACHLOROBUTADIENE	56	55	62.00-120.00	-	HEXACHLOROBUTADIENE	
	HEXACHLOROETHANE	49	46	57.00-109.00	-	HEXACHLOROETHANE	
	ISOPHORONE	68	69	73.00-102.00	-	ISOPHORONE	
	NAPHTHALENE	62	62	72.00-116.00	-	NAPHTHALENE	
	NITROBENZENE	68	67	72.00-106.00	-	NITROBENZENE	
	N-NITROSODIPHENYLAMINE	69	70	86.00-145.00	-	N-NITROSODIPHENYLAMINE	

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	TITANIUM	173	355	75.00-125.00	-	TITANIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: DE175_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MSD (SL-024-SA5DN-SB-4.0-5.0)	ACENAPHTHYLENE Dimethylphthalate	- -	63 73	67.00-114.00 74.00-118.00	- -	ACENAPHTHYLENE Dimethylphthalate	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-140-SA8N-SB-3.0-4.0)	FLUORIDE	52	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-133-SA8N-SB-7.0-8.0MS (SL-133-SA8N-SB-7.0-8.0)	FLUORIDE	69	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-133-SA8N-SB-7.0-8.0DUP (SL-133-SA8N-SB-7.0-8.0)	FLUORIDE	22	20.00	No Qual, OK by Difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5DN-SB-4.0-5.0DUP (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	CALCIUM	51	20.00	J(all detects) UJ(all non-detects)
	MANGANESE	37	20.00	
	Zirconium	48	20.00	Zr, No Qual, OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5DN-SB-4.0-5.0DUP (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	COBALT	24	20.00	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5DN-SB-4.0-5.0DUP (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	MERCURY	73	20.00	No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11601AQ321314A (EB15-SA5DN-SB-060711)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	135 130 130	- - -	78.00-126.00 80.00-124.00 80.00-120.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11626AQ240817A P11626AY240758A (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	Aroclor 5442	109	113	36.00-106.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16008CQ221119 (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	ALUMINUM	79	-	80.00-120.00	-	ALUMINUM	No Qual, SRM within QC Limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P0LFLCSQ260127 (DUP13 -SA5DN -QC-060711 SL -024-SA5DN -SB-19.0-20.0 SL -024-SA5DN -SB-4.0-5.0 SL -026-SA5DN -SB-17.0-18.0 SL -026-SA5DN -SB-4.0-5.0 SL -036-SA5DN -SB-4.0-5.0 SL -036-SA5DN -SB-9.0-10.0 SL -071-SA8N -SB-2.0-3.0 SL -122-SA8N -SB-2.0-3.0 SL -133-SA8N -SB-7.0-8.0 SL -140-SA8N -SB-3.0-4.0)	1,2-DICHLOROBENZENE	77	-	79.00-102.00	-	1,2-DICHLOROBENZENE	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
EB15-SA5DN-SB-060711	N-Nitrosodimethylamine-d6	162	50.00-150.00	All Target Analytes	J (all detects)

Method: **8315A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-026-SA5DN-SB-4.0-5.0	Butyraldehyde	149	64.00-126.00	All Target Analytes	J(all detects)
SL-071-SA8N-SB-2.0-3.0	Butyraldehyde	147	64.00-126.00	All Target Analytes	J(all detects)
SL-122-SA8N-SB-2.0-3.0	Butyraldehyde	135	64.00-126.00	All Target Analytes	J(all detects)
SL-140-SA8N-SB-3.0-4.0	Butyraldehyde	131	64.00-126.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
MOISTURE	12.2	12.6	3		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
N-NITROSODIMETHYLAMINE	37.8 U	65.1	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
FLUORIDE	15.6	17.2	10	50.00	No Qualifiers Applied
Nitrate-NO3	1.5	1.9	24	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
ALUMINUM	25300	27800	9	50.00	No Qualifiers Applied
BORON	12.7	15.1	17	50.00	
CALCIUM	13800	8480	48	50.00	
IRON	34600	36000	4	50.00	
LITHIUM	24.8	26.2	5	50.00	
MAGNESIUM	7490	7090	5	50.00	
MANGANESE	365	567	43	50.00	
PHOSPHORUS	357	413	15	50.00	
POTASSIUM	3130	2930	7	50.00	
SODIUM	438	476	8	50.00	
STRONTIUM	45.3	43.6	4	50.00	
TIN	2.60	2.80	7	50.00	
TITANIUM	1410	1250	12	50.00	
Zirconium	3.58	4.86	30	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
ANTIMONY	0.255	0.271	6	50.00	No Qualifiers Applied
ARSENIC	7.61	7.52	1	50.00	
BARIUM	201	180	11	50.00	
BERYLLIUM	0.987	0.931	6	50.00	
CADMIUM	0.429	0.344	22	50.00	
CHROMIUM	34.4	32.9	4	50.00	
COBALT	16.7	12.6	28	50.00	
COPPER	19.5	17.7	10	50.00	
LEAD	13.5	13.2	2	50.00	
MOLYBDENUM	0.361	0.333	8	50.00	
NICKEL	35.0	28.5	20	50.00	
SELENIUM	0.119	0.0730	48	50.00	
SILVER	0.0547	0.0599	9	50.00	
THALLIUM	0.424	0.386	9	50.00	
VANADIUM	56.6	57.6	2	50.00	
ZINC	86.6	80.0	8	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
HEXAVALENT CHROMIUM	0.44	1.1 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
MERCURY	0.0048	0.114 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
EFH (C30-C40)	0.68	1.0	38	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
ACETONE	11	9.0	20	50.00	No Qualifiers Applied
METHYLENE CHLORIDE	1.7	1.4	19	50.00	
TOLUENE	0.20	0.16	22	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	*Concentration (pH unit)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
PH	8.81	8.43	4	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5DN-SB-060711	METHANOL	J	230	1000	PQL	ug/L	J (all detects)

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5DN-SB-17.0-18.0	N-NITROSODIMETHYLAMINE	J	27.1	36.2	PQL	ng/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	20.4	39.5	PQL	ng/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	29.3	38.9	PQL	ng/Kg	J (all detects)
SL-036-SA5DN-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	23.9	38.2	PQL	ng/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	N-NITROSODIMETHYLAMINE	J	33.0	35.5	PQL	ng/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	N-NITROSODIMETHYLAMINE	J	26.6	35.3	PQL	ng/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	N-NITROSODIMETHYLAMINE	J	24.7	37.2	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-9.0-10.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5DN-QC-060711	TIN Zirconium	J J	2.80 4.86	11.2 5.61	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-024-SA5DN-SB-19.0-20.0	TIN Zirconium	J J	2.30 2.69	10.9 5.45	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-024-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.60 3.58	11.2 5.58	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-026-SA5DN-SB-17.0-18.0	TIN Zirconium	J J	2.75 2.26	10.7 5.35	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.75 2.93	11.9 5.93	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.56 3.20	11.4 5.72	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5DN-SB-9.0-10.0	TIN	J	2.70	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.62	5.66	PQL	mg/Kg	
SL-071-SA8N-SB-2.0-3.0	SODIUM	J	69.6	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.53	10.7	PQL	mg/Kg	
SL-122-SA8N-SB-2.0-3.0	SODIUM	J	61.0	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.41	10.4	PQL	mg/Kg	
	Zirconium	J	2.16	5.18	PQL	mg/Kg	
SL-133-SA8N-SB-7.0-8.0	TIN	J	2.87	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.76	5.65	PQL	mg/Kg	
SL-140-SA8N-SB-3.0-4.0	SODIUM	J	75.3	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.42	10.9	PQL	mg/Kg	
	Zirconium	J	2.19	5.46	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5DN-QC-060711	SELENIUM	J	0.0730	0.444	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0599	0.111	PQL	mg/Kg	
SL-024-SA5DN-SB-19.0-20.0	SELENIUM	J	0.0758	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0212	0.109	PQL	mg/Kg	
SL-024-SA5DN-SB-4.0-5.0	SELENIUM	J	0.119	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0547	0.113	PQL	mg/Kg	
SL-026-SA5DN-SB-17.0-18.0	ANTIMONY	J	0.110	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0577	0.419	PQL	mg/Kg	
	SILVER	J	0.0167	0.105	PQL	mg/Kg	
SL-026-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.229	0.235	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.199	0.470	PQL	mg/Kg	
	SILVER	J	0.0595	0.117	PQL	mg/Kg	
SL-036-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.185	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0464	0.453	PQL	mg/Kg	
	SILVER	J	0.0368	0.113	PQL	mg/Kg	
SL-036-SA5DN-SB-9.0-10.0	SILVER	J	0.0712	0.113	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	ANTIMONY	J	0.135	0.210	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0615	0.105	PQL	mg/Kg	
SL-122-SA8N-SB-2.0-3.0	ANTIMONY	J	0.0967	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.159	0.422	PQL	mg/Kg	
	SILVER	J	0.0650	0.106	PQL	mg/Kg	
SL-133-SA8N-SB-7.0-8.0	ANTIMONY	J	0.198	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0793	0.112	PQL	mg/Kg	
	SELENIUM	J	0.0507	0.448	PQL	mg/Kg	
SL-140-SA8N-SB-3.0-4.0	ANTIMONY	J	0.146	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.295	0.437	PQL	mg/Kg	
	SILVER	J	0.0370	0.109	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5DN-SB-19.0-20.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-024-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.41	1.2	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.60	1.2	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.33	1.2	PQL	mg/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5DN-SB-4.0-5.0	MERCURY	J	0.0048	0.108	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	MERCURY	J	0.0278	0.117	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	MERCURY	J	0.0044	0.111	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	MERCURY	J	0.0117	0.106	PQL	mg/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	MERCURY	J	0.0070	0.105	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	MERCURY	J	0.0108	0.107	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5DN-QC-060711	EFH (C30-C40)	J	1.0	1.4	PQL	mg/Kg	J (all detects)
SL-024-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.68	1.4	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	EFH (C15-C20)	J	1.2	2.9	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.51	1.4	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-9.0-10.0	EFH (C21-C30) EFH (C30-C40)	J J	0.50 0.85	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	EFH (C15-C20)	J	0.51	1.3	PQL	mg/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	EFH (C15-C20)	J	0.54	1.3	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	EFH (C30-C40)	J	0.87	1.4	PQL	mg/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	EFH (C30-C40)	J	0.73	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	0.54	2.0	PQL	ug/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	Aroclor 5460	J	1.4	3.8	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5DN-QC-060711	METHYLENE CHLORIDE TOLUENE	J J	1.4 0.16	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-024-SA5DN-SB-19.0-20.0	METHYLENE CHLORIDE TOLUENE	J J	1.3 0.14	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-024-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.7 0.20	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-026-SA5DN-SB-17.0-18.0	METHYLENE CHLORIDE TOLUENE	J J	1.3 0.15	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.17	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.1 0.11	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-036-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.14	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.13	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.24	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	METHYLENE CHLORIDE TOLUENE	J J	1.7 0.19	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.22	3.8 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5DN-SB-17.0-18.0	CHRYSENE	J	0.74	1.8	PQL	ug/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	NAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	ANTHRACENE NAPHTHALENE	J J	0.42 0.82	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	BENZO(B)FLUORANTHENE BENZO(K)FLUORANTHENE CHRYSENE FLUORANTHENE NAPHTHALENE PYRENE	J J J J J J	0.76 0.96 0.53 1.0 1.0 0.87	1.9 1.9 1.9 1.9 1.9 1.9	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

LDC #: 26277F4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11
SDG #: DE175 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MY
2nd Reviewer:

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	~~A~~ N	
III.	Calibration	N	
IV.	Blanks	A	M fuel
V.	ICP Interference Check Sample (ICS) Analysis	N	RPD out RPD out RPD out.
VI.	Matrix Spike Analysis	N	Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn 75, Na fuel 5R
VII.	Duplicate Sample Analysis	N	Hg, Zn <5X
VIII.	Laboratory Control Samples (LCS)	N A	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr, V
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	N	

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

Validated Samples:

1	SL-024-SA5DN-SB4.0-5.0	11	SL-133-SA8N-SB-7.0-8.0	21		31	
2	SL-024-SA5DN-SB19.0-20.0	12	SL-024-SA5DN-SB4.0-5.0MS	22		32	
3	SL-026-SA5DN-SB4.0-5.0	13	SL-024-SA5DN-SB4.0-5.0MSD	23		33	
4	SL-026-SA5DN-SB17.0-18.0	14	SL-024-SA5DN-SB4.0-5.0DUP	24		34	
5	SL-036-SA5DN-SB4.0-5.0	15		25		35	
6	SL-036-SA5DN-SB9.0-10.0	16		26		36	
7	DUP13-SA5DN-QC-060711	17		27		37	
8	SL-071-SA8N-SB-2.0-3.0	18		28		38	
9	SL-122-SA8N-SB-2.0-3.0	19		29		39	
10	SL-140-SA8N-SB-3.0-4.0	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE175
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6309733BKG Matrix Spike Lab Sample ID: 6309734MS Matrix Spike Duplicate Lab Sample ID: 6309735MSD
% Solids for Sample: 87.8
Batch Id(s): P16008C, P16026C, P15911F, P16608A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		25340.2675		38034.1641		36959.0167		225.5351	223.3240	MG/KG	5628		5203		3			20	P
Antimony	121	0.2549		1.0828		1.3159		1.3532	1.3142	MG/KG	61	N	81		19		75 - 125	20	MS
Arsenic	75	7.6118		9.9596		12.3051		2.2554	2.1903	MG/KG	104		214	N	21	*	75 - 125	20	MS
Barium	137	201.2450		193.9602		173.9640		11.2768	10.9515	MG/KG	-65		-249		11			20	MS
Beryllium	9	0.9872		1.9315		2.1546		0.9021	0.8761	MG/KG	105		133	N	11		75 - 125	20	MS
Boron		12.7183		234.0400		228.4638		225.5351	223.3240	MG/KG	98		97		2		84 - 115	20	P
Cadmium	111	0.4294		1.7368		1.9660		1.1277	1.0951	MG/KG	116		140	N	12		75 - 125	20	MS
Calcium		13806.7254		11165.0714		8775.0190		451.0702	446.6479	MG/KG	-586		-1127		24	*		20	P
Chromium	52	34.3715		43.4381		51.9099		11.2768	10.9515	MG/KG	80		160	N	18		75 - 125	20	MS
Cobalt	59	16.6873		70.8631		86.6261		56.3838	54.7573	MG/KG	96		128	N	20		75 - 125	20	MS
Copper	63	19.5201		28.6430		34.4095		11.2768	10.9515	MG/KG	81		136	N	18		75 - 125	20	MS
Iron		34636.6966		37309.4285		37289.7126		112.7675	111.6620	MG/KG	2370		2376		0			20	P
Lead	208	13.4915		16.8655		20.5559		3.3830	3.2854	MG/KG	100		215		20		75 - 125		MS
Lithium		24.7834		145.0698		142.5030		112.7675	111.6620	MG/KG	107		105		2		82 - 114	20	P
Magnesium		7488.8025		8878.6644		8474.8314		225.5351	223.3240	MG/KG	616		442		5			20	P
Manganese		365.2028		495.4397		666.0536		56.3838	55.8310	MG/KG	231		539		29	*		20	P
Mercury		0.0048	B	0.1720		0.1868		0.1760	0.1850	MG/KG	95		98		8		65 - 135	20	CV
Molybdenum	98	0.3613		13.8050		15.1809		11.2768	10.9515	MG/KG	119		135	N	9		75 - 125	20	MS
Nickel	60	34.9579		41.0248		52.4575		11.2768	10.9515	MG/KG	54	N	160	N	24	*	75 - 125	20	MS
Phosphorus		356.5345		494.7507		493.7335		112.7675	111.6620	MG/KG	123		123		0		75 - 125	20	P
Potassium		3131.8583		5011.7109		4872.8862		1127.6754	1116.6198	MG/KG	167	N	156	N	3		75 - 125	20	P
Selenium	78	0.1193	B	2.5440		2.6393		2.2554	2.1903	MG/KG	108		115		4		75 - 125	20	MS
Silver	107	0.0547	B	14.0734		15.4832		11.2768	10.9515	MG/KG	124		141	N	10		75 - 125	20	MS
Sodium		437.5341		1544.6706		1525.7895		1127.6754	1116.6198	MG/KG	98		97		1		75 - 125	20	P
Strontium		45.3124		155.0757		150.0357		112.7675	111.6620	MG/KG	97		94		3		75 - 115	20	P
Thallium	203	0.4236		0.9400		1.0507		0.4511	0.4381	MG/KG	114		143	N	11		75 - 125	20	MS
Tin		2.6040	B	391.6428		385.7899		451.0702	446.6479	MG/KG	86		86		2		80 - 110	20	P
Titanium		1412.3677		1605.7807		1817.1344		111.6620	113.8952	MG/KG	173		355		12			20	P
Vanadium	51	56.5642		63.3979		80.9970		11.2768	10.9515	MG/KG	61		223		24	*		20	MS
Zinc	66	86.5829		92.3792		107.3681		11.2768	10.9515	MG/KG	51		190		15			20	MS
Zirconium		3.5776	B	117.9797		115.6840		112.7675	111.6620	MG/KG	101		100		2		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

SAMPLE DELIVERY GROUP

DE176

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	TB-060811	6310784	TB	5030B	8015M	IV
08-Jun-2011	TB-060811	6310784	TB	5030B	8260B	IV
08-Jun-2011	TB-060811	6310784	TB	5030B	8260B SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3050B	6010B	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3050B	6020	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3060A	7199	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3546	1625C	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8015B	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8082	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8270C	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8270C SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	5035	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	5035	8260B	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	5035	8260B SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	8330	8330A	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	300.0	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	314.0	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	7471A	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	8015B	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	8315A	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	9012B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3050B	6010B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3050B	6020	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3060A	7199	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3546	1625C	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8015B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8082	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8270C	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8270C SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	5035	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	5035	8260B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	5035	8260B SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	8330	8330A	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	300.0	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	314.0	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	7471A	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	8015B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	8315A	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3060A	7199	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3546	1625C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8082	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8270C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8270C SIM	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	5035	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	5035	8260B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	5035	8260B SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	8330	8330A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	300.0	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	314.0	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	8315A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3060A	7199	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3546	1625C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8082	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8270C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8270C SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	5035	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	5035	8260B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	5035	8260B SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	8330	8330A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	300.0	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	314.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	8315A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3546	1625C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8082	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8270C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8270C SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	5035	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	5035	8260B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	5035	8260B SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	8330	8330A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	METHOD	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	METHOD	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	METHOD	8315A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	3060A	7199	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	METHOD	300.0	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	METHOD	314.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	METHOD	9012B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3050B	6010B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3050B	6020	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3060A	7199	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3546	1625C	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8015B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8015M	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8082	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8270C	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8270C SIM	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	5035	8015M	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	5035	8260B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	5035	8260B SIM	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	8330	8330A	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	300.0	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	314.0	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	7471A	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	8015B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	8015M	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	8315A	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	9012B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3050B	6010B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3050B	6020	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3060A	7199	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3546	1625C	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8015B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8082	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8270C	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8270C SIM	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	5035	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	5035	8260B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	5035	8260B SIM	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	8330	8330A	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	300.0	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	314.0	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	7471A	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	8015B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	8315A	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	9012B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3050B	6010B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3050B	6020	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3060A	7199	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3546	1625C	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8015B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8082	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8270C	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8270C SIM	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	5035	8015M	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	5035	8260B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	5035	8260B SIM	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	8330	8330A	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	300.0	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	314.0	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	6850	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	7471A	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	8015B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	8315A	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	9012B	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3005A	6010B	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3020A	6020	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3510C	8082	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3510C	8270C	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3510C	8270C SIM	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	5030B	8260B	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	5030B	8260B SIM	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	Gen Prep	300.0	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	Gen Prep	314.0	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	Gen Prep	7199	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	METHOD	7470A	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3060A	7199	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3546	1625C	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8082	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8270C	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8270C SIM	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	5035	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	5035	8260B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	5035	8260B SIM	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	8330	8330A	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	300.0	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	314.0	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	8315A	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5DUP	P310779D270824A	DUP	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5MS	P310779R270825A	MS	METHOD	9012B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3050B	6010B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3050B	6020	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3060A	7199	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3546	1625C	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8015B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8082	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8270C	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8270C SIM	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	5035	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	5035	8260B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	5035	8260B SIM	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	8330	8330A	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	300.0	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	314.0	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	6850	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	7471A	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	8015B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	8315A	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	9012B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3050B	6010B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3050B	6020	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3060A	7199	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3546	1625C	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8015B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8082	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8270C	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8270C SIM	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	5035	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	5035	8260B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	5035	8260B SIM	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	8330	8330A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	300.0	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	314.0	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	7471A	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	8015B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	8315A	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	9012B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3050B	6010B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3050B	6020	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3060A	7199	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3546	1625C	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8015B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8015M	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8082	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8270C	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8270C SIM	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	5035	8015M	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	5035	8260B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	5035	8260B SIM	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	8330	8330A	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	300.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	314.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	7471A	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	8015B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	8015M	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	8315A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	9012B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3050B	6010B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3050B	6020	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3060A	7199	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3546	1625C	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8015B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8082	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8270C	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8270C SIM	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	5035	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	5035	8260B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	5035	8260B SIM	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	8330	8330A	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	300.0	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	314.0	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	7471A	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	8015B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	8315A	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	9012B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5DUP	P310780D271933B	DUP	METHOD	300.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5DUP	P310780D272103B	DUP	METHOD	314.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5MS	P310780R271948B	MS	METHOD	300.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5MS	P310780R272150B	MS	METHOD	314.0	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3050B	6010B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3050B	6020	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3060A	7199	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3546	1625C	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8015B	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8082	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8270C	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8270C SIM	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	5035	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	5035	8260B	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	5035	8260B SIM	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	8330	8330A	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	300.0	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	314.0	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	7471A	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	8015B	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	8315A	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	9012B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3050B	6010B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3050B	6020	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3060A	7199	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3546	1625C	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8015B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8082	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8270C	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8270C SIM	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	5035	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	5035	8260B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	5035	8260B SIM	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	8330	8330A	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	300.0	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	314.0	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	7471A	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	8015B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	8315A	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	9012B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3050B	6010B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3050B	6020	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3060A	7199	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3546	1625C	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8015B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8082	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8270C	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8270C SIM	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	5035	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	5035	8260B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	5035	8260B SIM	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	8330	8330A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	300.0	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	314.0	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	7471A	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	8015B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	8315A	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	9012B	IV

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	2.0		0.90	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	18.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.1		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	18.4		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-7.5-8.5 ***Collected:*** 6/8/2011 2:00:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA8N-SB-2.5-3.5 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.1		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	3.9		0.92	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-109-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.92	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-109-SA8N-SB-9.0-10.0 ***Collected:*** 6/8/2011 3:55:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.0		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 ***Collected:*** 6/8/2011 10:10:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.54	J	0.395	MDL	5.49	PQL	mg/Kg	J	Z
MANGANESE	230		0.0395	MDL	0.549	PQL	mg/Kg	J	E
TIN	2.82	J	0.351	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.14	J	0.505	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA5DN-SB-20.0-21.0 ***Collected:*** 6/8/2011 11:30:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	259		0.0384	MDL	0.533	PQL	mg/Kg	J	E
TIN	2.48	J	0.341	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.18	J	0.491	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 11:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	362		0.0408	MDL	0.567	PQL	mg/Kg	J	E
TIN	2.71	J	0.363	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	4.26	J	0.522	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SB-23.0-24.0 ***Collected:*** 6/8/2011 9:40:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.75	J	0.384	MDL	5.34	PQL	mg/Kg	J	Z
MANGANESE	128		0.0384	MDL	0.534	PQL	mg/Kg	J	E
TIN	2.51	J	0.342	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.32	J	0.491	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	660		0.0403	MDL	0.559	PQL	mg/Kg	J	E
TIN	2.59	J	0.358	MDL	11.2	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6010B** ***Matrix:*** **SO**

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.61	J	0.515	MDL	5.59	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	330		0.0391	MDL	0.544	PQL	mg/Kg	J	E
TIN	2.45	J	0.348	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.69	J	0.500	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	434		0.0413	MDL	0.573	PQL	mg/Kg	J	E
TIN	2.84	J	0.367	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.07	J	0.527	MDL	5.73	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	203		0.0399	MDL	0.554	PQL	mg/Kg	J	E
TIN	2.50	J	0.355	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.85	J	0.510	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	592		0.0408	MDL	0.567	PQL	mg/Kg	J	E
TIN	2.66	J	0.363	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.18	J	0.522	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.48	J	0.398	MDL	5.53	PQL	mg/Kg	J	Z
MANGANESE	280		0.0398	MDL	0.553	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.85	J	0.354	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.47	J	0.509	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-7.5-8.5 ***Collected:*** 6/8/2011 2:00:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.81	J	0.402	MDL	5.59	PQL	mg/Kg	J	Z
MANGANESE	156		0.0402	MDL	0.559	PQL	mg/Kg	J	E
TIN	3.00	J	0.358	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.24	J	0.514	MDL	5.59	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA8N-SB-2.5-3.5 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.39	J	0.404	MDL	5.61	PQL	mg/Kg	J	Z
MANGANESE	137		0.0404	MDL	0.561	PQL	mg/Kg	J	E
TIN	3.19	J	0.359	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.94	J	0.516	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.38	J	0.413	MDL	5.73	PQL	mg/Kg	J	Z
MANGANESE	276		0.0413	MDL	0.573	PQL	mg/Kg	J	E
SODIUM	85.2	J	6.82	MDL	115	PQL	mg/Kg	J	Z
TIN	3.03	J	0.367	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.42	J	0.528	MDL	5.73	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA8N-SB-9.0-10.0 ***Collected:*** 6/8/2011 3:55:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.53	J	0.412	MDL	5.72	PQL	mg/Kg	J	Z
MANGANESE	298		0.0412	MDL	0.572	PQL	mg/Kg	J	E
TIN	2.76	J	0.366	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.38	J	0.527	MDL	5.72	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** AQ

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000066	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.201	J	0.0821	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	11.5		0.0887	MDL	0.444	PQL	mg/Kg	J	E
BERYLLIUM	1.07		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.113		0.0488	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	22.3		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	8.70		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	12.6		0.0887	MDL	0.444	PQL	mg/Kg	J	Q, A
LEAD	9.71		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	20.0		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0883	J	0.0157	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.406		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	49.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0643	MDL	0.444	PQL	mg/Kg	J	Z, Q

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.45		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.323		0.0790	MDL	0.213	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-023-SA5DN-SB-20.0-21.0 ***Collected:*** 6/8/2011 11:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	9.43		0.0854	MDL	0.427	PQL	mg/Kg	J	E
BERYLLIUM	1.06		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	34.5		0.128	MDL	0.427	PQL	mg/Kg	J	Q, A
COBALT	17.3		0.0213	MDL	0.107	PQL	mg/Kg	J	Q
COPPER	21.8		0.0854	MDL	0.427	PQL	mg/Kg	J	Q, A
LEAD	11.1		0.0109	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	31.2		0.107	MDL	0.427	PQL	mg/Kg	J	Q
SILVER	0.104	J	0.0151	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.480		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	59.0		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A

Sample ID: SL-023-SA5DN-SB-20.0-21.0 ***Collected:*** 6/8/2011 11:30:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.135		0.0469	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-20.0-21.0 ***Collected:*** 6/8/2011 11:30:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.763		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 11:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.361		0.0815	MDL	0.220	PQL	mg/Kg	J	Q
ARSENIC	9.03		0.0881	MDL	0.440	PQL	mg/Kg	J	E
BERYLLIUM	1.06		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.320		0.0484	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	35.4		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
COBALT	12.6		0.0220	MDL	0.110	PQL	mg/Kg	J	Q
COPPER	20.5		0.0881	MDL	0.440	PQL	mg/Kg	J	Q, A
LEAD	12.6		0.0112	MDL	0.220	PQL	mg/Kg	J	Q, E
NICKEL	26.7		0.110	MDL	0.440	PQL	mg/Kg	J	Q
SILVER	0.0545	J	0.0156	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.400		0.0330	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	64.2		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0638	MDL	0.440	PQL	mg/Kg	J	Z, Q

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.592		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0805	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	5.77		0.0870	MDL	0.435	PQL	mg/Kg	J	E
BERYLLIUM	0.590		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.0864	J	0.0479	MDL	0.109	PQL	mg/Kg	J	Z, Q
CHROMIUM	20.8		0.131	MDL	0.435	PQL	mg/Kg	J	Q, A
COBALT	4.17		0.0218	MDL	0.109	PQL	mg/Kg	J	Q
COPPER	13.3		0.0870	MDL	0.435	PQL	mg/Kg	J	Q, A
LEAD	5.61		0.0111	MDL	0.218	PQL	mg/Kg	J	Q, E
NICKEL	13.6		0.109	MDL	0.435	PQL	mg/Kg	J	Q
SILVER	0.0450	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.288		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	38.1		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, A

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.245		0.0544	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.465		0.0828	MDL	0.224	PQL	mg/Kg	J	Q
ARSENIC	10.5		0.0895	MDL	0.448	PQL	mg/Kg	J	E
BERYLLIUM	1.57		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.324		0.0492	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	42.5		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	23.6		0.0224	MDL	0.112	PQL	mg/Kg	J	Q
COPPER	24.3		0.0895	MDL	0.448	PQL	mg/Kg	J	Q, A
LEAD	14.8		0.0114	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	45.0		0.112	MDL	0.448	PQL	mg/Kg	J	Q
SILVER	0.0468	J	0.0159	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.468		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	75.0		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0811	J	0.0649	MDL	0.448	PQL	mg/Kg	J	Z, Q

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.559		0.0559	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.405		0.0797	MDL	0.215	PQL	mg/Kg	J	Q
ARSENIC	7.50		0.0861	MDL	0.431	PQL	mg/Kg	J	E
BERYLLIUM	0.714		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.207		0.0474	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	32.2		0.129	MDL	0.431	PQL	mg/Kg	J	Q, A
COBALT	8.61		0.0215	MDL	0.108	PQL	mg/Kg	J	Q
COPPER	20.7		0.0861	MDL	0.431	PQL	mg/Kg	J	Q, A
LEAD	8.14		0.0110	MDL	0.215	PQL	mg/Kg	J	Q, E
NICKEL	21.6		0.108	MDL	0.431	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0501	J	0.0153	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.317		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	79.6		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0625	MDL	0.431	PQL	mg/Kg	J	Z, Q

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.11		0.0538	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.731		0.0865	MDL	0.234	PQL	mg/Kg	J	Q
ARSENIC	8.54		0.0936	MDL	0.468	PQL	mg/Kg	J	E
BERYLLIUM	1.06		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.414		0.0515	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	48.2		0.140	MDL	0.468	PQL	mg/Kg	J	Q, A
COBALT	14.9		0.0234	MDL	0.117	PQL	mg/Kg	J	Q
COPPER	53.1		0.0936	MDL	0.468	PQL	mg/Kg	J	Q, A
LEAD	13.4		0.0119	MDL	0.234	PQL	mg/Kg	J	Q, E
NICKEL	38.9		0.117	MDL	0.468	PQL	mg/Kg	J	Q
SILVER	0.108	J	0.0166	MDL	0.117	PQL	mg/Kg	J	Z, Q
THALLIUM	0.483		0.0351	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	65.6		0.0257	MDL	0.117	PQL	mg/Kg	J	Q, A

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.247	J	0.0678	MDL	0.468	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.30		0.0585	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.316		0.0828	MDL	0.224	PQL	mg/Kg	J	Q
ARSENIC	7.26		0.0895	MDL	0.448	PQL	mg/Kg	J	E
BERYLLIUM	0.883		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.335		0.0492	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	31.9		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	12.5		0.0224	MDL	0.112	PQL	mg/Kg	J	Q
COPPER	17.6		0.0895	MDL	0.448	PQL	mg/Kg	J	Q, A
LEAD	9.94		0.0114	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	28.8		0.112	MDL	0.448	PQL	mg/Kg	J	Q
SILVER	0.0477	J	0.0159	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.425		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	56.7		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.606		0.0560	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.442		0.0839	MDL	0.227	PQL	mg/Kg	J	Q
ARSENIC	10.6		0.0907	MDL	0.454	PQL	mg/Kg	J	E
BERYLLIUM	1.82		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.427		0.0499	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	42.9		0.136	MDL	0.454	PQL	mg/Kg	J	Q, A
COBALT	17.8		0.0227	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	22.4		0.0907	MDL	0.454	PQL	mg/Kg	J	Q, A
LEAD	15.2		0.0116	MDL	0.227	PQL	mg/Kg	J	Q, E
NICKEL	40.2		0.113	MDL	0.454	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0596	J	0.0161	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.500		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	75.3		0.0249	MDL	0.113	PQL	mg/Kg	J	Q, A

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0658	MDL	0.454	PQL	mg/Kg	J	Z, Q

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.488		0.0567	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.275		0.0835	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	9.52		0.0903	MDL	0.451	PQL	mg/Kg	J	E
BERYLLIUM	0.872		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0781	J	0.0497	MDL	0.113	PQL	mg/Kg	J	Z, Q
CHROMIUM	18.8		0.135	MDL	0.451	PQL	mg/Kg	J	Q, A
COBALT	6.63		0.0226	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	10.2		0.0903	MDL	0.451	PQL	mg/Kg	J	Q, A
LEAD	7.66		0.0115	MDL	0.226	PQL	mg/Kg	J	Q, E
NICKEL	16.0		0.113	MDL	0.451	PQL	mg/Kg	J	Q
SILVER	0.0697	J	0.0160	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.333		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	40.1		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, A

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0655	MDL	0.451	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.18		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.169	J	0.0843	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	11.6		0.0911	MDL	0.456	PQL	mg/Kg	J	E
BERYLLIUM	0.791		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.0512	J	0.0501	MDL	0.114	PQL	mg/Kg	J	Z, Q
CHROMIUM	20.0		0.137	MDL	0.456	PQL	mg/Kg	J	Q, A
COBALT	7.48		0.0228	MDL	0.114	PQL	mg/Kg	J	Q
COPPER	8.54		0.0911	MDL	0.456	PQL	mg/Kg	J	Q, A
LEAD	8.54		0.0116	MDL	0.228	PQL	mg/Kg	J	Q, E
NICKEL	15.0		0.114	MDL	0.456	PQL	mg/Kg	J	Q
SILVER	0.130		0.0162	MDL	0.114	PQL	mg/Kg	J	Q
THALLIUM	0.295		0.0342	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	42.8		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, A

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.273	J	0.0661	MDL	0.456	PQL	mg/Kg	J	Z, Q

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.18		0.0570	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.177	J	0.0855	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	5.72		0.0924	MDL	0.462	PQL	mg/Kg	J	E
BERYLLIUM	0.690		0.0185	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.0653	J	0.0508	MDL	0.115	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.6		0.139	MDL	0.462	PQL	mg/Kg	J	Q, A
COBALT	5.25		0.0231	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	10.5		0.0924	MDL	0.462	PQL	mg/Kg	J	Q, A
LEAD	7.72		0.0118	MDL	0.231	PQL	mg/Kg	J	Q, E
NICKEL	12.0		0.115	MDL	0.462	PQL	mg/Kg	J	Q
SILVER	0.0210	J	0.0164	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.288		0.0346	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	36.0		0.0254	MDL	0.115	PQL	mg/Kg	J	Q, A

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.436		0.0577	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.214	J	0.0849	MDL	0.229	PQL	mg/Kg	J	Z, Q
ARSENIC	7.38		0.0917	MDL	0.459	PQL	mg/Kg	J	E
BERYLLIUM	0.765		0.0183	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.161		0.0505	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	23.3		0.138	MDL	0.459	PQL	mg/Kg	J	Q, A
COBALT	8.83		0.0229	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	14.5		0.0917	MDL	0.459	PQL	mg/Kg	J	Q, A
LEAD	7.63		0.0117	MDL	0.229	PQL	mg/Kg	J	Q, E
NICKEL	19.3		0.115	MDL	0.459	PQL	mg/Kg	J	Q
SILVER	0.0258	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.336		0.0344	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	45.3		0.0252	MDL	0.115	PQL	mg/Kg	J	Q, A

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.409		0.0573	MDL	0.115	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.216	J	0.0823	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	9.47		0.0889	MDL	0.445	PQL	mg/Kg	J	E
BERYLLIUM	0.870		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.175		0.0489	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	26.1		0.133	MDL	0.445	PQL	mg/Kg	J	Q, A
COBALT	10.7		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	16.3		0.0889	MDL	0.445	PQL	mg/Kg	J	Q, A
LEAD	11.2		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	21.8		0.111	MDL	0.445	PQL	mg/Kg	J	Q
SILVER	0.0633	J	0.0158	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.386		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	50.8		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.476		0.0556	MDL	0.111	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix:** AQ

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: PrepDE176_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.73	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.77	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 7470A **Matrix:** AQ

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000060	J	0.000046	MDL	0.00020	PQL	mg/L	U	B

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

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0320	J	0.0077	MDL	0.110	PQL	mg/Kg	U	F

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0194	J	0.0077	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0085	J	0.0080	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0242	J	0.0075	MDL	0.107	PQL	mg/Kg	U	F

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: PrepDE176_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	19.3	J	18.7	MDL	37.5	PQL	ng/Kg	J	Z, FD

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	34.3	J	18.7	MDL	37.4	PQL	ng/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	30.4	J	18.8	MDL	37.6	PQL	ng/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	29.0	J	18.8	MDL	37.5	PQL	ng/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	18.7	U	18.7	MDL	37.4	PQL	ng/Kg	UJ	Q, FD

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	22.5	J	19.1	MDL	38.2	PQL	ng/Kg	J	Z, S

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	31.0	J	19.1	MDL	38.1	PQL	ng/Kg	J	Z

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	190	U	190	MDL	380	PQL	ng/Kg	UJ	H

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: PrepDE176_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 1625C **Matrix:** SO

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.54	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z, FD
EFH (C8-C11)	0.99	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.70	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.2	J	0.44	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.47	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.3	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.49	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.4		0.44	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.2	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.1	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	1.1	J	0.45	MDL	1.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.57	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.99	J	0.47	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.50	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.55	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.1	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	11	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.6	U	5.6	MDL	11	PQL	mg/Kg	UJ	Q
Propylene glycol	5.6	U	5.6	MDL	11	PQL	mg/Kg	UJ	Q

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.45	U	0.45	MDL	1.4	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	2.1		0.45	MDL	1.4	PQL	mg/Kg	J	Q
EFH (C30-C40)	4.8		0.45	MDL	1.4	PQL	mg/Kg	J	Q, Q
EFH (C8-C11)	1.2	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.49	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: PrepDE176_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	1.2	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	1.2	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.95	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

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

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-025-SA5DN-SB-23.0-24.0 ***Collected:*** 6/8/2011 9:40:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	120		1.8	MDL	9.4	PQL	ug/Kg	J	*#
AROCLOR 1254	77		1.8	MDL	9.4	PQL	ug/Kg	J	*#
Aroclor 5432	5.6	U	5.6	MDL	18	PQL	ug/Kg	UJ	C

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.58	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z, *XIII
AROCLOR 1260	0.54	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	3.4		0.44	MDL	1.9	PQL	ug/Kg	J	* XIII
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-DINITROTOLUENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
2-NITROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	49	J	19	MDL	380	PQL	ug/Kg	UJ	B, FD

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	19	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2,4,5-TRICHLOROPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DICHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DIMETHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DINITROTOLUENE	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
2-CHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
4-CHLORO-3-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
4-CHLOROPHENYL-PHENYLETHER	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
4-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	R	Q
BENZYL ALCOHOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	Q
BIS(2-CHLOROETHOXY)METHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	370	PQL	ug/Kg	UJ	B, FD
HEXACHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
N-NITROSODIPHENYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q

Sample ID: SL-076-SA8N-SB-7.5-8.5 ***Collected:*** 6/8/2011 2:00:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-106-SA8N-SB-2.5-3.5 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-109-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	380	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.069	J	0.052	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.30	J	0.052	MDL	1.0	PQL	ug/L	J	Z, L
Di-n-butylphthalate	0.71	J	0.052	MDL	1.0	PQL	ug/L	J	Z, L
NAPHTHALENE	0.060		0.031	MDL	0.052	PQL	ug/L	J	L

Method Category: SVOA

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

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	10	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.79	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.79	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.80	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	12	J	6.6	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.94	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8330A **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	44	U	44	MDL	130	PQL	ug/Kg	UJ	Q

Method Category: VOA **Method:** 8015B **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.0		6.5	MDL	7.8	PQL	ug/Kg	UJ	B, FD
METHYLENE CHLORIDE	1.6	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.30	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.3		6.5	MDL	7.8	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.5	J	0.24	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.3		6.6	MDL	7.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.12	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.5		7.2	MDL	8.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.8	J	0.26	MDL	4.3	PQL	ug/Kg	UJ	L, B
TOLUENE	0.19	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.4		6.6	MDL	7.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.5	J	0.24	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.16	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.5		7.6	MDL	9.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.7	J	0.27	MDL	4.5	PQL	ug/Kg	UJ	L, B
TOLUENE	0.14	J	0.09	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.14	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.8		6.6	MDL	7.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.14	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.1		7.3	MDL	8.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.4	J	0.26	MDL	4.4	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.09	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6.3	U	6.3	MDL	7.5	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	1.3	J	0.22	MDL	3.7	PQL	ug/Kg	UJ	L, B
TOLUENE	0.28	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	11		6.8	MDL	8.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.20	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.2		6.4	MDL	7.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.23	MDL	3.8	PQL	ug/Kg	UJ	L, B
TOLUENE	0.19	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.5	J	1.2	MDL	8.1	PQL	ug/Kg	J	Z
ACETONE	27		6.8	MDL	8.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.0	J	0.24	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.12	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.5	J	1.2	MDL	8.1	PQL	ug/Kg	J	Z
ACETONE	32		6.8	MDL	8.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.7	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.16	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE176

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE176 **Laboratory: LL**
EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: 3546**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB16-SA8N-SB-060811 (RES)	Sampling To Analysis	24.50	24.00	HOURS	J(all detects) UJ(all non-detects)

Method: 1625C **Preparation Method: 3546**
Matrix: SO

Sample ID	Type	Actual	Criteria	Units	Flag
SL-109-SA8N-SB-9.0-10.0 (RES)	Sampling To Extraction	21.00	14.00	DAYS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: DE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16048CB221243	6/10/2011 12:43:00 PM	MAGNESIUM	0.0195 mg/L	EB16-SA8N-SB-060811

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16708BB220702	6/18/2011 7:02:00 AM	CALCIUM	4.40 mg/Kg	DUP10-SA8N-QC-060811
		IRON	4.74 mg/Kg	SL-023-SA5DN-SB-20.0-21.0
		MAGNESIUM	1.04 mg/Kg	SL-023-SA5DN-SB-4.0-5.0
		PHOSPHORUS	1.62 mg/Kg	SL-025-SA5DN-SB-23.0-24.0
		TIN	1.79 mg/Kg	SL-025-SA5DN-SB-4.0-5.0
				SL-028-SA5DN-SB-11.5-12.5
				SL-028-SA5DN-SB-4.0-5.0
				SL-051-SA5DN-SB-14.0-15.0
				SL-051-SA5DN-SB-4.0-5.0
				SL-076-SA8N-SB-4.0-5.0
				SL-076-SA8N-SB-7.5-8.5
				SL-106-SA8N-SB-2.5-3.5
				SL-109-SA8N-SB-4.0-5.0
				SL-109-SA8N-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA8N-QC-060811(REA2)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-023-SA5DN-SB-20.0-21.0(REA2)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-023-SA5DN-SB-4.0-5.0(REA2)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-025-SA5DN-SB-23.0-24.0(REA2)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-025-SA5DN-SB-4.0-5.0(REA2)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-028-SA5DN-SB-11.5-12.5(REA2)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-028-SA5DN-SB-4.0-5.0(REA2)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-051-SA5DN-SB-14.0-15.0(REA2)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-051-SA5DN-SB-4.0-5.0(REA2)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-076-SA8N-SB-4.0-5.0(REA2)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-076-SA8N-SB-7.5-8.5(REA2)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-106-SA8N-SB-2.5-3.5(REA2)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-109-SA8N-SB-4.0-5.0(REA2)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-109-SA8N-SB-9.0-10.0(REA2)	TIN	2.76 mg/Kg	2.76U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16726AB220905A	6/17/2011 9:05:00 AM	LEAD	0.0152 mg/Kg	DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0

Method: **7470A**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16013BB221002	6/11/2011 10:02:00 AM	MERCURY	0.00012 mg/L	EB16-SA8N-SB-060811

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB16-SA8N-SB-060811(RES)	MERCURY	0.000060 mg/L	0.000060U mg/L

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P67671AB320809A	6/18/2011 8:09:00 AM	EFH (C8-C11)	1.1 mg/Kg	DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA8N-QC-060811(REA2)	EFH (C8-C11)	0.99 mg/Kg	1.4U mg/Kg
SL-023-SA5DN-SB-20.0-21.0(REA2)	EFH (C8-C11)	1.2 mg/Kg	1.3U mg/Kg
SL-023-SA5DN-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.3 mg/Kg	1.4U mg/Kg
SL-025-SA5DN-SB-23.0-24.0(REA2)	EFH (C8-C11)	1.4 mg/Kg	1.4U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-025-SA5DN-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-028-SA5DN-SB-11.5-12.5(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.3U mg/Kg
SL-028-SA5DN-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.99 mg/Kg	1.4U mg/Kg
SL-051-SA5DN-SB-14.0-15.0(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-051-SA5DN-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-076-SA8N-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-076-SA8N-SB-7.5-8.5(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-106-SA8N-SB-2.5-3.5(REA2)	EFH (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-109-SA8N-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-109-SA8N-SB-9.0-10.0(REA2)	EFH (C8-C11)	0.95 mg/Kg	1.4U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB83B211315A	6/14/2011 1:15:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	8.3 ug/Kg 1.7 ug/Kg 0.14 ug/Kg	DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA8N-QC-060811(RES)	ACETONE	8.0 ug/Kg	8.0U ug/Kg
DUP10-SA8N-QC-060811(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	3.9U ug/Kg
DUP10-SA8N-QC-060811(RES)	TOLUENE	0.30 ug/Kg	3.9U ug/Kg
SL-023-SA5DN-SB-20.0-21.0(RES)	ACETONE	8.3 ug/Kg	8.3U ug/Kg
SL-023-SA5DN-SB-20.0-21.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.9U ug/Kg
SL-023-SA5DN-SB-20.0-21.0(RES)	TOLUENE	0.15 ug/Kg	3.9U ug/Kg
SL-023-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.3 ug/Kg	9.3U ug/Kg
SL-023-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg
SL-023-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.12 ug/Kg	4.0U ug/Kg
SL-025-SA5DN-SB-23.0-24.0(RES)	ACETONE	9.5 ug/Kg	9.5U ug/Kg
SL-025-SA5DN-SB-23.0-24.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.3U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 | Laboratory: LL

EDD Filename: DE176_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-025-SA5DN-SB-23.0-24.0(RES)	TOLUENE	0.19 ug/Kg	4.3U ug/Kg
SL-025-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.4 ug/Kg	8.4U ug/Kg
SL-025-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.9U ug/Kg
SL-025-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.16 ug/Kg	3.9U ug/Kg
SL-028-SA5DN-SB-11.5-12.5(RES)	ACETONE	9.5 ug/Kg	9.5U ug/Kg
SL-028-SA5DN-SB-11.5-12.5(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.5U ug/Kg
SL-028-SA5DN-SB-11.5-12.5(RES)	TOLUENE	0.14 ug/Kg	4.5U ug/Kg
SL-028-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.0U ug/Kg
SL-028-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.14 ug/Kg	4.0U ug/Kg
SL-051-SA5DN-SB-14.0-15.0(RES)	ACETONE	8.8 ug/Kg	8.8U ug/Kg
SL-051-SA5DN-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.0U ug/Kg
SL-051-SA5DN-SB-14.0-15.0(RES)	TOLUENE	0.14 ug/Kg	4.0U ug/Kg
SL-051-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.1 ug/Kg	9.1U ug/Kg
SL-051-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.4U ug/Kg
SL-051-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.15 ug/Kg	4.4U ug/Kg
SL-076-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.7U ug/Kg
SL-076-SA8N-SB-4.0-5.0(RES)	TOLUENE	0.28 ug/Kg	3.7U ug/Kg
SL-076-SA8N-SB-7.5-8.5(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-076-SA8N-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.1U ug/Kg
SL-076-SA8N-SB-7.5-8.5(RES)	TOLUENE	0.20 ug/Kg	4.1U ug/Kg
SL-106-SA8N-SB-2.5-3.5(RES)	ACETONE	8.2 ug/Kg	8.2U ug/Kg
SL-106-SA8N-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	3.8U ug/Kg
SL-106-SA8N-SB-2.5-3.5(RES)	TOLUENE	0.19 ug/Kg	3.8U ug/Kg
SL-109-SA8N-SB-4.0-5.0(RES)	ACETONE	27 ug/Kg	27U ug/Kg
SL-109-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.1U ug/Kg
SL-109-SA8N-SB-4.0-5.0(RES)	TOLUENE	0.12 ug/Kg	4.1U ug/Kg
SL-109-SA8N-SB-9.0-10.0(RES)	ACETONE	32 ug/Kg	32U ug/Kg
SL-109-SA8N-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.0U ug/Kg
SL-109-SA8N-SB-9.0-10.0(RES)	TOLUENE	0.16 ug/Kg	4.0U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB16B261536	6/23/2011 3:36:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA8N-QC-060811(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	49 ug/Kg	380U ug/Kg
SL-023-SA5DN-SB-20.0-21.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	370U ug/Kg
SL-023-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	380U ug/Kg
SL-028-SA5DN-SB-11.5-12.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	370U ug/Kg
SL-051-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	370U ug/Kg
SL-076-SA8N-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	370U ug/Kg
SL-076-SA8N-SB-7.5-8.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	380U ug/Kg
SL-109-SA8N-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	380U ug/Kg
SL-109-SA8N-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	380U ug/Kg

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWK16B262329	6/16/2011 11:29:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-octylphthalate	0.061 ug/L 0.065 ug/L	EB16-SA8N-SB-060811

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB16-SA8N-SB-060811(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.069 ug/L	1.0U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS	DIETHYLENE GLYCOL	54	44	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)
SL-076-SA8N-SB-4.0-5.0MSD	ETHYLENE GLYCOL	-	56	63.00-107.00	22 (20.00)	ETHYLENE GLYCOL	
(SL-076-SA8N-SB-4.0-5.0)	Propylene glycol	-	59	63.00-107.00	23 (20.00)	Propylene glycol	

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MSD	1,3,5-TRINITROBENZENE	-	76	82.00-126.00	-	1,3,5-TRINITROBENZENE	J(all detects) UJ(all non-detects)
(SL-076-SA8N-SB-4.0-5.0)							

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS	m-Terphenyl	74	-	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)
(SL-076-SA8N-SB-4.0-5.0)							

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS	EFH (C15-C20)	125	150	49.00-123.00	-	EFH (C15-C20)	J(all detects)
SL-076-SA8N-SB-4.0-5.0MSD	EFH (C21-C30)	-	158	49.00-123.00	-	EFH (C21-C30)	
(SL-076-SA8N-SB-4.0-5.0)	EFH (C30-C40)	-	240	49.00-123.00	51 (20.00)	EFH (C30-C40)	

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS	N-NITROSODIMETHYLAMINE	69	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)
(SL-076-SA8N-SB-4.0-5.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MSD (SL-076-SA8N-SB-4.0-5.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	31 (30.00)	2,4-DINITROPHENOL	J(all detects)
SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD (SL-076-SA8N-SB-4.0-5.0)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)
SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD (SL-076-SA8N-SB-4.0-5.0)	1,4-DICHLOROBENZENE	68	68	70.00-100.00	-	1,4-DICHLOROBENZENE	J(all detects) UJ(all non-detects)
	2,4,5-TRICHLOROPHENOL	76	76	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	74	72	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	77	77	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	71	-	73.00-113.00	-	2,4-DINITROTOLUENE	
	2-CHLOROPHENOL	71	71	73.00-121.00	-	2-CHLOROPHENOL	
	2-METHYLNAPHTHALENE	68	68	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	68	68	75.00-111.00	-	2-METHYLPHENOL	
	4-CHLORO-3-METHYLPHENOL	72	71	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	75	76	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	65	63	71.00-111.00	-	4-METHYLPHENOL	
	ACENAPHTHYLENE	79	80	81.00-110.00	-	ACENAPHTHYLENE	
	BENZYL ALCOHOL	-	66	67.00-115.00	-	BENZYL ALCOHOL	
	BIS(2-CHLOROETHOXY)METHA	-	74	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	FLUORENE	76	-	77.00-111.00	-	FLUORENE	
	HEXACHLOROBENZENE	-	76	77.00-114.00	-	HEXACHLOROBENZENE	
	N-NITROSODIPHENYLAMINE	80	79	86.00-145.00	-	N-NITROSODIPHENYLAMINE	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	ARSENIC	243	198	75.00-125.00	-	ARSENIC	J(all detects) As, Zn, No Qual, >4x
	BERYLLIUM	126	144	75.00-125.00	-	BERYLLIUM	
	CADMIUM	151	141	75.00-125.00	-	CADMIUM	
	CHROMIUM	160	145	75.00-125.00	-	CHROMIUM	
	COBALT	147	138	75.00-125.00	-	COBALT	
	COPPER	160	153	75.00-125.00	-	COPPER	
	LEAD	205	179	75.00-125.00	-	LEAD	
	NICKEL	183	173	75.00-125.00	-	NICKEL	
	SILVER	150	137	75.00-125.00	-	SILVER	
	THALLIUM	162	155	75.00-125.00	-	THALLIUM	
	VANADIUM	204	189	75.00-125.00	-	VANADIUM	
	ZINC	260	240	75.00-125.00	-	ZINC	
SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	ANTIMONY	64	62	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-076-SA8N-SB-4.0-5.0MS (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	SELENIUM	136	-	75.00-125.00	-	SELENIUM	J(all detects)
SL-076-SA8N-SB-4.0-5.0MS **SL-076-SA8N-SB-4.0-5.0MSD** (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	MOLYBDENUM	153	141	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-076-SA8N-SB-4.0-5.0MS **SL-076-SA8N-SB-4.0-5.0MSD** (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	BARIUM	433	423	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS **SL-076-SA8N-SB-4.0-5.0MSD** (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	2284 142 1221 257 207	2490 165 1275 256 303	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	No Qual, >4x
SL-076-SA8N-SB-4.0-5.0MS **SL-076-SA8N-SB-4.0-5.0MSD** (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	MANGANESE	32	12	75.00-125.00	-	MANGANESE	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS (SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5)	FLUORIDE	29	-	80.00-120.00	-	FLUORIDE	J(all detects) R(all non-detects)
SL-106-SA8N-SB-2.5-3.5MS (DUP10-SA8N-QC-060811 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	FLUORIDE Nitrate-NO3	47 74	- -	80.00-120.00 80.00-120.00	- -	FLUORIDE Nitrate-NO3	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-076-SA8N-SB-4.0-5.0DUP	MANGANESE	92	20.00	
(DUP10-SA8N-QC-060811	Zirconium	49	20.00	
SL-023-SA5DN-SB-20.0-21.0				
SL-023-SA5DN-SB-4.0-5.0				
SL-025-SA5DN-SB-23.0-24.0				J (all detects)
SL-025-SA5DN-SB-4.0-5.0				UJ (all non-detects)
SL-028-SA5DN-SB-11.5-12.5				
SL-028-SA5DN-SB-4.0-5.0				
SL-051-SA5DN-SB-14.0-15.0				
SL-051-SA5DN-SB-4.0-5.0				
SL-076-SA8N-SB-4.0-5.0				Zr, No Qual,
SL-076-SA8N-SB-7.5-8.5				OK by Difference
SL-106-SA8N-SB-2.5-3.5				
SL-109-SA8N-SB-4.0-5.0				
SL-109-SA8N-SB-9.0-10.0)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-076-SA8N-SB-4.0-5.0DUP	ANTIMONY	69	20.00	
(DUP10-SA8N-QC-060811	ARSENIC	23	20.00	
SL-023-SA5DN-SB-20.0-21.0	LEAD	21	20.00	
SL-023-SA5DN-SB-4.0-5.0				
SL-025-SA5DN-SB-23.0-24.0				
SL-025-SA5DN-SB-4.0-5.0				J(all detects)
SL-028-SA5DN-SB-11.5-12.5				UJ(all non-detects)
SL-028-SA5DN-SB-4.0-5.0				
SL-051-SA5DN-SB-14.0-15.0				
SL-051-SA5DN-SB-4.0-5.0				Sb, No Qual,
SL-076-SA8N-SB-4.0-5.0				OK by Difference
SL-076-SA8N-SB-7.5-8.5				
SL-106-SA8N-SB-2.5-3.5				
SL-109-SA8N-SB-4.0-5.0				
SL-109-SA8N-SB-9.0-10.0)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-076-SA8N-SB-4.0-5.0DUP (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	MERCURY	200	20.00	No Qual OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: DE176_v1 eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11655AQ241808A P11655AY241750A (EB16-SA8N-SB-060811)	Aroclor 5442	86	88	35.00-84.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WKLCSQ260002 P0WKLCSY260034 (EB16-SA8N-SB-060811)	1-METHYLNAPHTHALENE	134	119	71.00-117.00	-	1-METHYLNAPHTHALENE	J(all detects)
	2-METHYLNAPHTHALENE	118	-	75.00-115.00	-	2-METHYLNAPHTHALENE	
	ACENAPHTHENE	129	132	74.00-109.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	132	124	70.00-110.00	-	ACENAPHTHYLENE	
	ANTHRACENE	140	130	66.00-111.00	-	ANTHRACENE	
	BENZO(A)ANTHRACENE	129	129	72.00-114.00	-	BENZO(A)ANTHRACENE	
	BENZO(A)PYRENE	130	148	60.00-127.00	-	BENZO(A)PYRENE	
	BENZO(B)FLUORANTHENE	127	125	69.00-123.00	-	BENZO(B)FLUORANTHENE	
	BENZO(G,H,I)PERYLENE	-	136	57.00-131.00	-	BENZO(G,H,I)PERYLENE	
	BENZO(K)FLUORANTHENE	135	138	59.00-130.00	-	BENZO(K)FLUORANTHENE	
	CHRYSENE	131	129	76.00-116.00	-	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	149	172	55.00-134.00	-	DIBENZO(A,H)ANTHRACENE	
	Diethylphthalate	137	-	57.00-134.00	-	Diethylphthalate	
	Di-n-butylphthalate	133	149	74.00-131.00	-	Di-n-butylphthalate	
	FLUORANTHENE	138	158	75.00-116.00	-	FLUORANTHENE	
	FLUORENE	157	128	75.00-114.00	-	FLUORENE	
	INDENO(1,2,3-CD)PYRENE	145	162	69.00-124.00	-	INDENO(1,2,3-CD)PYRENE	
	NAPHTHALENE	128	126	72.00-109.00	-	NAPHTHALENE	
	PHENANTHRENE	130	127	76.00-111.00	-	PHENANTHRENE	
	PYRENE	146	130	69.00-118.00	-	PYRENE	

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WLLCSQ261332 P0WLLCSY261358 (EB16-SA8N-SB-060811)	3,3'-DICHLOROBENZIDINE	127	121	49.00-111.00	-	3,3'-DICHLOROBENZIDINE	J(all detects)
	4-CHLOROANILINE	146	-	42.00-124.00	-	4-CHLOROANILINE	
	ANILINE	112	104	49.00-101.00	-	ANILINE	
	BENZIDINE	137	116	20.00-109.00	-	BENZIDINE	
P0WLLCSY261358 (EB16-SA8N-SB-060811)	2,6-DINITROTOLUENE	-	80	85.00-115.00	-	2,6-DINITROTOLUENE	J(all detects) UJ(all non-detects)
	2-NITROANILINE	-	81	83.00-116.00	-	2-NITROANILINE	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11627AQ242055A P11627AY242037A (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	Aroclor 5442	144	120	36.00-106.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11648AQ242114A (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	PETN	123	-	80.00-120.00	-	PETN	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2LBLCSQ261602	3,3'-DICHLOROBENZIDINE	126	-	24.00-101.00	-	3,3'-DICHLOROBENZIDINE	
(DUP10-SA8N-QC-060811	4-CHLOROANILINE	114	-	10.00-110.00	-	4-CHLOROANILINE	
SL-023-SA5DN-SB-20.0-21.0	INDENO(1,2,3-CD)PYRENE	123	-	64.00-119.00	-	INDENO(1,2,3-CD)PYRENE	
SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)							J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2LBLCSQ261602	1,2-DICHLOROBENZENE	77	-	79.00-102.00	-	1,2-DICHLOROBENZENE	J(all detects) UJ(all non-detects)
(DUP10 -SA8N -QC-060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	2-NITROPHENOL	80	-	81.00-114.00	-	2-NITROPHENOL	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16726AQ220908A (DUP10 -SA8N -QC-060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	ANTIMONY	143	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB83Q211403A	1,2-DIBROMO-3-CHLOROPROP	129	-	58.00-120.00	-	1,2-DIBROMO-3-CHLOROPRO	J(all detects)
(DUP10 -SA8N -QC-060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	METHYLENE CHLORIDE	125	-	76.00-124.00	-	METHYLENE CHLORIDE	

Surrogate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-028-SA5DN-SB-11.5-12.5	N-Nitrosodimethylamine-d6	1044	50.00-150.00	All Target Analytes	No Qual, Diluted Out
SL-028-SA5DN-SB-4.0-5.0	N-Nitrosodimethylamine-d6	1071	50.00-150.00	All Target Analytes	No Qual, Diluted Out
SL-076-SA8N-SB-7.5-8.5	N-Nitrosodimethylamine-d6	151	50.00-150.00	All Target Analytes	J(all detects)

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-028-SA5DN-SB-4.0-5.0	n-Triacontane-d62	151	50.00-150.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB16-SA8N-SB-060811	Nitrobenzene-d5	138	40.00-130.00	No Affected Compounds	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
MOISTURE	11.4	11.6	2		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
N-NITROSODIMETHYLAMINE	37.4 U	19.3	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
FLUORIDE	2.5	2.6	4	50.00	No Qualifiers Applied
Nitrate-NO3	1.5	2.0	29	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
ALUMINUM	24500	24700	1	50.00	No Qualifiers Applied
BORON	4.48	4.54	1	50.00	
CALCIUM	2430	2430	0	50.00	
IRON	23200	23100	0	50.00	
LITHIUM	31.3	31.4	0	50.00	
MAGNESIUM	4360	4370	0	50.00	
MANGANESE	280	230	20	50.00	
PHOSPHORUS	238	240	1	50.00	
POTASSIUM	2160	2150	0	50.00	
SODIUM	122	134	9	50.00	
STRONTIUM	16.8	16.9	1	50.00	
TIN	2.85	2.82	1	50.00	
TITANIUM	1210	1190	2	50.00	
Zirconium	3.47	3.14	10	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.275	0.201	31	50.00	No Qualifiers Applied
ARSENIC	9.52	11.5	19	50.00	
BARIUM	119	165	32	50.00	
BERYLLIUM	0.872	1.07	20	50.00	
CADMIUM	0.0781	0.113	37	50.00	
CHROMIUM	18.8	22.3	17	50.00	
COBALT	6.63	8.70	27	50.00	
COPPER	10.2	12.6	21	50.00	
LEAD	7.66	9.71	24	50.00	
MOLYBDENUM	1.18	1.45	21	50.00	
NICKEL	16.0	20.0	22	50.00	
SELENIUM	0.127	0.128	1	50.00	
SILVER	0.0697	0.0883	24	50.00	
THALLIUM	0.333	0.406	20	50.00	
VANADIUM	40.1	49.0	20	50.00	
ZINC	62.6	85.1	30	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.51	0.48	6	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0242	0.0320	28	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
EFH (C21-C30)	2.1	2.5	17	50.00	No Qualifiers Applied
EFH (C30-C40)	4.8	5.4	12	50.00	
EFH (C8-C11)	1.2	0.99	19	50.00	
EFH (C15-C20)	1.4 U	0.54	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (ug/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	3.4	2.4	34	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
METHYLENE CHLORIDE	1.3	1.6	21	50.00	No Qualifiers Applied
TOLUENE	0.28	0.30	7	50.00	
ACETONE	7.5 U	8.0	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
NAPHTHALENE	0.94	1.2	24	50.00	No Qualifiers Applied

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
BIS(2-ETHYLHEXYL)PHTHALATE	22	49	76	50.00	J(all detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
PH	6.90	6.87	0	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA8N-SB-060811	LEAD	J	0.000066	0.0010	PQL	mg/L	J (all detects)

Method: 7470A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA8N-SB-060811	MERCURY	J	0.000060	0.00020	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA8N-SB-060811	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.069	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.30	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.71	1.0	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	N-NITROSODIMETHYLAMINE	J	19.3	37.5	PQL	ng/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	34.3	37.4	PQL	ng/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	N-NITROSODIMETHYLAMINE	J	30.4	37.6	PQL	ng/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	29.0	37.5	PQL	ng/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	N-NITROSODIMETHYLAMINE	J	22.5	38.2	PQL	ng/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	N-NITROSODIMETHYLAMINE	J	31.0	38.1	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-023-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	BORON	J	4.54	5.49	PQL	mg/Kg	J (all detects)
	TIN	J	2.82	11.0	PQL	mg/Kg	
	Zirconium	J	3.14	5.49	PQL	mg/Kg	
SL-023-SA5DN-SB-20.0-21.0	TIN	J	2.48	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.18	5.33	PQL	mg/Kg	
SL-023-SA5DN-SB-4.0-5.0	TIN	J	2.71	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.26	5.67	PQL	mg/Kg	
SL-025-SA5DN-SB-23.0-24.0	BORON	J	3.75	5.34	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	10.7	PQL	mg/Kg	
	Zirconium	J	2.32	5.34	PQL	mg/Kg	
SL-025-SA5DN-SB-4.0-5.0	TIN	J	2.59	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.61	5.59	PQL	mg/Kg	
SL-028-SA5DN-SB-11.5-12.5	TIN	J	2.45	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.69	5.44	PQL	mg/Kg	
SL-028-SA5DN-SB-4.0-5.0	TIN	J	2.84	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.07	5.73	PQL	mg/Kg	
SL-051-SA5DN-SB-14.0-15.0	TIN	J	2.50	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.85	5.54	PQL	mg/Kg	
SL-051-SA5DN-SB-4.0-5.0	TIN	J	2.66	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.18	5.67	PQL	mg/Kg	
SL-076-SA8N-SB-4.0-5.0	BORON	J	4.48	5.53	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	11.1	PQL	mg/Kg	
	Zirconium	J	3.47	5.53	PQL	mg/Kg	
SL-076-SA8N-SB-7.5-8.5	BORON	J	3.81	5.59	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	11.2	PQL	mg/Kg	
	Zirconium	J	3.24	5.59	PQL	mg/Kg	
SL-106-SA8N-SB-2.5-3.5	BORON	J	4.39	5.61	PQL	mg/Kg	J (all detects)
	TIN	J	3.19	11.2	PQL	mg/Kg	
	Zirconium	J	2.94	5.61	PQL	mg/Kg	
SL-109-SA8N-SB-4.0-5.0	BORON	J	5.38	5.73	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.2	115	PQL	mg/Kg	
	TIN	J	3.03	11.5	PQL	mg/Kg	
	Zirconium	J	3.42	5.73	PQL	mg/Kg	
SL-109-SA8N-SB-9.0-10.0	BORON	J	5.53	5.72	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	11.4	PQL	mg/Kg	
	Zirconium	J	3.38	5.72	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	ANTIMONY	J	0.201	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.128	0.444	PQL	mg/Kg	
	SILVER	J	0.0883	0.111	PQL	mg/Kg	
SL-023-SA5DN-SB-20.0-21.0	SILVER	J	0.104	0.107	PQL	mg/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	SELENIUM	J	0.119	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0545	0.110	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5DN-SB-23.0-24.0	ANTIMONY CADMIUM SILVER	J J J	0.140 0.0864 0.0450	0.218 0.109 0.109	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-025-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0811 0.0468	0.448 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	SELENIUM SILVER	J J	0.130 0.0501	0.431 0.108	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.247 0.108	0.468 0.117	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	SILVER	J	0.0477	0.112	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.119 0.0596	0.454 0.113	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	CADMIUM SELENIUM SILVER	J J J	0.0781 0.127 0.0697	0.113 0.451 0.113	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	ANTIMONY CADMIUM SELENIUM	J J J	0.169 0.0512 0.273	0.228 0.114 0.456	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	ANTIMONY CADMIUM SILVER	J J J	0.177 0.0653 0.0210	0.231 0.115 0.115	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	ANTIMONY SILVER	J J	0.214 0.0258	0.229 0.115	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	ANTIMONY SILVER	J J	0.216 0.0633	0.222 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-025-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	HEXAVALENT CHROMIUM	J	0.63	1.1	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.73	1.2	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.77	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	MERCURY	J	0.0320	0.110	PQL	mg/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	MERCURY	J	0.0194	0.110	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	MERCURY	J	0.0085	0.114	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	MERCURY	J	0.0242	0.107	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	EFH (C15-C20) EFH (C8-C11)	J J	0.54 0.99	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-023-SA5DN-SB-20.0-21.0	EFH (C30-C40) EFH (C8-C11)	J J	0.70 1.2	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	EFH (C21-C30) EFH (C8-C11)	J J	0.47 1.3	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-025-SA5DN-SB-23.0-24.0	EFH (C30-C40)	J	0.49	1.3	PQL	mg/Kg	J (all detects)
SL-025-SA5DN-SB-4.0-5.0	EFH (C30-C40) EFH (C8-C11)	J J	1.2 1.1	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	EFH (C8-C11)	J	1.1	1.3	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	EFH (C15-C20) EFH (C8-C11)	J J	0.57 0.99	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	EFH (C15-C20) EFH (C8-C11)	J J	0.50 1.1	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	EFH (C15-C20) EFH (C8-C11)	J J	0.55 1.1	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	EFH (C8-C11)	J	1.2	1.4	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	EFH (C15-C20) EFH (C8-C11)	J J	0.49 1.1	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	EFH (C8-C11)	J	1.2	1.4	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	EFH (C8-C11)	J	1.2	1.4	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	EFH (C8-C11)	J	0.95	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-028-SA5DN-SB-4.0-5.0	AROCLOR 1254 AROCLOR 1260	J J	0.58 0.54	2.0 2.0	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.30	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-023-SA5DN-SB-20.0-21.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.15	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.3 0.12	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-025-SA5DN-SB-23.0-24.0	METHYLENE CHLORIDE TOLUENE	J J	1.8 0.19	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-025-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.16	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	METHYLENE CHLORIDE TOLUENE	J J	1.7 0.14	4.5 4.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.14	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.14	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.4 0.15	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.3 0.28	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	METHYLENE CHLORIDE TOLUENE	J J	1.4 0.20	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.19	3.8 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	2-BUTANONE (MEK) METHYLENE CHLORIDE TOLUENE	J J J	2.5 1.0 0.12	8.1 4.1 4.1	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	2-BUTANONE (MEK) METHYLENE CHLORIDE TOLUENE	J J J	2.5 1.7 0.16	8.1 4.0 4.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	BIS(2-ETHYLHEXYL)PHTHALATE	J	49	380	PQL	ug/Kg	J (all detects)
SL-023-SA5DN-SB-20.0-21.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	370	PQL	ug/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	370	PQL	ug/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	370	PQL	ug/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	370	PQL	ug/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	380	PQL	ug/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
DUP10-SA8N-QC-060811	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	Butylbenzylphthalate	J	10	20	PQL	ug/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	BENZO(A)ANTHRACENE	J	0.79	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.79	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.80	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	12	20	PQL	ug/Kg	
	PYRENE	J	1.4	1.8	PQL	ug/Kg	
SL-076-SA8N-SB-4.0-5.0	NAPHTHALENE	J	0.94	1.9	PQL	ug/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	21	PQL	ug/Kg	J (all detects)

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 8, 2011
LDC Report Date:	October 11, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
TB-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB83	6/14/11	Acetone Methylene chloride Toluene	8.3 ug/Kg 1.7 ug/Kg 0.14 ug/Kg	All soil samples in SDG DE176

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-023-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	9.3 ug/Kg 1.3 ug/Kg 0.12 ug/Kg	9.3U ug/Kg 4.0U ug/Kg 4.0U ug/Kg
SL-023-SA5DN-SB-20.0-21.0	Acetone Methylene chloride Toluene	8.3 ug/Kg 1.5 ug/Kg 0.15 ug/Kg	8.3U ug/Kg 3.9U ug/Kg 3.9U ug/Kg
SL-025-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	8.4 ug/Kg 1.5 ug/Kg 0.16 ug/Kg	8.4U ug/Kg 3.9U ug/Kg 3.9U ug/Kg
SL-025-SA5DN-SB-23.0-24.0	Acetone Methylene chloride Toluene	9.5 ug/Kg 1.8 ug/Kg 0.19 ug/Kg	9.5U ug/Kg 4.3U ug/Kg 4.3U ug/Kg
SL-028-SA5DN-SB-4.0-5.0	Methylene chloride Toluene	1.5 ug/Kg 0.14 ug/Kg	4.0U ug/Kg 4.0U ug/Kg
SL-028-SA5DN-SB-11.5-12.5	Acetone Methylene chloride Toluene	9.5 ug/Kg 1.7 ug/Kg 0.14 ug/Kg	9.5U ug/Kg 4.5U ug/Kg 4.5U ug/Kg
SL-051-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	9.1 ug/Kg 1.4 ug/Kg 0.15 ug/Kg	9.1U ug/Kg 4.4U ug/Kg 4.4U ug/Kg
SL-051-SA5DN-SB-14.0-15.0	Acetone Methylene chloride Toluene	8.8 ug/Kg 1.6 ug/Kg 0.14 ug/Kg	8.8U ug/Kg 4.0U ug/Kg 4.0U ug/Kg
SL-076-SA8N-SB-4.0-5.0	Methylene chloride Toluene	1.3 ug/Kg 0.28 ug/Kg	3.7U ug/Kg 3.7U ug/Kg
SL-076-SA8N-SB-7.5-8.5	Acetone Methylene chloride Toluene	11 ug/Kg 1.4 ug/Kg 0.20 ug/Kg	11U ug/Kg 4.1U ug/Kg 4.1U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-106-SA8N-SB-2.5-3.5	Acetone Methylene chloride Toluene	8.2 ug/Kg 1.6 ug/Kg 0.19 ug/Kg	8.2U ug/Kg 3.8U ug/Kg 3.8U ug/Kg
SL-109-SA8N-SB-4.0-5.0	Acetone Methylene chloride Toluene	27 ug/Kg 1.0 ug/Kg 0.12 ug/Kg	27U ug/Kg 4.1U ug/Kg 4.1U ug/Kg
SL-109-SA8N-SB-9.0-10.0	Acetone Methylene chloride Toluene	32 ug/Kg 1.7 ug/Kg 0.16 ug/Kg	32U ug/Kg 4.0U ug/Kg 4.0U ug/Kg
DUP10-SA8N-QC-060811	Acetone Methylene chloride Toluene	8.0 ug/Kg 1.6 ug/Kg 0.30 ug/Kg	8.0U ug/Kg 3.9U ug/Kg 3.9U ug/Kg

Sample TB-060811 was identified as a trip blank. No volatile contaminants were found.

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS B83 (All soil samples in SDG DE176)	Methylene chloride 1,2-Dibromo-3-chloropropane	125 (76-124) 129 (58-120)	- -	- -	J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Methylene chloride	1.3	1.6	21 (≤50)	-	-
Toluene	0.28	0.30	7 (≤50)	-	-

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Acetone	7.5U	8.0	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	Methylene chloride 1,2-Dibromo-3-chloropropane	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 TB-060811 EB16-SA8N-SB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE176	SL-076-SA8N-SB-4.0-5.0 DUP10-SA8N-QC-060811	Acetone	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	SL-023-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	9.3U ug/Kg 4.0U ug/Kg 4.0U ug/Kg	A	B
DE176	SL-023-SA5DN-SB-20.0-21.0	Acetone Methylene chloride Toluene	8.3U ug/Kg 3.9U ug/Kg 3.9U ug/Kg	A	B
DE176	SL-025-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	8.4U ug/Kg 3.9U ug/Kg 3.9U ug/Kg	A	B

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	SL-025-SA5DN-SB-23.0-24.0	Acetone Methylene chloride Toluene	9.5U ug/Kg 4.3U ug/Kg 4.3U ug/Kg	A	B
DE176	SL-028-SA5DN-SB-4.0-5.0	Methylene chloride Toluene	4.0U ug/Kg 4.0U ug/Kg	A	B
DE176	SL-028-SA5DN-SB-11.5-12.5	Acetone Methylene chloride Toluene	9.5U ug/Kg 4.5U ug/Kg 4.5U ug/Kg	A	B
DE176	SL-051-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	9.1U ug/Kg 4.4U ug/Kg 4.4U ug/Kg	A	B
DE176	SL-051-SA5DN-SB-14.0-15.0	Acetone Methylene chloride Toluene	8.8U ug/Kg 4.0U ug/Kg 4.0U ug/Kg	A	B
DE176	SL-076-SA8N-SB-4.0-5.0	Methylene chloride Toluene	3.7U ug/Kg 3.7U ug/Kg	A	B
DE176	SL-076-SA8N-SB-7.5-8.5	Acetone Methylene chloride Toluene	11U ug/Kg 4.1U ug/Kg 4.1U ug/Kg	A	B
DE176	SL-106-SA8N-SB-2.5-3.5	Acetone Methylene chloride Toluene	8.2U ug/Kg 3.8U ug/Kg 3.8U ug/Kg	A	B
DE176	SL-109-SA8N-SB-4.0-5.0	Acetone Methylene chloride Toluene	27U ug/Kg 4.1U ug/Kg 4.1U ug/Kg	A	B
DE176	SL-109-SA8N-SB-9.0-10.0	Acetone Methylene chloride Toluene	32U ug/Kg 4.0U ug/Kg 4.0U ug/Kg	A	B
DE176	DUP10-SA8N-QC-060811	Acetone Methylene chloride Toluene	8.0U ug/Kg 3.9U ug/Kg 3.9U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G1a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/11/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤30, r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≥ 75
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9 + 14
XVII.	Field blanks	ND	TB = 15 EB = 16

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

Validated Samples: soil + water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	VBLKB83	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	VBLK107	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	TB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	EB16-SA8N-SB-060811 W	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MS	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18	SL-076-SA8N-SB-4.0-5.0MSD	28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

DC #: 202776/a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277G1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the fiald duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26277G/a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

(B)

Blank analysis date: 6/14/11
Conc. units: ug/kg
Associated Samples: All Soils

Compound	Blank ID	Sample Identification								
	VBLKB83	10x/5x	1	2	3	4	5	6	7	8
F	8.3	83	9.3/4	8.3/4	8.4/4	9.5/4	-	9.5/4	9.1/4	8.8/4
E	1.7	17	1.3/4.0U	1.5/3.9U	1.5/3.9U	1.8/4.3U	1.5/4.0U	1.7/4.5U	1.4/4.4U	1.6/4.0U
CC	0.14	0.70	0.12/4.0U	0.15/3.9U	0.16/3.9U	0.19/4.3U	0.14/4.0U	0.14/4.5U	0.15/4.4U	0.14/4.0U
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
		9	10	11	12	13	14			
		-	11/4	8.2/4	27/4	32/4	8.0/4			
		1.3/3.7U	1.4/4.1U	1.6/3.8U	1.0/4.1U	1.7/4.0U	1.6/3.9U			
		0.28/3.7U	0.20/4.1U	0.19/3.8U	0.12/4.1U	0.16/4.0U	0.30/3.9U			
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS B83	E	125 (76-124)	( )	( )	All soils	J/Pdet (L)
			MM	129 (58-120	( )	( )	↓	L ↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC
Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

(FD)

Compound	Concentration (ug/kg)		%RPD Limit ≤50	Qualification Parent only / All Samples
	9	14		
E	1.3	1.6	21	
CC	0.28	0.30	7	
F	7.54	8.0	200	J/UJ/A

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	C (1st internal standard)	0.3589	0.3589	0.3517	0.3517	7	7
			EE (2nd internal standard)	1.7255	1.7255	1.5871	1.5871	8	8
			JJJ (3rd internal standard)	1.4546	1.4546	1.3695	1.3695	6	6
			(4th internal standard)						
2	ICV2	4/21/11	C (1st internal standard)	0.3956	0.3956	0.4093	0.4093	4	4
			EE (2nd internal standard)	1.9473	1.9473	1.9438	1.9438	2	2
			JJJ (3rd internal standard)	1.6715	1.6715	1.6569	1.6569	3	3
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 12:08	6/14/11	C (1st internal standard)	0.3517	0.3242	0.3242	8	8
			EE (2nd internal standard)	1.5871	1.6998	1.6998	7	7
			JJJ (3rd internal standard)	1.3695	1.4229	1.4229	4	4
			(4th internal standard)					
2	CCV 07:24	6/14/11	C (1st internal standard)	0.4093	0.4022	0.4022	2	2
			EE (2nd internal standard)	1.9438	2.0373	2.0373	5	5
			JJJ (3rd internal standard)	1.6569	1.6867	1.6867	2	2
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	52.446	105	105	0
1,2-Dichloroethane-d4	↓	55.675	111	111	↓
Toluene-d8		49.233	98	98	
Bromofluorobenzene		47-80 U	96	96	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD sample: 17 + 18

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	16.89	16.89	ND	19.2	19.3	114	114	115	115	1	1
Trichloroethene	↓	↓	↓	16.76	16.64	99	99	99	99	1	1
Benzene	↓	↓	↓	17.64	17.65	104	104	105	105	0	0
Toluene	↓	↓	0.25	16.76	16.95	98	98	100	100	1	1
Chlorobenzene	↓	↓	ND	16.16	16.22	96	96	97	97	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 20217G7c

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: lcs 1B83

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	NA	22.59	NA	113	113				
Trichloroethene	↓	↓	21.12	↓	106	106				
Benzene			21.94		110	110				
Toluene			21.42		107	107				
Chlorobenzene			21.26		106	106	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G/a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, CC:

Conc. = $\frac{(1608)(50)(5)}{(75238)(0.8572)(5.74)(0.88)}$

=

0.123 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
TB-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-060811 was identified as a trip blank. No 1,4-dioxane was found.

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 TB-060811 EB16-SA8N-SB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G1b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/7/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EF
2nd Reviewer: CF

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 2x
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 9 a 14
XVII.	Field blanks	ND	TB = 15 EB = 16

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

Validated Samples: SOIL + water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	VBLKE52	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	VBLKE54	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23	VBLKE50	33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	TB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	EB16-SA8N-SB-060811 W	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MS	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18	SL-076-SA8N-SB-4.0-5.0MSD	28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

LDC #: 26277G1b

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?		✓		
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethana	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropene	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1st internal standard)	1.3539	1.3539	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
2	ICAL	11/1/10	1,4-Dioxane (1st internal standard)	1.3359	1.3359	1.3219	1.3219	1	1
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 7:04	6/11/11	1,4-Dioxane (1st internal standard)	1.3396	1.4220	1.4220	6	6
			(2nd internal standard)					
			(3rd internal standard)					
	CCV 13:30	6/13/11	↓ (4th internal standard)	↓	1.4330	1.4330	7	7
2			(1st internal standard)					
	CCV 8:12	6/09/11	↓ (2nd internal standard)	↓	1.2253	1.2253	7	7
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26776b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8	10	9.539	95	95	0
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSC | * 2/(MSC + MSDC)

MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD sample: 17 + 18

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~1,1-Dichloroethene~~ 1,4 Dioxane	102.46	102.46	NR	97.93	106.41	96	96	100	100	8	8
Trichloroethene											
Benzene											
Toluene											
Chlorobenzene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS E52 Lab ID

Compound	Spike Added (ng/kg)		Spiked Sample Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,4-Dioxane										
~~1,1-Dichloroethene~~	125	125	133.52	135.23	107	107	108	108	1	1
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____ , _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)}$

=

ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and one water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKB162	6/13/11	Bis(2-ethylhexyl)phthalate	19 ug/Kg	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-023-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	25 ug/Kg	380U ug/Kg
SL-023-SA5DN-SB-20.0-21.0	Bis(2-ethylhexyl)phthalate	24 ug/Kg	370U ug/Kg
SL-028-SA5DN-SB-11.5-12.5	Bis(2-ethylhexyl)phthalate	25 ug/Kg	370U ug/Kg
SL-051-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	24 ug/Kg	370U ug/Kg
SL-076-SA8N-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	22 ug/Kg	370U ug/Kg
SL-076-SA8N-SB-7.5-8.5	Bis(2-ethylhexyl)phthalate	21 ug/Kg	380U ug/Kg
SL-109-SA8N-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	19 ug/Kg	380U ug/Kg
SL-109-SA8N-SB-9.0-10.0	Bis(2-ethylhexyl)phthalate	25 ug/Kg	380U ug/Kg
DUP10-SA8N-QC-060811	Bis(2-ethylhexyl)phthalate	49 ug/Kg	380U ug/Kg

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No semivolatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	2-Chlorophenol	71 (73-121)	71 (73-121)	-	J (all detects)	A
	1,4-Dichlorobenzene	68 (70-100)	68 (70-100)	-	UJ (all non-detects)	
	Benzyl alcohol	-	66 (67-115)	-		
	2-Methylphenol	68 (75-111)	68 (75-111)	-		
	4-Methylphenol	65 (71-111)	63 (71-111)	-		
	2,4-Dimethylphenol	77 (78-110)	77 (78-110)	-		
	bis(2-Chloroethoxy)methane	-	74 (75-104)	-		
	2,4-Dichlorophenol	74 (78-117)	72 (78-117)	-		
	4-Chloro-3-methylphenol	72 (76-110)	71 (76-110)	-		
	2-Methylnaphthalene	68 (76-114)	68 (76-114)	-		
	2,4,5-Trichlorophenol	76 (78-109)	76 (78-109)	-		
	Acenaphthylene	79 (81-110)	80 (81-110)	-		
	2,4-Dinitrotoluene	71 (73-113)	-	-		
	Fluorene	76 (77-111)	-	-		
	4-Chlorophenyl-phenylether	75 (80-109)	76 (80-109)	-		
	N-Nitrosodiphenylamine	80 (86-145)	79 (86-145)	-		
	Hexachlorobenzene	-	76 (77-114)	-		
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	2,4-Dinitrophenol	-	-	31 (≤30)	J (all detects)	A
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	Benzidine	0 (35-141)	0 (35-141)	-	J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
160WLLCS/D (All water samples in SDG DE176)	Aniline	112 (49-101)	104 (49-101)	-	J (all detects)	P
	4-Chloroaniline	146 (42-124)	-	-	J (all detects)	
	3,3'-Dichlorobenzidine	127 (49-111)	121 (49-111)	-	J (all detects)	
	Benzidine	137 (34-117)	-	-	J (all detects)	
160WLLCS/D (All water samples in SDG DE176)	2-Nitroaniline	-	81 (83-116)	-	J (all detects)	P
				-	UJ (all non-detects)	
	2,6-Dinitrotoluene	-	80 (85-115)		J (all detects) UJ (all non-detects)	

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
162LBLCS (All soil samples in SDG DE176)	1,2-Dichlorobenzene	77 (79-102)	-	-	J (all detects) UJ (all non-detects)	P
	2-Nitrophenol	80 (81-114)	-	-	J (all detects) UJ (all non-detects)	
162LBLCS (All soil samples in SDG DE176)	4-Chloroaniline	114 (10-110)	-	-	J (all detects)	P
	3,3'-Dichlorobenzidine	126 (24-101)	-	-	J (all detects)	
	Indeno(1,2,3-cd)pyrene	123 (64-119)	-	-	J (all detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Bis(2-ethylhexyl)phthalate	22	49	76 (≤50)	J (all detects)	A

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0	2-Chlorophenol 1,4-Dichlorobenzene Benzyl alcohol 2-Methylphenol 4-Methylphenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 4-Chloro-3-methylphenol 2-Methylnaphthalene 2,4,5-Trichlorophenol Acenaphthylene 2,4-Dinitrotoluene Fluorene 4-Chlorophenyl-phenylether N-Nitrosodiphenylamine Hexachlorobenzene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-076-SA8N-SB-4.0-5.0	2,4-Dinitrophenol	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE176	SL-076-SA8N-SB-4.0-5.0	Benzidine	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	EB16-SA8N-SB-060811	Aniline 4-Chloroaniline 3,3'-Dichlorobenzidine Benzidine	J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	EB16-SA8N-SB-060811	2-Nitroaniline 2,6-Dinitrotoluene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	1,2-Dichlorobenzene 2-Nitrophenol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	4-Chloroaniline 3,3'-Dichlorobenzidine Indeno(1,2,3-cd)pyrene	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)
DE176	SL-076-SA8N-SB-4.0-5.0 DUP10-SA8N-QC-060811	Bis(2-ethylhexyl)phthalate	J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	SL-023-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B
DE176	SL-023-SA5DN-SB-20.0-21.0	Bis(2-ethylhexyl)phthalate	370U ug/Kg	A	B
DE176	SL-028-SA5DN-SB-11.5-12.5	Bis(2-ethylhexyl)phthalate	370U ug/Kg	A	B
DE176	SL-051-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	370U ug/Kg	A	B
DE176	SL-076-SA8N-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	370U ug/Kg	A	B
DE176	SL-076-SA8N-SB-7.5-8.5	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B
DE176	SL-109-SA8N-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	SL-109-SA8N-SB-9.0-10.0	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B
DE176	DUP10-SA8N-QC-060811	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G2a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/11/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r²
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9, 14
XVII.	Field blanks	ND	EB = 15

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

Validated Samples: SOIL + water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	SBLKLB162	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	SBLKWL160	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

LDC #: 20277G2a

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.			✓	
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 2027G2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 27762a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

(B)

Blank extraction date: 6/13/11 **Blank analysis date:** 6/23/11
Conc. units: ug/kg Associated Samples: 1, 2, 6, 7, 9, 10, 12 → 14

Compound	Blank ID	Sample Identification							
[redacted]	SBLKBI62	1	2	6	7	9	10	12	13
EEE	19	25/380U	24/370U	25/370U	24/370U	22/370U	21/380U	19/380U	25/380U
			14						
↓	↓		49/380U						

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277G2c

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		16 + 17	per following pages	( )	( )	( )	9	all J/UJ/A
				( )	( )	( )	except	HH = J/Adet
				( )	( )	( )		SSS = J/R/A
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )	

Lancaster Laboratories

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: DE176
Matrix: SOLID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

16 of 17

UNSPK: 6310775 MS: 6310776 MSD: 6310777 Analyte	Batch: 11162SLB026 (Sample number(s): 6310767-6310777, 6310779-6310783)								
	Spike Added ug/kg	Unspiked Conc ug/kg	MS Conc ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	%Rec Limits	%RPD	%RPD Limits
N-Nitrosodimethylamine	1661.13	N.D.	1149.66	1151.3	69	70	47-116	0	30
Phenol	1661.13	N.D.	1123.1	1153.15	68	70	58-126	3	30
Aniline	1661.13	N.D.	867.62	806.55	52	49	35-95	7	30
bis(2-Chloroethyl)ether	1661.13	N.D.	1137.89	1140.13	69	69	60-116	0	30
2-Chlorophenol	1661.13	N.D.	1172.62	1171.57	71 *	71 *	73-121	0	30
1,3-Dichlorobenzene	1661.13	N.D.	1117.01	1144.8	67	69	63-109	2	30
1,4-Dichlorobenzene	1661.13	N.D.	1121.59	1118.24	68 *	68 *	70-100	0	30
Benzyl alcohol	1661.13	N.D.	1118.48	1086.	67	66 *	67-115	3	30
1,2-Dichlorobenzene	1661.13	N.D.	1121.69	1167.07	68	71	66-108	4	30
2-Methylphenol	1661.13	N.D.	1136.94	1117.51	68 *	68 *	75-111	2	30
bis(2-Chloroisopropyl)ether	1661.13	N.D.	1158.91	1137.88	70	69	55-142	2	30
4-Methylphenol	1661.13	N.D.	1086.49	1040.03	65 *	63 *	71-111	4	30
N-Nitroso-di-n-propylamine	1661.13	N.D.	1105.67	1098.6	67	67	60-116	1	30
Hexachloroethane	1661.13	N.D.	1147.26	1154.66	69	70	57-109	1	30
Nitrobenzene	1661.13	N.D.	1299.85	1301.89	78	79	72-106	0	30
Isophorone	1661.13	N.D.	1233.22	1232.95	74	75	73-102	0	30
2-Nitrophenol	1661.13	N.D.	1255.18	1234.9	76	75	74-115	2	30
2,4-Dimethylphenol	1661.13	N.D.	1275.77	1268.95	77 *	77 *	78-110	1	30
Benzoic acid	1661.13	N.D.	1098.4	1104.49	66	67	10-173	1	30
3,5-Dimethylphenol	1661.13	N.D.	1657.75	1627.54	100	99.	70-130	2	30
bis(2-Chloroethoxy)methane	1661.13	N.D.	1243.05	1217.93	75	74 *	75-104	2	30
2,4-Dichlorophenol	1661.13	N.D.	1224.21	1181.61	74 *	72 *	78-117	4	30
1,2,4-Trichlorobenzene	1661.13	N.D.	1260.82	1270.08	76	77	72-115	1	30
Naphthalene	1661.13	N.D.	1268.19	1251.04	76	76	72-116	1	30
4-Chloroaniline	1661.13	N.D.	838.09	834.99	50	51	23-95	0	30
Hexachlorobutadiene	1661.13	N.D.	1278.62	1265.5	77	77	62-120	1	30
4-Chloro-3-methylphenol	1661.13	N.D.	1202.48	1179.35	72 *	71 *	76-110	2	30
2-Methylnaphthalene	1661.13	N.D.	1136.38	1127.62	68 *	68 *	76-114	1	30
1-Methylnaphthalene	1661.13	N.D.	1240.09	1202.72	75	73	73-112	3	30
Hexachlorocyclopentadiene	3322.26	N.D.	2380.51	2306.53	72	70	10-153	3	30
2,4,6-Trichlorophenol	1661.13	N.D.	1294.81	1294.07	78	78	77-115	0	30
2,4,5-Trichlorophenol	1661.13	N.D.	1266.99	1262.37	76 *	76 *	78-109	0	30
2-Chloronaphthalene	1661.13	N.D.	1026.71	1045.42	62	63	50-141	2	30
2-Nitroaniline	1661.13	N.D.	1284.22	1294.47	77	78	67-125	1	30
Dimethylphthalate	1661.13	N.D.	1238.51	1239.43	75	75	64-118	0	30
2,6-Dinitrotoluene	1661.13	N.D.	1236.5	1289.36	74	78	69-123	4	30
Acenaphthylene	1661.13	N.D.	1318.86	1324.23	79 *	80 *	81-110	0	30
3-Nitroaniline	1661.13	N.D.	1133.64	1155.23	68	70	59-122	2	30
Acenaphthene	1661.13	N.D.	1285.45	1287.35	77	78	75-115	0	30
2,4-Dinitrophenol	3322.26	N.D.	1581.18	1157.47	48	35	20-143	31 *	30
4-Nitrophenol	1661.13	N.D.	1084.01	1208.46	65	73	54-113	11	30
2,4-Dinitrotoluene	1661.13	N.D.	1172.85	1264.89	71 *	77	73-113	8	30

Results are being reported on an as received basis.

Lancaster Laboratories

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: DE176
Matrix: SOLID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 6310775 MS: 6310776 MSD: 6310777 Analyte	Batch: **11162SLB026** (Sample number(s): 6310767-6310777, 6310779-6310783)								
	Spike Added ug/kg	Unspiked Conc ug/kg	MS Conc ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	%Rec Limits	%RPD	%RPD Limits
Dibenzofuran	1661.13	N.D.	1278.65	1273.66	77	77	71-112	0	30
Diethylphthalate	1661.13	N.D.	1247.2	1176.16	75	71	66-118	6	30
Fluorene	1661.13	N.D.	1254.98	1268.09	76 *	77	77-111	1	30
4-Chlorophenyl-phenylether	1661.13	N.D.	1237.55	1251.14	75 *	76 *	80-109	1	30
4-Nitroaniline	1661.13	N.D.	897.75	893.99	54	54	52-112	0	30
4,6-Dinitro-2-methylphenol	1661.13	N.D.	982.31	820.7	59	50	24-116	18	30
N-Nitrosodiphenylamine	1661.13	N.D.	1327.26	1309.6	80 *	79 *	86-145	1	30
1,2-Diphenylhydrazine	1661.13	N.D.	1393.81	1352.97	84	82	71-129	3	30
4-Bromophenyl-phenylether	1661.13	N.D.	1244.39	1222.96	75	74	67-129	2	30
Hexachlorobenzene	1661.13	N.D.	1275.25	1253.86	77	76 *	77-114	2	30
Pentachlorophenol	1661.13	N.D.	1101.94	1163.69	66	71	28-127	5	30
Phenanthrene	1661.13	N.D.	1255.88	1258.2	76	76	65-125	0	30
Anthracene	1661.13	N.D.	1282.43	1276.75	77	77	75-115	0	30
Carbazole	1661.13	N.D.	1235.03	1284.87	74	78	64-120	4	30
Di-n-butylphthalate	1661.13	N.D.	1265.72	1192.51	76	72	67-123	6	30
Fluoranthene	1661.13	N.D.	1207.58	1274.06	73	77	73-112	5	30
Benzidine	8305.65	N.D.	N.D.	N.D.	0 *	0 *	35-141	0	30
Pyrene	1661.13	N.D.	1306.62	1289.65	79	78	74-126	1	30
Butylbenzylphthalate	1661.13	N.D.	1417.95	1320.65	85	80	73-134	7	30
bis(2-Ethylhexyl)phthalate	1661.13	19.32	1493.06	1347.33	89	80	63-122	10	30
3,3'-Dichlorobenzidine	1661.13	N.D.	980.35	949.9	59	58	16-119	3	30
Benzo(a)anthracene	1661.13	N.D.	1298.74	1285.18	78	78	65-122	1	30
Chrysene	1661.13	N.D.	1339.89	1336.14	81	81	62-128	0	30
Di-n-octylphthalate	1661.13	N.D.	1200.74	1125.2	72	68	56-126	6	30
Benzo(b)fluoranthene	1661.13	N.D.	1131.52	1113.05	68	67	59-125	2	30
Benzo(k)fluoranthene	1661.13	N.D.	1128.13	1107.11	68	67	56-132	2	30
Benzo(a)pyrene	1661.13	N.D.	1172.5	1151.01	71	70	57-126	2	30
Indeno(1,2,3-cd)pyrene	1661.13	N.D.	1301.55	1328.19	78	80	61-126	2	30
Dibenz(a,h)anthracene	1661.13	N.D.	1324.36	1315.03	80	80	65-125	1	30
Benzo(g,h,i)perylene	1661.13	N.D.	1264.31	1314.87	76	80	59-127	4	30

Results are being reported on an as received basis.

LDC #: 26277G29

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		160WLLCS/D	NNN	112 (49-101)	104 (49-101)	( )	All waters	J/Pdet (L)
			T	146 (42-124)	( )	( )		J/UJ/P
			BB	( )	81 (83-116)	( )		J/Pdet
			SSS	137 (34-117)	( )	( )		J/UJ/P
			BBB	127 (49-111)	121 (49-111)	( )		
			EE	( )	80 (85-115)	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		162LBLCS	F	77 (79-102)	( )	( )	All soils	J/UJ/P (L)
			N	80 (81-114)	( )	( )		J/Pdet
			T	114 (10-110)	( )	( )		
			BBB	126 (24-101)	( )	( )		
			JJJ	123 (64-119)	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26277G2c

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

(FB)

Compound	Concentration (ug/kg)		≤ 50 RPD
	9	14	
EEE	22	49	76 J/Adot

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 26277G05

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 6 of 7
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/20/11	Phenol (1st internal standard)	2.878	2.878	2.803	2.803	7	7
			Nitrobenzene (2nd internal standard)	0.520	0.520	0.518	0.518	3	3
			2-Nitroaniline (3rd internal standard)	0.423	0.423	0.401	0.401	8	8
			Pentachlorophenol (4th internal standard)	0.148	0.148	0.144	0.144	7	7
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.833	0.833	0.777	0.777	9	9
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)	1.845	1.845	1.572	1.572	21	21
2	ICAL	6/22/11	Phenol (1st internal standard)	2.410	2.40	2.405	2.405	6	6
			Nitrobenzene (2nd internal standard)	0.381	0.381	0.385	0.385	4	4
			2-Nitroaniline (3rd internal standard)	0.424	0.424	0.416	0.416	6	6
			Pentachlorophenol (4th internal standard)	0.147	0.147	0.146	0.146	1	1
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.935	0.935	0.919	0.910	6	6
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)	1.632	1.632	1.607	1.607	8	8
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2s

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	FF093I	6/23/11	Phenol (1st internal standard)	2.803	2.801	2.801	0	0
			Nitrobenzene (2nd internal standard)	0.518	0.531	0.531	2	2
			2-Nitrophenol (3rd internal standard)	0.401	0.422	0.422	5	5
			Pentachlorophenol (4th internal standard)	0.144	0.398	0.398	1	1
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.777	0.846	0.846	9	9
			Benzo(a)pyrene (6th internal standard)	1.572	1.654	1.654	9	9
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G29
SDG #: see Cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	84.598	85	85	0
2-Fluorobiphenyl	↓	86.782	87	87	
Terphenyl-d14	↓	81.147	81	81	↓
Phenol-d5	200	153.785	77	77	
2-Fluorophenol	↓	159.443	80	80	
2,4,6-Tribromophenol	↓	162.808	81	81	
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26277Q29

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 16 + 17

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1661.13	1661.13	ND	1123.1	1153.15	68	68	70	70	3	3
N-Nitroso-di-n-propylamine				1105.67	1098.6	67	67	67	67	1	1
4-Chloro-3-methylphenol				1202.48	1179.35	72	72	71	71	2	2
Acenaphthene				1285.45	1287.35	77	77	78	78	0	0
Pentachlorophenol				1101.94	1163.69	66	66	71	71	5	5
Pyrene				1306.62	1289.65	79	79	78	78	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277929

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 162 LBLCS

Compound	Spike Added (ug/Kg)		Spike Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1433.33	NA	1153.14	NA	80	80				
N-Nitroso-di-n-propylamine	1666.67		1116.71		67	67				
4-Chloro-3-methylphenol	1466.67		1201.12		82	82				
Acenaphthene	↓		1245.03		85	85				
Pentachlorophenol	1366.67		1114.69		82	82				
Pyrene	1566.67	↓	1294.66	↓	83	83	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G29

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, EEE:

Conc. = $\frac{(6402)(40)(1000)(\quad)(\quad)}{(492163)(0.777)(30)(0.88)(\quad)}$

= 25 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatiles were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKWK160	6/9/11	Bis(2-ethylhexyl)phthalate Di-n-octylphthalate	0.061 ug/L 0.065 ug/L	All water samples in SDG DE176

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
EB16-SA8N-SB-060811	Bis(2-ethylhexyl)phthalate	0.069 ug/L	1.0U ug/L

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No semivolatiles were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB16-SA8N-SB-060811	6/8/11	Di-n-butylphthalate Diethylphthalate Naphthalene	0.71 ug/L 0.30 ug/L 0.060 ug/L	All soil samples in SDG DE176
EB16-SA8N-SB-060811	6/8/11	Bis(2-ethylhexyl)phthalate	0.069 ug/L	SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-106-SA8N-SB-2.5-3.5

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
160WKLCS/D (All water samples in SDG DE176)	1-Methylnaphthalene	134 (71-117)	119 (71-117)	-	J (all detects)	P
	Naphthalene	128 (72-109)	126 (72-109)	-	J (all detects)	
	2-Methylnaphthalene	118 (75-115)	-	-	J (all detects)	
	Acenaphthylene	132 (70-110)	124 (70-110)	-	J (all detects)	
	Acenaphthene	129 (74-109)	132 (74-109)	-	J (all detects)	
	Diethylphthalate	137 (57-134)	-	-	J (all detects)	
	Fluorene	157 (75-114)	128 (75-114)	-	J (all detects)	
	Phenanthrene	130 (76-111)	127 (76-111)	-	J (all detects)	
	Anthracene	140 (66-111)	130 (66-111)	-	J (all detects)	
	Di-n-butylphthalate	133 (74-131)	149 (74-131)	-	J (all detects)	
	Fluoranthene	138 (75-116)	158 (75-116)	-	J (all detects)	
	Pyrene	146 (69-118)	130 (69-118)	-	J (all detects)	
	Benzo(a)anthracene	129 (72-114)	129 (72-114)	-	J (all detects)	
	Chrysene	131 (76-116)	129 (76-116)	-	J (all detects)	
	Benzo(b)fluoranthene	127 (69-123)	125 (69-123)	-	J (all detects)	
	Benzo(k)fluoranthene	135 (59-130)	138 (59-130)	-	J (all detects)	
	Benzo(a)pyrene	130 (60-127)	148 (60-127)	-	J (all detects)	
	Indeno(1,2,3-cd)pyrene	145 (69-124)	162 (69-124)	-	J (all detects)	
	Dibenz(a,h)anthracene	149 (55-134)	172 (55-134)	-	J (all detects)	
	Benzo(g,h,i)perylene	-	136 (57-131)	-	J (all detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Naphthalene	0.94	1.2	24 (≤50)	-	-

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	EB16-SA8N-SB-060811	1-Methylnaphthalene Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Diethylphthalate Fluorene Phenanthrene Anthracene Di-n-butylphthalate Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	All TCL compounds	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	EB16-SA8N-SB-060811	Bis(2-ethylhexyl)phthalate	1.0U ug/L	A	B

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G2b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/11/11

SDG #: DE176 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories SW 01A Reviewer: F

2nd Reviewer: A

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ (EPA SW 846 Method 8270C-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS 1/1
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9, 14
XVII.	Field blanks	SW	EB = 15

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

Validated Samples: Soil + water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	SBLKLJ167	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	SBLKWK160	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

LDC #: 26277G26

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277G36

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26277G2b

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

(B)

Blank extraction date: 6/9/11 **Blank analysis date:** 6/16/11
Conc. units: ug/L Associated Samples: all water

Compound	Blank ID	Sample Identification							
[redacted]	SBLKWK160	15							
EEE	0.061		0.069 /1.04						
FFF	0.065		-						

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277G25

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

(F)

Blank units: ug/L **Associated sample units:** ug/kg
Sampling date: 6/8/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All SOILS ND + > 5X, 10X

Compound	Blank ID	Sample Identification								
	15	5X/10X								
XX	0.71	7.1								
LL	0.30	3.0								
~~EEE~~	~~0.069~~	~~0.69~~								
S	0.060	0.3								
CRQL										

(F)

Blank units: ug/L **Associated sample units:** ug/kg
Sampling date: 6/8/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 3, 4, 5, 8, 11 (ND + > ~~10X~~)

Compound	Blank ID	Sample Identification								
	15									
EEE	0.069									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 26277G2b

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were percent recoveries (%R) for surrogates within QC limits?
Y N N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N N/A If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		15	NBZ	138 (40-130)	no qual
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP)= 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

LDC #: 27763b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		160WK LCS/D	all	next page	( )	( )	All water	all J/Pdet (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

Lancaster Laboratories

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: DE176
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS-SIM

160WK LCS ID
all J/Polet

LCS: 160WKLCS LCSD: 160WKLCSD Analyte	Batch: 11160WAK026 (Sample number(s): 6310785)							
	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
N-Nitrosodimethylamine	1	.8	.62	80	62	36-89	26	30
1-Methylnaphthalene	1	1.34	1.19	134 *	119 *	71-117	12	30
Naphthalene	1	1.28	1.26	128 *	126 *	72-109	2	30
2-Methylnaphthalene	1	1.18	1	118 *	100	75-115	17	30
Acenaphthylene	1	1.32	1.24	132 *	124 *	70-110	6	30
Dimethylphthalate ✓	1	1.1	1.16	110	116	40-119	5	30
Acenaphthene	1	1.29	1.32	129 *	132 *	74-109	2	30
Diethylphthalate ✓	1	1.37	1.24	137 *	124	57-134	11	30
Fluorene	1	1.57	1.28	157 *	128 *	75-114	21	30
Phenanthrene	1	1.3	1.27	130 *	127 *	76-111	2	30
Anthracene	1	1.4	1.3	140 *	130 *	66-111	7	30
Di-n-butylphthalate ✓	1	1.33	1.49	133 *	149 *	74-131	12	30
Fluoranthene	1	1.38	1.58	138 *	158 *	75-116	14	30
Pyrene	1	1.46	1.3	146 *	130 *	69-118	12	30
Butylbenzylphthalate ✓	1	1.25	1.26	125	126	40-138	1	30
Bis(2-Ethylhexyl)phthalate ✓	1	1.26	1.24	126	124	57-154	2	30
Benzo(a)anthracene	1	1.29	1.29	129 *	129 *	72-114	0	30
Chrysene	1	1.31	1.29	131 *	129 *	76-116	2	30
Di-n-octylphthalate	1	1.36	1.25	136	125	57-145	8	30
Benzo(b)fluoranthene	1	1.27	1.25	127 *	125 *	69-123	2	30
Benzo(k)fluoranthene	1	1.35	1.38	135 *	138 *	59-130	3	30
Benzo(a)pyrene	1	1.3	1.48	130 *	148 *	60-127	12	30
Indeno(1,2,3-cd)pyrene	1	1.45	1.62	145 *	162 *	69-124	11	30
Dibenz(a,h)anthracene	1	1.49	1.72	149 *	172 *	55-134	14	30
Benzo(g,h,i)perylene	1	1.24	1.36	124	136 *	57-131	9	30

DE176 2149

LDC #: 26277G2b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

(FD)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ug/kg)		± SD RPD
	9	14	
S	0.94	1.2	24

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 26277026

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (/ std)	Recalculated RRF (/ std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/9/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.101	1.01	1.101	1.101	3	3
			Fluorene (3rd internal standard)	1.573	1.573	1.558	1.558	5	5
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.376	1.376	1.342	1.342	7	7
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.554	1.554	1.530	1.530	3	3
			Benzo(a)pyrene (6th internal standard)	1.393	1.393	1.370	1.370	5	5
2	ICAL	6/16/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.067	1.067	1.071	1.071	3	3
			Fluorene (3rd internal standard)	1.304	1.304	1.253	1.253	5	5
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.125	1.125	1.118	1.118	7	7
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.200	1.200	1.206	1.206	3	3
			Benzo(a)pyrene (6th internal standard)	1.083	1.083	1.076	1.076	4	4
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G26

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CF0571.d	6/24/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.101	1.060	1.060	4	4
			Fluorene (3rd internal standard)	1.558	1.461	1.461	6	6
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.342	1.328	1.328	1	1
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.530	1.499	1.499	2	2
			Benzo(a)pyrene (6th internal standard)	1.370	1.455	1.455	6	6
2	CF0591	6/26/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)		1.051	1.051	5	5
			Fluorene (3rd internal standard)		1.453	1.453	7	7
			~~Pentachlorophenol~~ Anthracen (4th internal standard)		1.329	1.329	1	1
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)		1.529	1.529	0	0
			Benzo(a)pyrene (6th internal standard)		1.446	1.446	6	6
3	CF0609	6/27/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)		1.075	1.075	2	2
			Fluorene (3rd internal standard)		1.478	1.478	5	5
			~~Pentachlorophenol~~ Anthracen (4th internal standard)		1.333	1.333	1	1
			~~Bis(2-ethylhexyl)phthalate~~ Chrysen (5th internal standard)		1.541	1.541	1	1
			Benzo(a)pyrene (6th internal standard)		1.471	1.471	7	7

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277g2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	1.053	105	105	0
2-Fluorobiphenyl	1.0	0.861	86	86	
Terphenyl-d14	1.0	1.005	100	101	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26271A4D

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 16 + 17

Compound	Spike Added (ug/Kg)		Sample Concentration (ug/Kg)	Spiked Sample Concentration (ug/Kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.22	33.22	ND	28.57	28.95	86	86	87	87	1	1
Pentachlorophenol											
Pyrene	↓	↓	ND	28.51	27.74	86	86	83	83	3	3

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2D

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 167LJLCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/g)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	30.47	NA	91	91				
Pentachlorophenol										
Pyrene	33.33	↓	31.99	↓	96	96	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277926

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1 . Butylbenzylphthalati

Conc. = $\frac{(47538)(1.0)(1000)(\quad)(\quad)}{(229437)(0.760)(30)(0.88)(\quad)}$

=

10.3 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Extraction	Required Holding Time (in Days) From Sample Collection Until Extraction	Flag	A or P
SL-109-SA8N-SB-9.0-10.0	N-Nitrosodimethylamine	21	14	J (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-076-SA8N-SB-7.5-8.5	N-Nitrosodimethylamine-d6	151 (50-150)	N-Nitrosodimethylamine	J (all detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	N-Nitrosodimethylamine	69 (70-130)	-	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No N-nitrosodimethylamine was detected in any of the samples with the following exceptions:

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
N-Nitrosodimethylamine	37.4U	19.3	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-109-SA8N-SB-9.0-10.0	N-Nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Technical holding time (H)
DE176	SL-076-SA8N-SB-7.5-8.5	N-Nitrosodimethylamine	J (all detects)	P	Surrogate spikes (%R) (S)
DE176	SL-076-SA8N-SB-4.0-5.0	N-Nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)
DE176	SL-076-SA8N-SB-4.0-5.0 DUP10-SA8N-QC-060811	N-Nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G2c **VALIDATION COMPLETENESS WORKSHEET** Date: 10/10/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

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

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	N	Not Required
III.	Initial calibration	A	%D ≤ 30
IV.	Continuing calibration/ICV	A	ICV ≤ 30 CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9 & 14
XVII.	Field blanks	N	

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

Validated Samples:

Soil

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	SBLKLF16	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	SBLKLC179	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

LDC #: 26277G2C

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.		✓		
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ ~~25%~~ 20 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?		✓		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?		✓		
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277G2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Reviewer: FT
2nd Reviewer: A

All circled dates have exceeded the technical holding times.
Y N N/A Were all cooler temperatures within validation criteria?

METHOD : GC/MS BNA (EPA SW 846 Method 8270)

Sample ID	Matrix	Preserved	Sampling Date	Extraction date	Analysis date	Total # of Days	Qualifier
13	SOIL	~~X~~	6/8/11	6/29/11	7/2/11	21	J/UJ/R (H)

TECHNICAL HOLDING TIME CRITERIA

Water: Extracted within 7 days, analyzed within 40 days.
Soil: Extracted within 14 days, analyzed within 40 days.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS ~~BNA (EPA SW 846 Method 8270)~~ 1625C

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were percent recoveries (%R) for surrogates within QC limits?
Y (N) N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N (N/A) If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		5, 6	surrogate	out side limit ( )	no qual 10X DL
				( )	
				( )	
				( )	
				( )	
				( )	
		10	*	157 (20-150)	J/Pdet (5)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
		* N-Nitrosodimethylamine-d6		( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP)= 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: GC~~/MS BNA (EPA SW-846 Method 8270).~~ 1625C

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		15 + 16	000	69 (70-130)	( )	( )	9	J/UJ/A (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26277Q2C

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

(FD)

Compound	Concentration (ng/kg)		RPD (≤ 50)
	9	14	
000	37.44	19.3	200 J/UJ/A

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/09/11	~~Phenol (1st internal standard)~~ NDMA	1.142	1.142	1.176	1.176	10	10
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 14:54	6/29/11	~~Phenol (1st internal standard)~~ NDMA	1.17602	1.09173	1.09173	7.16703	7.167
			Naphthalene (2nd internal standard)					
	CCV 18:17	6/29/11	Fluorene (3rd internal standard) ↓	↓	1.00833	1.00833	14.25861	14.258
			Pentachlorophenol (4th internal standard)					
	CCV 21:38	6/29/11	Bis(2-ethylhexyl)phthalate (5th internal standard) ↓	↓	1.00055	1.00055	14.92058	14.921
			~~Benzo(a)pyrene (6th internal standard)~~					
2	CCV 19:40	7/01/11	~~Phenol (1st internal standard)~~ ↓	↓	1.01203	1.01203	13.94456	13.946
			Naphthalene (2nd internal standard)					
	CCV 23:01	7/01/11	Fluorene (3rd internal standard) ↓	↓	1.09263	1.09263	7.09027	7.09027
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
N-Nitrosodimethylamine-d6					
Nitrobenzene-d5	25	29.437	118	118	0
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26d1/92c

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/Kg)		Sample Concentration (ug/Kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											
NDMA	827.81	827.81	ND	571.98	571.79	69	69	70	70	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 161 LFLCS

Compound	Spike Added (mg/kg)		Spike Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol NPMA	83333	NA	69111	NA	83	83	NA			
~~N-Nitroso-di-n-propylamine~~										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_t	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1 , NDMA

Conc. = $\frac{(9044)(25)(1000)(\quad)(\quad)}{(209738)(1.176)(30)(28)(\quad)}$

=

34.7 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
6/16/11	3P20164.42R	ZBMultiR1	Aroclor-1016	21.0	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD	Aroclor-1016 Aroclor-1221 Aroclor-1232	J (all detects) UJ (all non-detects)	A
6/16/11	3P20164.43R	ZBMultiR1	Aroclor-5460	24.2	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD	Aroclor-5460	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
6/16/11	3P20164.43R	ZBMultiR2	Aroclor-5460	30.2	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD	Aroclor-5460	J (all detects) UJ (all non-detects)	A
6/16/11	4P20164.08R	ZBMultiR1	Aroclor-5432	24.6	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 PBLK07162	Aroclor-5432	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No polychlorinated biphenyl contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
PBLK07162	Not specified	Decachlorobiphenyl	122 (45-120)	All TCL compounds	J (all detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Affected Compound	Flag	A or P
LCS/D07162 (All soil samples in SDG DE176)	Aroclor-5442	144 (36-106)	120 (36-106)	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P
LCS/D15165 (All water samples in SDG DE176)	Aroclor-5442	86 (38-84)	88 (38-84)	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
SL-028-SA5DN-SB-11.5-12.5	Aroclor-1248 Aroclor-1254	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	P

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-028-SA5DN-SB-4.0-5.0	Aroclor-1254	149.25	J (all detects)	A
SL-076-SA8N-SB-4.0-5.0	Aroclor-1260	50.52	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Aroclor-1260	3.4	2.4	34 (≤50)	-	-

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-5460	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0	Aroclor-5432	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-028-SA5DN-SB-11.5-12.5	Aroclor-1248 Aroclor-1254	J (all detects) J (all detects)	P	Compound quantitation and RLs (exceeded range) (*XIII)
DE176	SL-028-SA5DN-SB-4.0-5.0	Aroclor-1254	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE176	SL-076-SA8N-SB-4.0-5.0	Aroclor-1260	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G3b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/11/12
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	%RSD ≤20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	SW	D = 9 + 14
XVI.	Field blanks	ND	EB = 15

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

Validated Samples: SOIL + Water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK071262	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	PBLK15165	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 26277693b
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓	✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?				
IX. Regional Quality Assurance and Quality Control			✓	
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26279G3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓	✓		
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 26277G3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/16/11	3P20164.42R	ZB Multi R1	Y	21.0	( )	9-14, 16, 17	J/UJ/A (C)
						( )		qual V, W, X
						( )		
	6/16/11	3P20164.43R	ZB Multi R1	Aroclor 5460	24.2	( )	↓	J/UJ/A (C)
			↓ R2	↓	30.2	( )		↓
						( )		qual 5460 only
						( )		
						( )		
	6/16/11	4P20164.08R	ZB Multi R1	Aroclor 5432	24.6	( )	1PBLK07162, 1-8	J/UJ/A (C)
						( )		qual 5432 only
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 26277G3h

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ **GC** __ **HPLC**

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y (N) N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	PBLK07162	NS	o	122 (45-120)	J/Pdet (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277G3b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D 07162	Aroclor 5442	144 (36-106)	120 (36-106)	( )	All soils	J/pdet (L)
			( )	( )	( )		qual 5442 ~~only~~ 5432 5460
			( )	( )	( )		
			( )	( )	( )		
	LCS/D 15165	↓	86 (38-84)	88 (38-84)	( )	all water	↓ (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277036
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: A

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding	Associated Samples	Qualifications
	Z, AA	x'd cal Range	6	J/Pdet * XIII

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26277G3b
SDG #: all covered

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet 2 cols ≤ 40 Finding	Associated Samples	Qualifications
	AA	149.25	5	J/A det * XIII
	BB	50.52	9	J/A det * XIII

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26277G3b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: ✓ GC __ HPLC
Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		%RPD Limit ≤ 52	Qualification Parent only / All Samples
	9	14		
BB	3.4	2.4	34	

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 26277G3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (20 std)	Recalculated CF (20 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/13/11	1260 - 1 2Bmulti R1	37	37	37	37	2.9	2.9
			✓ 2Bmulti R2	206	206	204	204	8.5	8.5
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G3b
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	3P20164.42R	6/16/11	Aroclor-1260 ZB5MultiR1	200.00	234.61	234.61	17.3	17.3
			↓ R2	200.00	217.30	217.30	8.7	8.7
2	3P20164.65R	6/16/11	↓	↓	247.11	247.11	23.6	23.6
					208.21	208.21	4.1	4.1
3	3P20164.77R	6/16/11	↓	200	228.49	228.49	14.2	14.2
			↓	↓	215.10	215.10	7.5	7.5
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TCMX	ZB-2	1.036	0.991772	96	96	0
PCB	ZB-1	1.036	~~0.958297~~	97	97	0
			1.010229			

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #:_____ VALIDATION FINDINGS WORKSHEET Page:__of__

SDG #: [illegible] Matrix Spike/Matrix Spike Duplicates Results Verification Reviewer: FZ

2nd Reviewer:

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration

SA = Spike added

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 16 + 17

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB-1260	16.56	16.56	3.05	20.01	21.85	102	102	113	113	9	9

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G3b
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS07162

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
PCB 1260	16.67	NA	22.41	NA	134	134	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 76377G3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ~~GC~~ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. 5 Compound Name Aroclor 1254

Concentration = $\frac{0.49223}{0.855}$

0.58 ug/kg

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications
	1254-1 = $\frac{(6289.850586)(3)}{(188)(60.4)}$ = 1.10784			1254-1 = 1.10793	
				-2 = 0.15900	
				-3 = 0.21484	
				Av= 0.49223	

Comments: [illegible]

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 6, 2011

Matrix: Soil/Water

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD
SL-076-SA8N-SB-4.0-5.0DUP

Introduction

This data review covers 17 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, 7470A, and 7471A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Magnesium Mercury	19.500 ug/L 0.116 ug/L	All water samples in SDG DE176
ICB/CCB	Magnesium Titanium	41.2 ug/L 0.60 ug/L	All water samples in SDG DE176
PB (prep blank)	Calcium Iron Lead Magnesium Phosphorus Tin	4.395 mg/Kg 4.735 mg/Kg 0.015 mg/Kg 1.035 mg/Kg 1.618 mg/Kg 1.792 mg/Kg	All soil samples in SDG DE176
ICB/CCB	Titanium	0.39 ug/L	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-076-SA8N-SB-4.0-5.0

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Titanium	0.55 ug/L	SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-023-SA5DN-SB-4.0-5.0	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-023-SA5DN-SB-20.0-21.0	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-025-SA5DN-SB-4.0-5.0	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-025-SA5DN-SB-23.0-24.0	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-028-SA5DN-SB-4.0-5.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-028-SA5DN-SB-11.5-12.5	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-051-SA5DN-SB-4.0-5.0	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-051-SA5DN-SB-14.0-15.0	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-076-SA8N-SB-4.0-5.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-076-SA8N-SB-7.5-8.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-106-SA8N-SB-2.5-3.5	Tin	3.2 mg/Kg	3.2U mg/Kg
SL-109-SA8N-SB-4.0-5.0	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-109-SA8N-SB-9.0-10.0	Tin	2.8 mg/Kg	2.8U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
DUP10-SA8N-QC-060811	Tin	2.8 mg/Kg	2.8U mg/Kg
EB16-SA8N-SB-060811	Mercury	0.060 ug/L	0.060U ug/L

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No metal contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB16-SA8N-SB-060811	6/8/11	Lead Mercury	0.066 ug/L 0.060 ug/L	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-076-SA8N-SB-4.0-5.0	Mercury	0.024 mg/Kg	0.024U mg/Kg
DUP10-SA8N-QC-060811	Mercury	0.032 mg/Kg	0.032U mg/Kg

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (All soil samples in SDG DE176)	Antimony	64 (75-125)	62 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-076-SA8N-SB-4.0-5.0MS/MSD (All soil samples in SDG DE176)	Beryllium	126 (75-125)	144 (75-125)	-	J (all detects)	A
	Cadmium	151 (75-125)	141 (75-125)	-	J (all detects)	
	Chromium	160 (75-125)	145 (75-125)	-	J (all detects)	
	Cobalt	147 (75-125)	138 (75-125)	-	J (all detects)	
	Copper	160 (75-125)	153 (75-125)	-	J (all detects)	
	Lead	205 (75-125)	179 (75-125)	-	J (all detects)	
	Molybdenum	153 (75-125)	141 (75-125)	-	J (all detects)	
	Nickel	183 (75-125)	173 (75-125)	-	J (all detects)	
	Selenium	136 (75-125)	-	-	J (all detects)	
	Silver	150 (75-125)	137 (75-125)	-	J (all detects)	
	Thallium	162 (75-125)	155 (75-125)	-	J (all detects)	
	Vanadium	204 (75-125)	189 (75-125)	-	J (all detects)	

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0DUP (All soil samples in SDG DE176)	Arsenic	23 (≤20)	-	J (all detects) UJ (all non-detects)	A
	Lead	21 (≤20)	-		
	Manganese	92 (≤20)	-		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-076-SA8N-SB-4.0-5.0	Chromium Copper Vanadium	15 (≤10) 13 (≤10) 15 (≤10)	All soil samples in SDG DE176	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE176	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Aluminum	24500	24700	1 (≤50)	-	-
Antimony	0.27	0.20	30 (≤50)	-	-
Arsenic	9.5	11.5	19 (≤50)	-	-
Barium	119	165	32 (≤50)	-	-
Beryllium	0.87	1.1	23 (≤50)	-	-
Boron	4.5	4.5	0 (≤50)	-	-
Cadmium	0.078	0.11	34 (≤50)	-	-
Calcium	2430	2430	0 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Chromium	18.8	22.3	17 (≤50)	-	-
Cobalt	6.6	8.7	27 (≤50)	-	-
Copper	10.2	12.6	21 (≤50)	-	-
Iron	23200	23100	0 (≤50)	-	-
Lead	7.7	9.7	23 (≤50)	-	-
Lithium	31.3	31.4	0 (≤50)	-	-
Magnesium	4360	4370	0 (≤50)	-	-
Manganese	280	230	20 (≤50)	-	-
Mercury	0.024	0.032	29 (≤50)	-	-
Molybdenum	1.2	1.5	22 (≤50)	-	-
Nickel	16.0	20.0	22 (≤50)	-	-
Phosphorus	238	240	1 (≤50)	-	-
Potassium	2160	2150	0 (≤50)	-	-
Selenium	0.13	0.13	0 (≤50)	-	-
Silver	0.070	0.088	23 (≤50)	-	-
Sodium	122	134	9 (≤50)	-	-
Strontium	16.8	16.9	1 (≤50)	-	-
Thallium	0.33	0.41	22 (≤50)	-	-
Tin	2.8	2.8	0 (≤50)	-	-
Titanium	1210	1190	2 (≤50)	-	-
Vanadium	40.1	49.0	20 (≤50)	-	-
Zinc	62.6	85.1	30 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Zirconium	3.5	3.1	12 (≤50)	-	-

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE176

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Beryllium Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium Vanadium	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Arsenic Lead Manganese	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Chromium Copper Vanadium	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE176	SL-023-SA5DN-SB-4.0-5.0	Tin	2.7U mg/Kg	A	B
DE176	SL-023-SA5DN-SB-20.0-21.0	Tin	2.5U mg/Kg	A	B
DE176	SL-025-SA5DN-SB-4.0-5.0	Tin	2.6U mg/Kg	A	B
DE176	SL-025-SA5DN-SB-23.0-24.0	Tin	2.5U mg/Kg	A	B
DE176	SL-028-SA5DN-SB-4.0-5.0	Tin	2.8U mg/Kg	A	B
DE176	SL-028-SA5DN-SB-11.5-12.5	Tin	2.4U mg/Kg	A	B
DE176	SL-051-SA5DN-SB-4.0-5.0	Tin	2.7U mg/Kg	A	B
DE176	SL-051-SA5DN-SB-14.0-15.0	Tin	2.5U mg/Kg	A	B
DE176	SL-076-SA8N-SB-4.0-5.0	Tin	2.8U mg/Kg	A	B
DE176	SL-076-SA8N-SB-7.5-8.5	Tin	3.0U mg/Kg	A	B
DE176	SL-106-SA8N-SB-2.5-3.5	Tin	3.2U mg/Kg	A	B
DE176	SL-109-SA8N-SB-4.0-5.0	Tin	3.0U mg/Kg	A	B
DE176	SL-109-SA8N-SB-9.0-10.0	Tin	2.8U mg/Kg	A	B
DE176	DUP10-SA8N-QC-060811	Tin	2.8U mg/Kg	A	B
DE176	EB16-SA8N-SB-060811	Mercury	0.060U ug/L	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE176

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE176	SL-076-SA8N-SB-4.0-5.0	Mercury	0.024U mg/Kg	A	F
DE176	DUP10-SA8N-QC-060811	Mercury	0.032U mg/Kg	A	F

LDC #: 26277G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-4-11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CC
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020/~~7000~~ 7420A/7471A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Nonvolitized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	SW	(9, 14)
XV	Field Blanks	SW	EB=15

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

Validated Samples: Soil/water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21		31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18	SL-076-SA8N-SB-4.0-5.0DUP	28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes: _____

DC #: 262764

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [illegible]

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

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were < 5X the RL.		✓		
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			/	
Do all applicable analysies have duplicate injections? (Level IV only)			/	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			/	
Were analytical spike recoveries within the 85-115% QC limits?			/	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	/			
Were all percent differences (%Ds) < 10%?		/		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			/	
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	/			
If the %Rs were outside the criteria, was a reanalysis performed?	/			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	/			
Target analytes were detected in the field duplicates.	/			
XV. Field blanks				
Field blanks were identified in this SDG.	/			
Target analytes were detected in the field blanks.	/			

LDC #: 26277C4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-15		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
16-18		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: NA

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Water Reason: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	15									
Mg		19.500	41.2	206										
Hg		0.116		0.58	0.060									
Ti			0.60	3										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Ca	4.395			21.98														
Fe	4.735			23.68														
Pb	0.015			0.08														
Mg	1.035			5.175														
P	1.618			8.09														
Sn	1.792			8.96	2.7	2.5	2.6	2.5	2.8	2.4	2.7	2.5	2.8	3.0	3.2	3.0	2.8	2.8

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2, 9

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			0.39	0.195										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3-8, 10-14

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			0.55	0.275										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U". Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CA
2nd Reviewer: L

METHOD: Trace Metals (EPA SW846 6010B/7000)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target analytes detected in the field blanks? Reason: F

Blank units: ug/L **Associated sample units:** mg/Kg

Sampling date: 6/8/11 Soil factor applied 100x; Hg=167x

Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: ~~All Soil~~ 9-14

Analyte	Blank ID	Sample Identification											
	15	Action Level	~~1~~	~~5~~	9	14							
Pb	0.066	0.033											
Hg	0.060	0.0501	~~0.019~~ CA	~~0.0085~~ CA	0.024	0.032							

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 26776H

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer:

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were ICP interference check samples performed as required?
(Y) N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	6/10/11	ICSA (12:29/1325	Mn	5	0.84	All Water	No Qual (<90% ICSA)
	6/18/11	ICSA (06:46/09:03)	Mn	4	0.78	All Soil	No Qual (<10x)

Comments:

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

(Y) N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	16/17	S	Sb	64	62		All Soil	J/UJ/A (Q)
			Be	126	144			J det/A
			Cd	151	141			
			Cr	160	145			
			Co	147	138			
			Cu	160	153			
			Pb	205	179			
			Mo	153	141			
			Ni	183	173			
			Se	136				
			Ag	150	137			
			Tl	162	155			
			V	204	189			

Comments: _____

MSD.4SW

LDC #: 26764

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤ 35% for soil samples? If no, see qualifications below. A control limit of ±R.L. (±2X R.L. for soil) was used for sample values that were <5X the R.L., including the case when only one of the duplicate sample values was <5X R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
		18	S	As	23 (≤20)		All Soil	J/UJ/A (E)
				Pb	21		↓	↓
				Mn	92 ↓			

Comments: _____

DUP.4SW

LDC #: 26077G4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y (N) N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y (N) N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		9	S	Cr	15	All Soil	J (UJ/A (A)
				Cu	13	↓	↓
				V	15		

Comments: _____

SDILICPMS.wpd

LDC#: 26277G4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	9	14		
Aluminum	24500	24700	1	
Antimony	0.27	0.20	30	
Arsenic	9.5	11.5	19	
Barium	119	165	32	
Beryllium	0.87	1.1	23	
Boron	4.5	4.5	0	
Cadmium	0.078	0.11	34	
Calcium	2430	2430	0	
Chromium	18.8	22.3	17	
Cobalt	6.6	8.7	27	
Copper	10.2	12.6	21	
Iron	23200	23100	0	
Lead	7.7	9.7	23	
Lithium	31.3	31.4	0	
Magnesium	4360	4370	0	
Manganese	280	230	20	
Mercury	0.024	0.032	29	
Molybdenum	1.2	1.5	22	
Nickel	16.0	20.0	22	

LDC#: 26277G4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	9	14		
Phosphorus	238	240	1	
Potassium	2160	2150	0	
Selenium	0.13	0.13	0	
Silver	0.070	0.088	23	
Sodium	122	134	9	
Strontium	16.8	16.9	1	
Thallium	0.33	0.41	22	
Tin	2.8	2.8	0	
Titanium	1210	1190	2	
Vanadium	40.1	49.0	20	
Zinc	62.6	85.1	30	
Zirconium	3.5	3.1	12	

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: GS
2nd Reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Sn	581.72	600	97.0	97.0	Y
ICV	ICP/MS (Initial calibration)	Pb	50.31	50	100.6	100.6	
ICV	CVAA (Initial calibration)	Hg	2.41	2.5	96.4	96.4	
CCV	ICP (Continuing calibration)	Sr	505.05	500	101.0	101.0	
CCV	ICP/MS (Continuing calibration)	Tl	25.06	25	100.2	100.2	
CCV	CVAA (Continuing calibration)	Hg	0.93	1.0	93.0	93.0	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277C4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	As	20.0	20.0	100.0	100.0	Y
LCS	Laboratory control sample	P	1065.3	1000	107	107	
16	Matrix spike	Cd	(SSR-SR) 1.6731	1.665	151	151	
18	Duplicate	K	2157.502	2581.3924	15	15	
9	ICP serial dilution	Mn	2532.27	2658.55	5	5	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 7627764

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 3
Reviewer: CR
2nd reviewer: _____

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{(100ml)(260.8487\ mg/L)}{0.882(1.0g)} = 29574.7\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	29600	29600	Y
		Sb	0.36	0.36	
		As	9.0	9.0	
		Ba	168	168	
		Be	1.1	1.1	
		B	8.9	8.9	
		Cd	0.32	0.32	
		Ca	13900	13900	
		Cr	35.4	35.4	
		Co	12.6	12.6	
		Cu	20.5	20.5	
		Fe	33400	33400	
		Pb	12.6	12.6	
		Li	26.5	26.5	
		Mg	6920	6920	
		Mn	362	362	
		Hg	0.019	0.019	
		Mo	0.59	0.59	
		Ni	26.7	26.7	
		P	308	308	

Note: _____

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for On were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

9: $\frac{100mL\ (21.92253\ mg/L)}{0.886\ (1.025)} = 2425.81\ mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	3550	3550	Y
		Se	0.12	0.12	
		Ag	0.055	0.055	
		Na	463	463	
		Sr	43.4	43.4	
		Tl	0.40	0.40	
		Sn	2.7	2.7	
		Ti	1050	1050	
		V	64.2	64.2	
		Zn	94.6	44.6	
		Zr	4.3	4.3	
	9	Al	24500	24500	
		Sb	0.27	0.27	
		As	9.5	9.5	
		Ba	119	119	
		Be	0.87	0.87	
		B	4.5	4.5	
		Cd	0.078	0.078	
		Ca	2430	2430	

Note: _____

LDC #: 7627764

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 3 of 3
Reviewer: AR
2nd reviewer: [signature]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: see Previous Page

#	Sample ID	Analyte	Reported Concentration (ug/L)	Calculated Concentration (ug/L)	Acceptable (Y/N)
	9	Cr	18.8	18.8	Y
		Co	6.6	6.6	
		Cu	10.2	10.2	
		Fe	23200	23200	
		Pb	7.7	7.7	
		Li	31.3	31.3	
		Mg	4360	4360	
		Mn	280	280	
		Hg	0.024	0.024	
		Mo	1.2	1.2	
		Ni	16.0	16.0	
		P	238	238	
		K	2160	2160	
		Se	0.13	0.13	
		Ag	0.070	0.070	
		Na	122	122	
		Sr	16.8	16.8	
		Tl	0.33	0.33	
		Sn	2.8	2.8	
		Ti	1210	1210	
		V	40.1	40.1	
		Zn	62.6	62.6	
		Zr	3.5	3.5	

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 20, 2011

Matrix: Soil/Water

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0DUP
SL-106-SA8N-SB-2.5-3.5MS
SL-106-SA8N-SB-2.5-3.5DUP

Introduction

This data review covers 18 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
EB16-SA8N-SB-060811	Hexavalent chromium	24.5 hours	24 hours	J (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No contaminant concentrations were found.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS (SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5)	Fluoride	29 (80-120)	J (all detects) R (all non-detects)	A

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-106-SA8N-SB-2.5-3.5MS (SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811)	Fluoride Nitrate as N	47 (80-120) 74 (80-120)	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE176	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Fluoride	2.5	2.6	4 (≤50)	-	-
Nitrate	1.5	2.0	29 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Hexavalent chromium	0.51	0.48	6 (≤50)	-	-

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE176

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE176	EB16-SA8N-SB-060811	Hexavalent chromium	J (all detects) UJ (all non-detects)	P	Technical holding times (H)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5	Fluoride	J (all detects) R (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE176	SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	Fluoride Nitrate as N	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G6 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-4-11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: AC
2nd Reviewer: W

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 6/8/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	Dup
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	(9, 14)
X	Field blanks	ND	EB=15

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: soil/water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21		31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0DUP	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18	#11 MS	28		38	
9	SL-076-SA8N-SB-4.0-5.0	19	#11 Dup	29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 627766

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: ✓

Method: Inorganics (EPA Method See cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.		✓		
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anayized for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26776

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [signature]

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
X. Field blanks				
Field blanks were identified in this SDG.	✓			
Target analytes were detected in the field blanks.		✓		

DC #: 2627766

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CR
2nd reviewer: W

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-14		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC (CR6+) (ClO4)
15		pH TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (CR6+) (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
QC: 16,17		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC (CR6+) (ClO4)
18,19		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4

Comments:

LDC #: 26776G

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Reviewer: SR
2nd reviewer: W

All circled dates have exceeded the technical holding time.
(Y) N N/A Were all samples preserved as applicable to each method ?
(Y) N N/A Were all cooler temperatures within validation criteria?

Method:	7199					
Parameters:	Cr+6					
Technical holding time:	24hrs					

Sample ID	Sampling date	Analysis date	Analysis date	Analysis date	Analysis date	Analysis date	Qualifier
15	6/8/11 13:45	6/9/11 14:21	(24.5hrs)				J/UJ/R (H)

LDC #: 26766

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Reviewer: CR
2nd Reviewer: [signature]

METHOD: Inorganics, Method SW846

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125~~ 80-120 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		16	G	F	29	~~ALL SAT~~ 1-10	J/R/A (Q)
		18	S	F	47	11-14	J/UJ/A (Q)
				NO_3	74	~~1-10~~	

Comments:

LDC# 26277G6

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Inorganics, Method See Cover

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/L) 9	Concentration (mg/L) 14	RPD (≤50)	
Fluoride	2.5	2.6	4	
Nitrate	1.5	2.0	29	
Hexavalent Chromium	0.51	0.48	6	

V:\FIELD DUPLICATES\FD_inorganic\26277G6.wpd

LDC #: 02145

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	F	1.6	1.5	107	-	Y
16	Matrix spike sample	CN	(SSR-SR) 4.6	4.78	96	97	/
17	Duplicate sample	NO_3	1.4	1.4	0	0	/

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26276G

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer:

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for GGT / F reported with a positive detect were recalculated and verified using the following equation:

Concentration =

GGT = Area(85.39) + 0.4357

F: y = 0.2018x - 0.0044

Recalculation: GGT = (0.1183(85.39) + 0.4357)(25.3) / 0.882 = 0.47 mg/L

9: F = ((0.039 + 0.0044 / 0.2018) × 50mL) / 4.91g(0.886) = 2.5 mg/kg

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
0.882	1	F	7.1	7.1	Y
		NO3	1.6	1.6	
		GGT	0.48	0.47	
0.886	9	F	2.5	2.5	
		NO3	1.5	1.5	
		GGT	0.51	0.50	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
TB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-060811 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 TB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G7 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/10/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: F
2nd Reviewer: A

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	% RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9 + 14
XIII.	Field blanks	ND	TB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1 1	SL-023-SA5DN-SB-4.0-5.0	11 1	SL-106-SA8N-SB-2.5-3.5	21 1	BLKH9	31	
2 1	SL-023-SA5DN-SB-20.0-21.0	12 1	SL-109-SA8N-SB-4.0-5.0	22 2	BLKHK	32	
3 1	SL-025-SA5DN-SB-4.0-5.0	13 2	SL-109-SA8N-SB-9.0-10.0	23 3	BLK13	33	
4 1	SL-025-SA5DN-SB-23.0-24.0	14 2	DUP10-SA8N-QC-060811	24		34	
5 1	SL-028-SA5DN-SB-4.0-5.0	15 3	TB-060811 W	25		35	
6 1	SL-028-SA5DN-SB-11.5-12.5	16 1	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7 1	SL-051-SA5DN-SB-4.0-5.0	17 1	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8 1	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9 1	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10 1	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 2027697
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26277G7
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (223 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	LUFT 34333 ICAL	11/29/10	GRO	35488	35488	37329	37329	12.7	12.7
				(552)	(552)				
2	LUFT 2016	6/15/11	↓	7581	7581	7279	7279	5.8	5.8
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 76277G7
SDG #: pw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FD
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	6/13/11	GRO	220.00	213.20	213.20	3.1	3.1
	11:00							
2	CCV	6/13/11	GRO	220.00	201.76	201.76	8.3	8.3
	20:39							
3	CCV	6/14/11	GRO	22000	194.07	194.07	11.8	11.8
	10:40							
4	CCV	6/16/11	GRO	550.00	568.92	568.92	3.4	3.4
	6:10							

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: /

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Trifluorotoluene	N5	636.3	509.1017	80	80	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: [illegible]
Reviewer: EZ
2nd Reviewer: [illegible]

METHOD: ✓GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SA = Spike added SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 16 + 17

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	--	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	9.26	9.26	ND	4.99	5.29	54	54	58	58	6	6
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26279J
SDG #: Lucas

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 111 64A34-A

Compound	Spike Added (mg/Kg)		Spiked Sample Concentration (mg/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	NA	8.37	NA	76	76				
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G7
SDG #: pu seven

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: P
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 8, 2011
LDC Report Date:	October 7, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
PBLK11167	6/16/11	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	All samples in SDG DE176

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-023-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.3 mg/Kg	1.4U mg/Kg
SL-023-SA5DN-SB-20.0-21.0	Extractable fuel hydrocarbons (C8-C11)	1.2 mg/Kg	1.3U mg/Kg
SL-025-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-025-SA5DN-SB-23.0-24.0	Extractable fuel hydrocarbons (C8-C11)	1.4 mg/Kg	1.4U mg/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-028-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	0.99 mg/Kg	1.4U mg/Kg
SL-028-SA5DN-SB-11.5-12.5	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.3U mg/Kg
SL-051-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-051-SA5DN-SB-14.0-15.0	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-076-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-076-SA8N-SB-7.5-8.5	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-106-SA8N-SB-2.5-3.5	Extractable fuel hydrocarbons (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-109-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-109-SA8N-SB-9.0-10.0	Extractable fuel hydrocarbons (C8-C11)	0.95 mg/Kg	1.4U mg/Kg
DUP10-SA8N-QC-060811	Extractable fuel hydrocarbons (C8-C11)	0.99 mg/Kg	1.4U mg/Kg

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	Extractable fuel hydrocarbons (C15-C20) Extractable fuel hydrocarbons (C21-C30) Extractable fuel hydrocarbons (C30-C40)	125 (49-123) - -	150 (49-123) 158 (49-123) 240 (49-123)	- - 51 (≤20)	J (all detects) J (all detects) J (all detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Extractable fuel hydrocarbons (C21-C30)	2.1	2.5	17 (≤50)	-	-
Extractable fuel hydrocarbons (C30-C40)	4.8	5.4	12 (≤50)	-	-
Extractable fuel hydrocarbons (C8-C11)	1.2	0.99	19 (≤50)	-	-
Extractable fuel hydrocarbons (C15-C20)	1.4U	0.54	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C15-C20) Extractable fuel hydrocarbons (C21-C30)	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-076-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C30-C40)	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)
DE176	SL-076-SA8N-SB-4.0-5.0 DUP10-SA8N-QC-060811	Extractable fuel hydrocarbons (C15-C20)	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE176	SL-023-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-023-SA5DN-SB-20.0-21.0	Extractable fuel hydrocarbons (C8-C11)	1.3U mg/Kg	A	B
DE176	SL-025-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-025-SA5DN-SB-23.0-24.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-028-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-028-SA5DN-SB-11.5-12.5	Extractable fuel hydrocarbons (C8-C11)	1.3U mg/Kg	A	B
DE176	SL-051-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-051-SA5DN-SB-14.0-15.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE176	SL-076-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-076-SA8N-SB-7.5-8.5	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-106-SA8N-SB-2.5-3.5	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-109-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-109-SA8N-SB-9.0-10.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	DUP10-SA8N-QC-060811	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G8 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/7/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer:

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%D/RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW	D = 9, 14
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK11167	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 462764
DG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26277G8
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?		✓		
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G8

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

(B)

Blank extraction date: ~~6/8/11~~ 6/16/11 **Blank analysis date:** 6/18/11 **Associated samples:** All
Conc. units: mg/kg

Compound	Blank ID	5X	Sample Identification					
	PBLK11167		1	2	3	4	5	6
EFH (C8-C11)	1.1	5.5	1.3/1.4U	1.2/1.3U	1.1/1.4U	1.4/U	0.99/1.4U	1.1/1.3U

Blank extraction date: 6/16/11 **Blank analysis date:** 6/18/11 **Associated samples:** All
Conc. units: mg/kg

Compound	Blank ID	Sample Identification						
	PBLK11167	7	8	9	10	11	12	13
EFH (C8-C11)	1.1	1.1/1.4U	1.1/1.4U	1.2/1.4U	~~1.8/U~~ 1.1/1.4U	1.2/1.4U	1.2/1.4U	0.95/1.4U
↓	↓	14						
↓		0.99/1.4U						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26277GS

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15 + 16	EFH (C15-C20)	125 (49-123)	150 (49-123)	( )	9	J/A det (Q)
		EFH (C21-C30)	( )	158 (49-123)	( )	↓	↓
		EPH (C30-C46)	( )	240 (49-123)	51 (20)	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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LDC#: 26277G8

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: F
2nd Reviewer: A

METHOD: TPH Extractables (EPA Method 8015B)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

(FD)

Compound	Concentration (mg/Kg)		≤ 50 RPD	
	9	14		
EFH (C21-C30)	2.1	2.5	17	
EFH (C30-C40)	4.8	5.4	12	
EFH (C8-C11)	1.2	0.99	19	
EFH (C15-C20)	1.4U	0.54	200	J/UJ/A

V:\FIELD DUPLICATES\templates\26277G8.wpd

LDC #: 26277G8
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: F
2nd Reviewer: A

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (288 std)	Recalculated CF (288 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL 28-5	5/22/11	C8-C40	20047.44	20047.44	2067.85	2067.85	5.1	5.1
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 76277G8
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	J168.37R	6/18/11	C8-C40	287.98	304.00	304.00	5.6	5.6
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	NS	1.0	0.63506	64	64	0
orthoterphenyl	↓	1.0	0.807792	81	81	↓

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #:_____ VALIDATION FINDINGS WORKSHEET Page:___of___

SDG #: per cover

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ

2nd Reviewer:

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EFH (08-011)	0.84	0.84	1.04	1.58	1.73	64	64	83	83	9	9

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26271O8
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS11167

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C8-C11)	0-84	NA	0-69	NA	82	82	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277A8
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: EB
2nd Reviewer: A

METHOD: GC HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name $C_{30}-C_{40}$

Concentration = $\frac{171242 \; (1000)}{20671.85 \; (60) \; (0.882) \; (1000)}$

$= 1.6 \text{ mg/kg}$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil

Parameters: Explosives

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	1,3,5-Trinitrobenzene	-	76 (82-126)	-	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS08164	PETN	123 (80-120)	All samples in SDG DE176	J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No explosives were detected in any of the samples.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0	1,3,5-Trinitrobenzene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	PETN	J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G40 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/10/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%RSD ≤20, r²≥
III.	Calibration verification/ICV	A	%R ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9, 14
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK 08/16	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 1027764D
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: C

Method: GC / HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26277G4U
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ____HPLC

8310	8330	8151	8141	8141(Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2,4,6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotolune	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	
O. Phenanthrene	O.		O. Chlorpyrifos		
P. Pyrene	P.		P. Fenthion		
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichloronate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes:_____

LDC #: 26277G40

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: C

METHOD: __ GC / HPLC (HAA)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15+16	C	( )	76 (82-126)	( )	9	J/UJ/A (Q)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277G40

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: __ GC / HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS08164	PETN	123 (80-120)	( )	( )	All	J/pdet (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277G4U
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: F
2nd Reviewer: A

METHOD: GC ✓ HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (501.0/499.5 std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	chromack ICAL	5/31/11	1,3,5 - TNB	1.97×10^2	1.97×10^2	2.00×10^2	2.0×10^2	0.8	0.8
			Nitrobenzene	1.98×10^2	1.98×10^2	2.00×10^2	2.0×10^2	1.8	1.8
2	CAPCELL	5/31/11	↓	3.31×10^2	3.31×10^2	3.32×10^2	3.32×10^2	7.0	7.0
				1.81×10^2	1.81×10^2	1.83×10^2	1.83×10^2	5.8	5.8
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 46277Q4C
SDG #: fw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC W HPLC /

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 19:07	6/16/11	1,3,5 - TNB chrompack	500.50	503.48	503.48	0.6	0.6
			Nitrobenzene	499.50	508.04	508.04	1.7	1.7
	CCV 3:36	6/17/11	↓	1001.00	1013.72	1013.72	1.3	1.3
2			↓	999.00	1053.88	1053.88	5.5	5.5
3	CCV 19:07	6/16/11	↓ capcell	500.50	469.11	469.11	6.3	6.3
			↓	499.50	491.92	491.92	1.5	1.5
	CCV 3:36	6/17/11	↓	1001.00	990.10	990.10	1.1	1.1
4			↓	999.00	987.69	98769	1.1	1.1

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 20211470

SDG #: see cover

METHOD: ___ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2. Nitro. m-xylene	CAPCELL	1922.68	2293.756	119	119	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 22474C0

SDG #: per cover

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ

2nd Reviewer: [signature]

METHOD: __ GC ~~/~~ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SA = Spike added SC = Sample concentration

RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/Kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)	1851.85	1851.85	ND	1535.48	1505.63	83	83	81	81	2	2
2,4,6-Trinitrotoluene (8330)	↓	↓	↓	1783.86	1788.3	96	96	97	97	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26271G4U
SDG #: µ1 cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ___ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 08164

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2000	NA	2056.69	NA	103	103				
2,4,6-Trinitrotoluene (8330)	1999.2	↓	2108.01	↓	120	120	NR			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26776H0
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: __ GC __/__ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALow.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Terphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-028-SA5DN-SB-4.0-5.0	n-Triacontane-d62	151 (50-150)	All TCL compounds	J (all detects)	P

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	m-Terphenyl	74 (75-125)	-	-	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-028-SA5DN-SB-4.0-5.0	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
DE176	SL-076-SA8N-SB-4.0-5.0	m-Terphenyl	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G41 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/9/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9 & 14
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
soil

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK05166	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: K27164
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26277G4 1
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G4/

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	5	NS	Z	151 (50-150)	J/Pdet (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	n-Triacontane-d62
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277G4/

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: / **GC** ___ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15 + 16	m-Terphenyl	74 (75-125)	( )	( )	9	J/UJ/A (a)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277G4/
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC_____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported 15-5W CF (std)	Recalculated 15-5W CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	m-terphenyl	2.51 X10^4	2.51 X10^4	2.48 X10^4	2.48 X10^4	1.8	1.8
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 76277G4/
SDG #: pw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	R167.01R	6/16/11	m-Terphenyl	31.04	30.85	30.85	0.6	0.6
2	R167.12R	6/16/11	↓	↓	31.30	31.30	0.8	0.8
	R167.23R	6/17/11	↓	↓	31.17	31.17	0.4	0.4
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Triacontane-d62	SPB-5	0.33330	0.278307	83	83	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]

SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: EZ

2nd Reviewer: [illegible]

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (mg/Kg)		Sample Conc. (mg/Kg)	Spike Sample Concentration (mg/Kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
m-Terphenyl	1.65	1.65	NO	1.22	1.35	74	74	82	82	10	10

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G4/
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS05166

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl	1.65	1.6 NA	1.4	NA	85	85	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G4/
SDG #: pu sonen

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: A

METHOD: / GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Quallfications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No alcohols were detected in any of the samples.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G43 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer: AL

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation(RL)/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9, 14
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK24160	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	PBLK18161	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 26277643
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: / GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples	✓			
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26277G43
SDG #: all cancel

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G43
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported CF (5000_{std})	Recalculated CF (5000_{std})	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/19/11	Methanol	2.82×10^{0}	2.82×10^{0}	2.95×10^{0}	2.95×10^{0}	12.3	10.3
2	ICAL	5/26/11	↓	9.04×10^{0}	9.04×10^{0}	8.95×10^{0}	8.95×10^{0}	2.0	2.0
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277943
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 19:53	6/9/11	methanol	10000	8870.95	8870.95	11.3	11.3
	CCV 23:06	6/9/11	methanol	↓	9242.42	9242.42	7.6	7.6
2								
	CCV 19:14	6/10/11	methanol	↓	9409.92	9409.92	5.9	5.9
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 22124C7

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: C

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	NS	2500	1882.7632	75	75	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 21747 (1)
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SA = Spike added SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Methanol	2500	2500	no	182159	185185	73	73	74	74	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26271G43
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: KJ
2nd Reviewer: C

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS-24160

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol	2500	NA	2187.09	NA	87	87	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G43
SDG #: pu prev

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Quallfications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	Ethylene glycol Propylene glycol Diethylene glycol	- - 54 (59-109)	56 (63-107) 59 (63-107) 44 (59-109)	22 (≤20) 23 (≤20) -	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No glycols were detected in any of the samples.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0	Ethylene glycol Propylene glycol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE176	SL-076-SA8N-SB-4.0-5.0	Diethylene glycol	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G45 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9, 14
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK25160	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes: _____

DC #: 26277G45
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: / GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) < 20%?	/			
Was a curve fit used for evaluation?		/		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			/	
Were the RT windows properly established?	/			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	/			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	/			
Were all the retention times within the acceptance windows?	/			
V. Blanks				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	/			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			/	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	/			
Was a MS/MSD analyzed every 20 samples of each matrix?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		/		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	

LDC #: 26277G45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification.				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G45

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y (N) N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y (N) N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15+16	Ethylene glycol	( )	56 (63-107)	22 (20)	9	J/UJ/A (Q)
		Propylene glycol	( )	59 (63-107)	23 (20)	↓	↓
		Diethylene glycol	54 (59-109)	44 (59-109)	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277945
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

4

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				191.6874 CF (207.1872 std)	191.6874 CF (207.1872 std)	Average CF (initial)	Average CF (initial)	%RSD	%RSD
1	ICAL	6/11/11	ethylene glycol	3.44×10^2	3.44×10^2	3.30×10^2	3.30×10^2	10.6	10.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G45
SDG #: pw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 12:11	6/11/11	ethylene glycol	103.59	107.55	107.55	3.8	3.8
	CCV 15:23	6/11/11	↓	↓	109.00	109.00	5.2	5.2
2								
	CCV 18:23	6/11/11	↓	↓	106.67	106.67	3.0	3.0
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	NS	193	172.039948	89	89	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26171A3

SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1

Reviewer: EZ

2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration

SA = Spike added

RPD =({(SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Ethylene Glycol	225.43	225.43	ND	157.11	175.99	70	70	56	56	22	22

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G45
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: EO
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 25160

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
ethylene glycol	225.43	NA	240.49	NA	107	107	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G45
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

KD

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No formaldehyde was detected in any of the samples.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G71 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: ET
2nd Reviewer:

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D= 9,14
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK011166	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811 D	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0 D	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 26277G7
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 76277G1
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G7/
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC_____HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (W02 std)	Recalculated CF (W02 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/16/11	Formaldehyde	6.74X10'	6.74X10'	6.64 X10'	6.64X10'	8.8	8.8
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G71
SDG #: fw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 7
Reviewer: FD
2nd Reviewer: [illegible]

METHOD: GC_____HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	6/16/11	formaldehyde	2002.000	2024.74	2024.74	1.1	1.1
	23:03							
2	ccv	6/17/11	↓	↓	2024.19	2024.19	1.1	1.1
	0:48							
3	ccv	6/17/11	↓	↓	2020.32	2020.32	0.9	0.9
	2:33							
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ___ GC ~~HPLC~~

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: A

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	NS	3967.5	4245.23	107	107	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer: A

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Formaldehyde	5010	5010	ND	4565.18	4543.51	91	91	92	92	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G7/
SDG #: pc cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [redacted]
2nd Reviewer: [redacted]

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: ICS 011166

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
formaldehyde	5010	NA	4530.96	NA	90	90	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: __ GC ✓ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #12 Compound Name Formaldehyde

Concentration = $\frac{158123 \quad (200,000)\ (0.1)}{6.64 \times 10^7 \quad (20)\ (0.872)\ (1000)}$

= 2730.9 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: [illegible]

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Perchlorate

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-20.0-21.0
SL-028-SA5DN-SB-4.0-5.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-20.0-21.0 SL-028-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G87 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer:

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r^2 r^2 ICV/CCV ≤ 15/50 LODY ≤ 50
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 15/50 LODY ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-20.0-21.0	11	PBLK191166	21		31	
2	SL-028-SA5DN-SB-4.0-5.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26277487

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: [illegible]

LCMS Perchlorate (EPA Method 6850)

Method: ~~Semivolatiles (EPA SW-846 Method 8270C)~~

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ~~≤ 25%~~ 15/50 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix Spike/Matrix Spike Duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277687

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 26277687
SDG# See cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: EJ
2nd Reviewer: AA

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
06/20/2011	LCMS	perchlorate	0.03	0.020	0.0004
			0.04	0.040	0.0016
			0.10	0.100	0.0100
			0.27	0.200	0.0400
			0.41	0.400	0.1600
			1.10	1.000	1.0000
			3.19	2.500	6.2500

Regression Output:		Regression Output:	Reported	
Constant		0.01870		1.8700E-002
Std Err of Y Est		0.03169		
R Squared		0.99949		0.99949
No. of Observations		7.00000		
Degrees of Freedom		4.00000		
X Coefficient(s)	9.669E-001	0.12	0.09670	1.20E-001
Std Err of Coef.	0.060943	0.02		

LDC #: 26277G87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270C)~~, Method 6850

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	MSSP/6811010	6/18/11	~~Phenol (1st internal standard)~~ Perchlorate	4	4.42	4.42	11	11
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 46277G8/

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ Method 8321

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 19166

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
Perchlorate	100	NA	104	NA	104	104	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 8270

Y N ~~N/A~~ Were all reported results recalculated and verified for all level IV samples?
Y N ~~N/A~~ Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____, _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)(\quad)(\quad)}$

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE177

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	TB-060911	6312180	TB	5030B	8015M	III
09-Jun-2011	TB-060911	6312180	TB	5030B	8260B	III
09-Jun-2011	TB-060911	6312180	TB	5030B	8260B SIM	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3050B	6010B	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3050B	6020	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3060A	7199	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3550B	8082	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3550B	8270C	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3550B	8270C SIM	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	5035	8260B	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	5035	8260B SIM	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	METHOD	300.0	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	METHOD	314.0	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	METHOD	7471A	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3050B	6010B	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3050B	6020	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3060A	7199	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3550B	8082	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3550B	8270C	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3550B	8270C SIM	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	METHOD	300.0	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	METHOD	314.0	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	METHOD	7471A	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3050B	6010B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3050B	6020	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3546	1625C	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8015B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8082	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8270C	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8270C SIM	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	5035	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	5035	8260B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	5035	8260B SIM	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	8330	8330A	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	300.0	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	314.0	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	7471A	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	8015B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	8315A	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	9012B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0DU	P312175D270338B	DUP	METHOD	300.0	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0MS	P312175R270353B	MS	METHOD	300.0	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3050B	6010B	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3050B	6020	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3060A	7199	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3546	1625C	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8015B	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8270C	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8270C SIM	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	5035	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	5035	8260B	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	5035	8260B SIM	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	8330	8330A	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	300.0	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	314.0	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	7471A	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	8015B	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	8315A	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	9012B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3050B	6010B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3050B	6020	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3060A	7199	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3546	1625C	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8015B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8082	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8270C	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8270C SIM	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	5035	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	5035	8260B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	5035	8260B SIM	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	300.0	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	314.0	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	7471A	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	8015B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	8315A	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	9012B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3050B	6010B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3050B	6020	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3060A	7199	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3546	1625C	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8015B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8082	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8270C	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8270C SIM	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	5035	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	5035	8260B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	5035	8260B SIM	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	8330	8330A	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	300.0	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	314.0	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	7471A	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	8015B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	9012B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3050B	6010B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3050B	6020	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3060A	7199	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3546	1625C	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8015B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8015M	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8082	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8270C	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8270C SIM	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	5035	8015M	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	5035	8260B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	5035	8260B SIM	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	8330	8330A	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	300.0	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	314.0	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	7471A	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	8015B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	8015M	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	8315A	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	9012B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0DUP	P312179D271217B	DUP	METHOD	314.0	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0MS	P312179R271241B	MS	METHOD	314.0	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	3510C	8015B	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	3510C	8015M	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	3520C	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	5030B	8015M	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	8330	8330A	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	Gen Prep	300.0	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	Gen Prep	8015B	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	Gen Prep	8015M	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	METHOD	8315A	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	METHOD	9012B	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	3510C	8015B	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	3510C	8015M	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	3520C	1625C	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	5030B	8015M	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	8330	8330A	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	Gen Prep	300.0	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	Gen Prep	8015B	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	Gen Prep	8015M	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	METHOD	8315A	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	METHOD	9012B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3050B	6010B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3050B	6020	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3060A	7199	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3546	1625C	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8015B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8082	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8270C	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	5035	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	5035	8260B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	5035	8260B SIM	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	8330	8330A	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	300.0	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	314.0	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	7471A	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	8015B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	8315A	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	9012B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3050B	6010B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3050B	6020	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3060A	7199	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3546	1625C	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8015B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8082	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8270C	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8270C SIM	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	5035	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	5035	8260B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	5035	8260B SIM	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	8330	8330A	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	300.0	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	6850	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	7471A	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	8015B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	8315A	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	9012B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3050B	6010B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3050B	6020	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3060A	7199	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3546	1625C	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8015B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8082	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8270C	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8270C SIM	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	5035	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	5035	8260B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	5035	8260B SIM	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	8330	8330A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	300.0	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	314.0	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	7471A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	8015B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	8315A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0DU	P312169D220259	DUP	3050B	6010B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0DU	P312169D220737A	DUP	3050B	6020	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0DU	P312169D270647A	DUP	METHOD	314.0	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R220302	MS	3050B	6010B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R220739A	MS	3050B	6020	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R240320A	MS	METHOD	8315A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R240921A	MS	3550B	8082	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R242159A	MS	8330	8330A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R260715	MS	3550B	8270C	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R261146	MS	3550B	8270C SIM	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R261926	MS	3546	1625C	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R270711A	MS	METHOD	314.0	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R320317A	MS	3550B	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3050B	6010B	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3050B	6020	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3060A	7199	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3546	1625C	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8015B	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8082	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8270C	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8270C SIM	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	5035	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	5035	8260B	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	5035	8260B SIM	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	300.0	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	314.0	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	7471A	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	8015B	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	8315A	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.3	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.97	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.6	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.2	J	0.85	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	9.2		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	23100		6.63	MDL	21.9	PQL	mg/Kg	J	E
BORON	2.56	J	0.394	MDL	5.48	PQL	mg/Kg	U	B
MANGANESE	237		0.0394	MDL	0.548	PQL	mg/Kg	J	E, E
PHOSPHORUS	424		0.383	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2190		12.4	MDL	54.8	PQL	mg/Kg	J	Q
TIN	3.16	J	0.351	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.33	J	0.504	MDL	5.48	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	30800		7.02	MDL	23.2	PQL	mg/Kg	J	E
MANGANESE	452		0.0418	MDL	0.580	PQL	mg/Kg	J	E, E
PHOSPHORUS	286		0.406	MDL	11.6	PQL	mg/Kg	J	Q
POTASSIUM	4100		13.1	MDL	58.0	PQL	mg/Kg	J	Q
TIN	2.91	J	0.371	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.69	J	0.534	MDL	5.80	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-10.5-11.5 ***Collected:*** 6/9/2011 2:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15100		6.44	MDL	21.3	PQL	mg/Kg	J	E
BORON	2.26	J	0.383	MDL	5.32	PQL	mg/Kg	U	B
MANGANESE	134		0.0383	MDL	0.532	PQL	mg/Kg	J	E, E
PHOSPHORUS	129		0.372	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	1820		12.0	MDL	53.2	PQL	mg/Kg	J	Q
TIN	2.55	J	0.340	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.489	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 2:10:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	30000		6.69	MDL	22.1	PQL	mg/Kg	J	E
MANGANESE	391		0.0398	MDL	0.553	PQL	mg/Kg	J	E, E
PHOSPHORUS	273		0.387	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3890		12.5	MDL	55.3	PQL	mg/Kg	J	Q
TIN	2.43	J	0.354	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.29	J	0.509	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-11.5-12.5 ***Collected:*** 6/9/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17100		6.87	MDL	22.7	PQL	mg/Kg	J	E
BORON	2.61	J	0.409	MDL	5.68	PQL	mg/Kg	U	B
MANGANESE	218		0.0409	MDL	0.568	PQL	mg/Kg	J	E, E
PHOSPHORUS	269		0.397	MDL	11.4	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-039-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1950		12.8	MDL	56.8	PQL	mg/Kg	J	Q
TIN	2.56	J	0.363	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.98	J	0.522	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	31900		7.07	MDL	23.4	PQL	mg/Kg	J	E
MANGANESE	387		0.0421	MDL	0.584	PQL	mg/Kg	J	E, E
PHOSPHORUS	298		0.409	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	3920		13.2	MDL	58.4	PQL	mg/Kg	J	Q
TIN	3.03	J	0.374	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	4.91	J	0.537	MDL	5.84	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	2970		6.26	MDL	20.7	PQL	mg/Kg	J	E
BORON	1.93	J	0.373	MDL	5.18	PQL	mg/Kg	U	B
LITHIUM	1.3	J	0.64	MDL	2.1	PQL	mg/Kg	J	Z
MANGANESE	126		0.0373	MDL	0.518	PQL	mg/Kg	J	E, E
PHOSPHORUS	324		0.362	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	459		11.7	MDL	51.8	PQL	mg/Kg	J	Q
TIN	1.83	J	0.331	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.74	J	0.476	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	29900		6.71	MDL	22.2	PQL	mg/Kg	J	E
MANGANESE	372		0.0399	MDL	0.554	PQL	mg/Kg	J	E, E
PHOSPHORUS	259		0.388	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3720		12.5	MDL	55.4	PQL	mg/Kg	J	Q
TIN	3.44	J	0.355	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	4.28	J	0.510	MDL	5.54	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-050-SA5DN-SB-11.2-12.5 *Collected:* 6/9/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20100		6.67	MDL	22.1	PQL	mg/Kg	J	E
BORON	4.30	J	0.397	MDL	5.51	PQL	mg/Kg	U	B
MANGANESE	271		0.0397	MDL	0.551	PQL	mg/Kg	J	E, E
PHOSPHORUS	251		0.386	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2990		12.5	MDL	55.1	PQL	mg/Kg	J	Q
TIN	2.49	J	0.353	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.83	J	0.507	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 9:25:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	32800		6.78	MDL	22.4	PQL	mg/Kg	J	E
MANGANESE	372		0.0403	MDL	0.560	PQL	mg/Kg	J	E, E
PHOSPHORUS	251		0.392	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	3610		12.7	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.73	J	0.359	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17400		6.84	MDL	22.6	PQL	mg/Kg	J	E
BORON	3.16	J	0.407	MDL	5.65	PQL	mg/Kg	U	B
MANGANESE	212		0.0407	MDL	0.565	PQL	mg/Kg	J	E, E
PHOSPHORUS	490		0.396	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3240		12.8	MDL	56.5	PQL	mg/Kg	J	Q
SODIUM	101	J	6.73	MDL	113	PQL	mg/Kg	J	Z
TIN	2.60	J	0.362	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.73	J	0.520	MDL	5.65	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.161	J	0.0635	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.3		0.0111	MDL	0.217	PQL	mg/Kg	J	Q, A

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0811	MDL	0.219	PQL	mg/Kg	J	Z
ARSENIC	8.41		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
BERYLLIUM	0.926		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	29.2		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COPPER	16.8		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
NICKEL	18.1		0.110	MDL	0.438	PQL	mg/Kg	J	Q
SILVER	0.0679	J	0.0156	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	68.9		0.613	MDL	3.29	PQL	mg/Kg	J	A, Q

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.230	J	0.0679	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	9.77		0.0123	MDL	0.241	PQL	mg/Kg	J	Q, A

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.17		0.0937	MDL	0.468	PQL	mg/Kg	J	Q
BERYLLIUM	0.848		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	36.2		0.141	MDL	0.468	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	20.6		0.0937	MDL	0.468	PQL	mg/Kg	J	Q
NICKEL	23.9		0.117	MDL	0.468	PQL	mg/Kg	J	Q
SILVER	0.0533	J	0.0166	MDL	0.117	PQL	mg/Kg	J	Z
ZINC	77.3		0.656	MDL	3.51	PQL	mg/Kg	J	A, Q

Sample ID: SL-038-SA5DN-SB-10.5-11.5 ***Collected:*** 6/9/2011 2:20:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.66		0.0108	MDL	0.213	PQL	mg/Kg	J	Q, A

Sample ID: SL-038-SA5DN-SB-10.5-11.5 ***Collected:*** 6/9/2011 2:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.165	J	0.0810	MDL	0.219	PQL	mg/Kg	J	Z
ARSENIC	6.27		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
BERYLLIUM	0.721		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0777	J	0.0482	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	20.0		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COPPER	9.57		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
NICKEL	11.5		0.110	MDL	0.438	PQL	mg/Kg	J	Q
SILVER	0.0162	J	0.0156	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	47.1		0.613	MDL	3.29	PQL	mg/Kg	J	A, Q

Sample ID: SL-038-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 2:10:00 PM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.229	J	0.0674	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 2:10:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	18.3		0.0114	MDL	0.223	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-038-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 2:10:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.91		0.0929	MDL	0.465	PQL	mg/Kg	J	Q
BERYLLIUM	1.06		0.0186	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	36.4		0.139	MDL	0.465	PQL	mg/Kg	J	Q
COPPER	21.0		0.0929	MDL	0.465	PQL	mg/Kg	J	Q
NICKEL	27.3		0.116	MDL	0.465	PQL	mg/Kg	J	Q
SILVER	0.0623	J	0.0165	MDL	0.116	PQL	mg/Kg	J	Z
ZINC	105		0.650	MDL	3.48	PQL	mg/Kg	J	A, Q

Sample ID: SL-039-SA5DN-SB-11.5-12.5 ***Collected:*** 6/9/2011 11:45:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.16		0.0111	MDL	0.218	PQL	mg/Kg	J	Q, A

Sample ID: SL-039-SA5DN-SB-11.5-12.5 ***Collected:*** 6/9/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.133	J	0.0808	MDL	0.218	PQL	mg/Kg	J	Z
ARSENIC	5.50		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.773		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	30.0		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COPPER	9.58		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
NICKEL	13.0		0.109	MDL	0.437	PQL	mg/Kg	J	Q
ZINC	48.7		0.611	MDL	3.27	PQL	mg/Kg	J	A, Q

Sample ID: SL-039-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 11:35:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0658	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 11:35:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.1		0.0119	MDL	0.234	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-039-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 11:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.80		0.0907	MDL	0.454	PQL	mg/Kg	J	Q
BERYLLIUM	1.16		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	44.2		0.136	MDL	0.454	PQL	mg/Kg	J	Q
COPPER	25.0		0.0907	MDL	0.454	PQL	mg/Kg	J	Q
NICKEL	32.3		0.113	MDL	0.454	PQL	mg/Kg	J	Q
SILVER	0.0890	J	0.0161	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	107		0.635	MDL	3.40	PQL	mg/Kg	J	A, Q

Sample ID: SL-040-SA5DN-SB-10.5-11.5 **Collected:** 6/9/2011 10:39:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	2.01		0.0106	MDL	0.207	PQL	mg/Kg	J	Q, A

Sample ID: SL-040-SA5DN-SB-10.5-11.5 **Collected:** 6/9/2011 10:39:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.114	J	0.0759	MDL	0.205	PQL	mg/Kg	J	Z
ARSENIC	2.50		0.0820	MDL	0.410	PQL	mg/Kg	J	Q
BERYLLIUM	0.143		0.0164	MDL	0.103	PQL	mg/Kg	J	Q
CADMIUM	0.0879	J	0.0451	MDL	0.103	PQL	mg/Kg	J	Z
CHROMIUM	12.4		0.123	MDL	0.410	PQL	mg/Kg	J	Q
COPPER	2.61		0.0820	MDL	0.410	PQL	mg/Kg	J	Q
NICKEL	6.64		0.103	MDL	0.410	PQL	mg/Kg	J	Q
ZINC	10.1		0.574	MDL	3.08	PQL	mg/Kg	J	A, Q

Sample ID: SL-040-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 10:20:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0656	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 10:20:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	14.1		0.0118	MDL	0.231	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.56		0.0904	MDL	0.452	PQL	mg/Kg	J	Q
BERYLLIUM	0.872		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	33.7		0.136	MDL	0.452	PQL	mg/Kg	J	Q
COPPER	18.8		0.0904	MDL	0.452	PQL	mg/Kg	J	Q
NICKEL	25.2		0.113	MDL	0.452	PQL	mg/Kg	J	Q
SILVER	0.0528	J	0.0160	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	93.1		0.633	MDL	3.39	PQL	mg/Kg	J	A, Q

Sample ID: SL-050-SA5DN-SB-11.2-12.5 *Collected:* 6/9/2011 9:30:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	10.5		0.0110	MDL	0.216	PQL	mg/Kg	J	Q, A

Sample ID: SL-050-SA5DN-SB-11.2-12.5 *Collected:* 6/9/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.85		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.799		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	28.0		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COPPER	14.8		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
NICKEL	22.4		0.109	MDL	0.437	PQL	mg/Kg	J	Q
SILVER	0.0408	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	63.1		0.611	MDL	3.28	PQL	mg/Kg	J	A, Q

Sample ID: SL-050-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 9:25:00 AM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0900	J	0.0656	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 9:25:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.7		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-050-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 9:25:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.198	J	0.0837	MDL	0.226	PQL	mg/Kg	J	Z
ARSENIC	5.57		0.0905	MDL	0.453	PQL	mg/Kg	J	Q
BERYLLIUM	0.892		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	33.3		0.136	MDL	0.453	PQL	mg/Kg	J	Q
COPPER	16.8		0.0905	MDL	0.453	PQL	mg/Kg	J	Q
NICKEL	22.7		0.113	MDL	0.453	PQL	mg/Kg	J	Q
SILVER	0.0407	J	0.0161	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	69.5		0.634	MDL	3.39	PQL	mg/Kg	J	A, Q

Sample ID: SL-116-SA8N-SB-4.0-5.0 ***Collected:*** 6/9/2011 12:25:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0643	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA8N-SB-4.0-5.0 ***Collected:*** 6/9/2011 12:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	12.5		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, A

Sample ID: SL-116-SA8N-SB-4.0-5.0 ***Collected:*** 6/9/2011 12:25:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.112	J	0.0821	MDL	0.222	PQL	mg/Kg	J	Z
ARSENIC	5.22		0.0887	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	0.690		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	25.4		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COPPER	14.3		0.0887	MDL	0.444	PQL	mg/Kg	J	Q
NICKEL	16.8		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0783	J	0.0157	MDL	0.111	PQL	mg/Kg	J	Z
ZINC	78.5		0.621	MDL	3.33	PQL	mg/Kg	J	A, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.73	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 9:25:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0157	J	0.0073	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0084	J	0.0081	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0332	J	0.0080	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0355	J	0.0078	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0154	J	0.0078	MDL	0.110	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** AQ

Sample ID: EB16-SA5DN-SB-060911 *Collected:* 6/9/2011 1:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	7.95		0.498	MDL	0.995	PQL	ng/L	UJ	B, S

Sample ID: EB17-SA8N-SB-060911 *Collected:* 6/9/2011 12:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	7.17		0.506	MDL	1.01	PQL	ng/L	UJ	B, S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.7	J	18.4	MDL	36.8	PQL	ng/Kg	UJ	S, F

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	42.7		20.3	MDL	40.6	PQL	ng/Kg	J	Q

Method Category: SVOA

Method: 8015M **Matrix:** AQ

Sample ID: EB16-SA5DN-SB-060911 *Collected:* 6/9/2011 1:00:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.13	J	0.10	MDL	0.60	PQL	mg/L	UJ	L, B

Sample ID: EB17-SA8N-SB-060911 *Collected:* 6/9/2011 12:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.14	J	0.10	MDL	0.60	PQL	mg/L	UJ	L, B

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.62	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.1	U	6.1	MDL	12	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.49	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.59	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	46		2.3	MDL	7.0	PQL	mg/Kg	U	B

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.51	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.2	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	2.3	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	20	MDL	410	PQL	ug/Kg	U	B

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-039-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	180	J	18	MDL	360	PQL	ug/Kg	U	B

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-050-SA5DN-SB-11.2-12.5 *Collected:* 6/9/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	370	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	380	PQL	ug/Kg	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.81	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.90	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.8	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	0.97	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.91	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.90	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.81	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.7	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.8	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.8	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C SIM **Matrix:** SO

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.4	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8330A **Matrix:** AQ

Sample ID: EB17-SA8N-SB-060911 *Collected:* 6/9/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
RDX	0.43	J	0.20	MDL	0.60	PQL	ug/L	J	Z

Method Category: SVOA **Method:** 8330A **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	48	U	48	MDL	140	PQL	ug/Kg	UJ	Q
RDX	60	U	60	MDL	140	PQL	ug/Kg	UJ	Q

Method Category: VOA **Method:** 8015B **Matrix:** AQ

Sample ID: EB16-SA5DN-SB-060911 *Collected:* 6/9/2011 1:00:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	210	J	200	MDL	1000	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.9	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.6	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.13	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 11:45:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.1	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.8	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.13	J	0.09	MDL	4.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	11		7.0	MDL	8.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	3.4	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.22	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.2	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.17	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-050-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 9:25:00 AM *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.7	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.17	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* RES *Dilution:* 0.8

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.8	J	0.22	MDL	3.7	PQL	ug/Kg	UJ	L, B
TOLUENE	0.17	J	0.07	MDL	3.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE177

Method Blank Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWA16B260857	6/30/2011 8:57:00 AM	N-NITROSODIMETHYLAMINE	6.03 ng/L	EB16-SA5DN-SB-060911 EB17-SA8N-SB-060911

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB16-SA5DN-SB-060911(RES)	N-NITROSODIMETHYLAMINE	7.95 ng/L	7.95U ng/L
EB17-SA8N-SB-060911(RES)	N-NITROSODIMETHYLAMINE	7.17 ng/L	7.17U ng/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16808BB220244	6/21/2011 2:44:00 AM	ALUMINUM	5.85 mg/Kg	SL-037-SA5DN-SB-11.5-12.5
		BORON	0.868 mg/Kg	SL-037-SA5DN-SB-4.0-5.0
		CALCIUM	14.7 mg/Kg	SL-038-SA5DN-SB-10.5-11.5
		IRON	3.86 mg/Kg	SL-038-SA5DN-SB-4.0-5.0
		MAGNESIUM	0.630 mg/Kg	SL-039-SA5DN-SB-11.5-12.5
		PHOSPHORUS	1.54 mg/Kg	SL-039-SA5DN-SB-4.0-5.0
		STRONTIUM	0.0819 mg/Kg	SL-040-SA5DN-SB-10.5-11.5
		TIN	1.52 mg/Kg	SL-040-SA5DN-SB-4.0-5.0
				SL-050-SA5DN-SB-11.2-12.5
				SL-050-SA5DN-SB-4.0-5.0
				SL-116-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5DN-SB-11.5-12.5(RES)	BORON	2.56 mg/Kg	2.56U mg/Kg
SL-037-SA5DN-SB-11.5-12.5(RES)	TIN	3.16 mg/Kg	3.16U mg/Kg
SL-037-SA5DN-SB-4.0-5.0(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-038-SA5DN-SB-10.5-11.5(RES)	BORON	2.26 mg/Kg	2.26U mg/Kg
SL-038-SA5DN-SB-10.5-11.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-038-SA5DN-SB-4.0-5.0(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-039-SA5DN-SB-11.5-12.5(RES)	BORON	2.61 mg/Kg	2.61U mg/Kg
SL-039-SA5DN-SB-11.5-12.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-039-SA5DN-SB-4.0-5.0(RES)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	BORON	1.93 mg/Kg	1.93U mg/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	TIN	1.83 mg/Kg	1.83U mg/Kg
SL-040-SA5DN-SB-4.0-5.0(RES)	TIN	3.44 mg/Kg	3.44U mg/Kg
SL-050-SA5DN-SB-11.2-12.5(RES)	BORON	4.30 mg/Kg	4.30U mg/Kg
SL-050-SA5DN-SB-11.2-12.5(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-050-SA5DN-SB-4.0-5.0(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-116-SA8N-SB-4.0-5.0(RES)	BORON	3.16 mg/Kg	3.16U mg/Kg
SL-116-SA8N-SB-4.0-5.0(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P65651AB320311A	6/18/2011 3:11:00 AM	EFH (C8-C11)	0.11 mg/L	EB16-SA5DN-SB-060911 EB17-SA8N-SB-060911

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB16-SA5DN-SB-060911(REA2)	EFH (C8-C11)	0.13 mg/L	0.60U mg/L
EB17-SA8N-SB-060911(REA2)	EFH (C8-C11)	0.14 mg/L	0.60U mg/L

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P71719AB322215A	6/20/2011 10:15:00 PM	EFH (C30-C40)	2.2 mg/Kg	SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-039-SA5DN-SB-4.0-5.0(REA2)	EFH (C30-C40)	46 mg/Kg	46U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB84B210341A	6/15/2011 3:41:00 AM	ACETONE METHYLENE CHLORIDE	9.0 ug/Kg 1.4 ug/Kg	SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5DN-SB-11.5-12.5(RES)	METHYLENE CHLORIDE	2.0 ug/Kg	3.9U ug/Kg
SL-037-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.1U ug/Kg
SL-038-SA5DN-SB-10.5-11.5(RES)	METHYLENE CHLORIDE	1.9 ug/Kg	3.9U ug/Kg
SL-038-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.1U ug/Kg
SL-039-SA5DN-SB-11.5-12.5(RES)	METHYLENE CHLORIDE	2.1 ug/Kg	3.9U ug/Kg
SL-039-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.2U ug/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	METHYLENE CHLORIDE	3.4 ug/Kg	4.2U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-040-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.0U ug/Kg
SL-050-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.2U ug/Kg
SL-116-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	3.7U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA16B260223	6/23/2011 2:23:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	410U ug/Kg
SL-038-SA5DN-SB-10.5-11.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	370U ug/Kg
SL-038-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	34 ug/Kg	390U ug/Kg
SL-039-SA5DN-SB-11.5-12.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	38 ug/Kg	380U ug/Kg
SL-039-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	34 ug/Kg	390U ug/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	180 ug/Kg	360U ug/Kg
SL-040-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	27 ug/Kg	390U ug/Kg
SL-050-SA5DN-SB-11.2-12.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	370U ug/Kg
SL-116-SA8N-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	26 ug/Kg	380U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB16-SA5DN-SB-060911 (RES)	6/9/2011 1:00:00 PM	N-NITROSODIMETHYLAMINE	7.95 ng/L	SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5DN-SB-11.5-12.5(RES)	N-NITROSODIMETHYLAMINE	27.7 ng/Kg	36.8U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MS SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-4.0-5.0)	DIETHYLENE GLYCOL	50	56	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-4.0-5.0)	PETN	-	123	80.00-121.00	-	PETN	J(all detects)
SL-037-SA5DN-SB-4.0-5.0MS (SL-037-SA5DN-SB-4.0-5.0)	1,3,5-TRINITROBENZENE RDX	79 74	- -	82.00-126.00 75.00-129.00	- -	1,3,5-TRINITROBENZENE RDX	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MS SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-4.0-5.0)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	128 201 337	- 131 231	49.00-123.00 49.00-123.00 49.00-123.00	- 23 (20.00) -	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J(all detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MS (SL-037-SA5DN-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	66	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MS SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM	2397 12445 297 - 146	1692 13631 386 161 129	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM	J(all detects) Al, Fe, Mg, No Qual, >4x
SL-037-SA5DN-SB-4.0-5.0MS SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	CALCIUM MANGANESE	62 453	288 175	75.00-125.00 75.00-125.00	- 26 (20.00)	CALCIUM MANGANESE	J(all detects) UJ(all non-detects) Ca, Mn, No Qual %R, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-040-SA5DN-SB-4.0-5.0MS (SL-040-SA5DN-SB-4.0-5.0)	FLUORIDE	35	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-11.5-12.5MS SL-037-SA5DN-SB-11.5-12.5MSD (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	TITANIUM	206	284	75.00-125.00	-	TITANIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-037-SA5DN-SB-4.0-5.0MS **SL-037-SA5DN-SB-4.0-5.0MSD** (SL-037-SA5DN-SB-11.5-12.5 SL -037-SA5DN-SB-4.0-5.0 SL -038-SA5DN-SB-10.5-11.5 SL -038-SA5DN-SB-4.0-5.0 SL -039-SA5DN-SB-11.5-12.5 SL -039-SA5DN-SB-4.0-5.0 SL -040-SA5DN-SB-10.5-11.5 SL -040-SA5DN-SB-4.0-5.0 SL -050-SA5DN-SB-11.2-12.5 SL -050-SA5DN-SB-4.0-5.0 SL -116-SA8N-SB-4.0-5.0)	LEAD	235	235	75.00-125.00	-	LEAD	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-037-SA5DN-SB-4.0-5.0DUP	ALUMINUM	22	20.00	
(SL-037-SA5DN-SB-11.5-12.5	BORON	25	20.00	
SL-037-SA5DN-SB-4.0-5.0	MANGANESE	31	20.00	J (all detects) UJ (all non-detects)
SL-038-SA5DN-SB-10.5-11.5				
SL-038-SA5DN-SB-4.0-5.0				
SL-039-SA5DN-SB-11.5-12.5				
SL-039-SA5DN-SB-4.0-5.0				
SL-040-SA5DN-SB-10.5-11.5				B, No Qual, OK by Difference
SL-040-SA5DN-SB-4.0-5.0				
SL-050-SA5DN-SB-11.2-12.5				
SL-050-SA5DN-SB-4.0-5.0				
SL-116-SA8N-SB-4.0-5.0)				

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11651AY320401A (EB16-SA5DN-SB-060911 EB17-SA8N-SB-060911)	EFH (C8-C11)	-	104	46.00-103.00	-	EFH (C8-C11)	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11649AQ241745A (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	2,4,6-TRINITROTOLUENE PETN	121 121	- -	80.00-120.00 80.00-120.00	- -	2,4,6-TRINITROTOLUENE PETN	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16826AQ220936A (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	ANTIMONY	137	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits
P16826AQ220936C (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	MOLYBDENUM	121	-	80.00-120.00	-	MOLYBDENUM	No Qual, SRM within QC Limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB84Q210207A LCSB84Y210231A (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	METHYLENE CHLORIDE	128	125	76.00-124.00	-	METHYLENE CHLORIDE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
EB16-SA5DN-SB-060911	N-Nitrosodimethylamine-d6	154	50.00-150.00	All Target Analytes	J (all detects)
EB17-SA8N-SB-060911	N-Nitrosodimethylamine-d6	151	50.00-150.00	All Target Analytes	J(all detects)

Method: **1625C**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-037-SA5DN-SB-11.5-12.5	N-Nitrosodimethylamine-d6	203	50.00-150.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA5DN-SB-060911	METHANOL	J	210	1000	PQL	ug/L	J (all detects)

Method: 8015M

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA5DN-SB-060911	EFH (C8-C11)	J	0.13	0.60	PQL	mg/L	J (all detects)
EB17-SA8N-SB-060911	EFH (C8-C11)	J	0.14	0.60	PQL	mg/L	J (all detects)

Method: 8330A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB17-SA8N-SB-060911	RDX	J	0.43	0.60	PQL	ug/L	J (all detects)

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	N-NITROSODIMETHYLAMINE	J	27.7	36.8	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SB-10.5-11.5	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SB-10.5-11.5	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	BORON	J	2.56	5.48	PQL	mg/Kg	J (all detects)
	TIN	J	3.16	11.0	PQL	mg/Kg	
	Zirconium	J	3.33	5.48	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-4.0-5.0	TIN	J	2.91	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.69	5.80	PQL	mg/Kg	
SL-038-SA5DN-SB-10.5-11.5	BORON	J	2.26	5.32	PQL	mg/Kg	J (all detects)
	TIN	J	2.55	10.6	PQL	mg/Kg	
	Zirconium	J	2.33	5.32	PQL	mg/Kg	
SL-038-SA5DN-SB-4.0-5.0	TIN	J	2.43	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.29	5.53	PQL	mg/Kg	
SL-039-SA5DN-SB-11.5-12.5	BORON	J	2.61	5.68	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	11.4	PQL	mg/Kg	
	Zirconium	J	2.98	5.68	PQL	mg/Kg	
SL-039-SA5DN-SB-4.0-5.0	TIN	J	3.03	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.91	5.84	PQL	mg/Kg	
SL-040-SA5DN-SB-10.5-11.5	BORON	J	1.93	5.18	PQL	mg/Kg	J (all detects)
	LITHIUM	J	1.3	2.1	PQL	mg/Kg	
	TIN	J	1.83	10.4	PQL	mg/Kg	
	Zirconium	J	1.74	5.18	PQL	mg/Kg	
SL-040-SA5DN-SB-4.0-5.0	TIN	J	3.44	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.28	5.54	PQL	mg/Kg	
SL-050-SA5DN-SB-11.2-12.5	BORON	J	4.30	5.51	PQL	mg/Kg	J (all detects)
	TIN	J	2.49	11.0	PQL	mg/Kg	
	Zirconium	J	3.83	5.51	PQL	mg/Kg	
SL-050-SA5DN-SB-4.0-5.0	TIN	J	2.73	11.2	PQL	mg/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	BORON	J	3.16	5.65	PQL	mg/Kg	J (all detects)
	SODIUM	J	101	113	PQL	mg/Kg	
	TIN	J	2.60	11.3	PQL	mg/Kg	
	Zirconium	J	2.73	5.65	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	ANTIMONY	J	0.180	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.161	0.438	PQL	mg/Kg	
	SILVER	J	0.0679	0.110	PQL	mg/Kg	
SL-037-SA5DN-SB-4.0-5.0	SELENIUM	J	0.230	0.468	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0533	0.117	PQL	mg/Kg	
SL-038-SA5DN-SB-10.5-11.5	ANTIMONY	J	0.165	0.219	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0777	0.110	PQL	mg/Kg	
	SILVER	J	0.0162	0.110	PQL	mg/Kg	
SL-038-SA5DN-SB-4.0-5.0	SELENIUM	J	0.229	0.465	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0623	0.116	PQL	mg/Kg	
SL-039-SA5DN-SB-11.5-12.5	ANTIMONY	J	0.133	0.218	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	SELENIUM	J	0.113	0.454	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0890	0.113	PQL	mg/Kg	
SL-040-SA5DN-SB-10.5-11.5	ANTIMONY	J	0.114	0.205	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0879	0.103	PQL	mg/Kg	
SL-040-SA5DN-SB-4.0-5.0	SELENIUM	J	0.163	0.452	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0528	0.113	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA5DN-SB-11.2-12.5	SILVER	J	0.0408	0.109	PQL	mg/Kg	J (all detects)
SL-050-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.198	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0900	0.453	PQL	mg/Kg	
	SILVER	J	0.0407	0.113	PQL	mg/Kg	
SL-116-SA8N-SB-4.0-5.0	ANTIMONY	J	0.112	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.444	PQL	mg/Kg	
	SILVER	J	0.0783	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SB-11.5-12.5	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.63	1.2	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.73	1.2	PQL	mg/Kg	J (all detects)
SL-050-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.43	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	MERCURY	J	0.0157	0.104	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SB-4.0-5.0	MERCURY	J	0.0084	0.115	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SB-4.0-5.0	MERCURY	J	0.0332	0.114	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	MERCURY	J	0.0355	0.110	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	MERCURY	J	0.0154	0.110	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	EFH (C21-C30)	J	0.62	1.3	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SB-10.5-11.5	EFH (C21-C30)	J	0.49	1.3	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	0.59	1.3	PQL	mg/Kg	
SL-116-SA8N-SB-4.0-5.0	EFH (C15-C20)	J	0.51	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-038-SA5DN-SB-4.0-5.0	Aroclor 5460	J	3.2	3.8	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	AROCLOR 1260 Aroclor 5460	J J	1.4 2.3	2.0 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	AROCLOR 1260	J	1.1	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	METHYLENE CHLORIDE TOLUENE	J J	2.0 0.15	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-037-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.15	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-038-SA5DN-SB-10.5-11.5	METHYLENE CHLORIDE TOLUENE	J J	1.9 0.15	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-038-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.13	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-039-SA5DN-SB-11.5-12.5	METHYLENE CHLORIDE TOLUENE	J J	2.1 0.15	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.8 0.13	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-040-SA5DN-SB-10.5-11.5	METHYLENE CHLORIDE TOLUENE	J J	3.4 0.22	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	2.2 0.17	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-050-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.7 0.17	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.8 0.17	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	410	PQL	ug/Kg	J (all detects)
SL-038-SA5DN-SB-10.5-11.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	370	PQL	ug/Kg	J (all detects)
SL-038-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	390	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SB-11.5-12.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	380	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	390	PQL	ug/Kg	J (all detects)
SL-040-SA5DN-SB-10.5-11.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	180	360	PQL	ug/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA5DN-SB-11.2-12.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-038-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.81	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.90	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.8	21	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.97	1.9	PQL	ug/Kg	
	PYRENE	J	0.91	1.9	PQL	ug/Kg	
SL-039-SA5DN-SB-11.5-12.5	BENZO(A)PYRENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.90	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.81	1.9	PQL	ug/Kg	
	PYRENE	J	1.7	1.9	PQL	ug/Kg	
SL-039-SA5DN-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.8	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
SL-040-SA5DN-SB-10.5-11.5	ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.8	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.0	1.9	PQL	ug/Kg	

\DC #: 26277H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE177 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: MH

2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	N, gwel
V.	ICP Interference Check Sample (ICS) Analysis	N	RPD out
VI.	Matrix Spike Analysis	SW	Al, Ca, Fe, Mg, Mn, Ti 4X, Na fwl for ZR TCP/MS pb DE178
VII.	Duplicate Sample Analysis	SW	BCKX
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	pb, ZR
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-037-SA5DN-SB-4.0-5.0	11	SL-116-SA8N-SB-4.0-5.0	21		31	
2	SL-037-SA5DN-SB-11.5-12.5	12	#1 MS (TCP, Pb)	22		32	
3	SL-038-SA5DN-SB-4.0-5.0	13	MSD	23		33	
4	SL-038-SA5DN-SB-10.5-11.5	14	"	24		34	
5	SL-039-SA5DN-SB-4.0-5.0	15	#2 MS (Ti)	25		35	
6	SL-039-SA5DN-SB-11.5-12.5	16	MSD	26		36	
7	SL-040-SA5DN-SB-4.0-5.0	17	"	27		37	
8	SL-040-SA5DN-SB-10.5-11.5	18		28		38	
9	SL-050-SA5DN-SB-4.0-5.0	19		29		39	
10	SL-050-SA5DN-SB-11.2-12.5	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE177
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6312169BKG Matrix Spike Lab Sample ID: 6312169MS Matrix Spike Duplicate Lab Sample ID: 6312169MSD
% Solids for Sample: 82.1
Batch Id(s): P16808B, P17326A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		30765.8802		36490.2116		34729.6367		238.8288	234.2359	MG/KG	2397		1692		5			20	P
Boron		8.1399		225.9953		224.8056		238.8288	234.2359	MG/KG	91		92		1		84 - 115	20	P
Calcium		7114.8274		7412.8048		8465.2406		477.6576	468.4718	MG/KG	62		288		13			20	P
Iron		35285.3848		50147.0684		51249.8032		119.4144	117.1180	MG/KG	12445		13631		2			20	P
[redacted]	208	9.7732		18.1167		18.1773		3.5477	3.5824	MG/KG	[redacted]		[redacted]		0		75 - 125	20	MS
Lithium		24.7584		142.4709		141.4949		119.4144	117.1180	MG/KG	99		100		1		82 - 114	20	P
Magnesium		6792.0271		7501.3768		7696.7875		238.8288	234.2359	MG/KG	297		386		3			20	P
Manganese		451.7847		722.1621		554.5383		59.7072	58.5590	MG/KG	453		175		[redacted]			20	P
[redacted]		286.0704		414.5889		474.9543		119.4144	117.1180	MG/KG	108		[redacted]		14		75 - 125	20	P
[redacted]		4104.1216		5849.6573		5613.7871		1194.1439	1171.1796	MG/KG	[redacted]		129	N	4		75 - 125	20	P
Sodium		327.3511		1433.8683		1433.6890		1194.1439	1171.1796	MG/KG	93		94		0		75 - 125	20	P
Strontium		36.4863		148.0667		146.4092		119.4144	117.1180	MG/KG	93		94		1		75 - 115	20	P
Tin		2.9070	B	402.4719		403.5815		477.6576	468.4718	MG/KG	84		86		0		80 - 110	20	P
Zirconium		3.6866	B	114.2342		112.7003		119.4144	117.1180	MG/KG	93		93		1		75 - 125	20	P

[redacted] qualify the data.

[redacted] + As, Be, Cu, Ni J/UJ (Q) ↓ from SDG DE178

+ Cr J/UJ

DE177 2 of 6

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP/Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE177
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6312170BKG Matrix Spike Lab Sample ID: 6312170MS Matrix Spike Duplicate Lab Sample ID: 6312170MSD
% Solids for Sample: 89.5
Batch Id(s): P17208E

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Titanium		1100.2278		1323.8922		1414.9510		108.4775	110.6256	MG/KG	206		284		7		.	20	P

DE177 P17208

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP/Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE177
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6312169BKG
% Solids for Duplicate: 82.1
Batch ID(s): P16808B, P17326A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6312169DUP
% Solids for Sample: 82.1

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
[redacted]			30765.8802		24700.0470		22	*	P
Boron		5.8	8.1399		6.3530		25		P
Calcium			7114.8274		6972.4678		2		P
Iron			35285.3848		38323.2571		8		P
Lead	208		9.7732		10.1001		3		MS
Lithium			24.7584		21.3408		15		P
Magnesium			6792.0271		6155.7410		10		P
[redacted]			451.7847		330.5725		31	*	P
Phosphorus			286.0704		264.2226		8		P
Potassium			4104.1216		3528.4259		15		P
Sodium		116.0	327.3511		291.7415		12		P
Strontium			36.4863		32.1897		13		P
Tin			2.9070	B	2.7460	B	6		P
Zirconium			3.6866	B	3.0776	B	18		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

(No fault for ICP/MS from SDG DE178)

DE177 4249

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE178

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	TB-061011	6313376	TB	5030B	8015M	III
10-Jun-2011	TB-061011	6313376	TB	5030B	8260B	III
10-Jun-2011	TB-061011	6313376	TB	5030B	8260B SIM	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3050B	6010B	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3060A	7199	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3546	1625C	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8015B	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8082	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8270C	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8270C SIM	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	5035	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	5035	8260B	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	5035	8260B SIM	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	8330	8330A	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	300.0	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	314.0	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	6850	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	7471A	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	8015B	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	8315A	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	9012B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3050B	6010B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3060A	7199	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3546	1625C	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8015B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8082	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8270C	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8270C SIM	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	5035	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	5035	8260B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	5035	8260B SIM	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	8330	8330A	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	300.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	314.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	7471A	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	8015B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	8315A	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	9012B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220935	DUP	METHOD	7471A	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220942A	DUP	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220942B	DUP	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220942C	DUP	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220942D	DUP	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D270452A	DUP	METHOD	300.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D271457A	DUP	METHOD	314.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220936	MS	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220945A	MS	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220945B	MS	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220945C	MS	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220945D	MS	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R261133	MS	3550B	8270C	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R262359	MS	3546	1625C	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R270507A	MS	METHOD	300.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R271520A	MS	METHOD	314.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R321723A	MS	METHOD	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3050B	6010B	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3050B	6020	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3060A	7199	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3546	1625C	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8015B	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8082	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8270C	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8270C SIM	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	5035	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	5035	8260B	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	5035	8260B SIM	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	8330	8330A	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	300.0	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	314.0	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	7471A	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	8315A	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	9012B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3050B	6010B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3050B	6020	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3060A	7199	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3546	1625C	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8015B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8082	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8270C	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8270C SIM	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	5035	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	5035	8260B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	5035	8260B SIM	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	8330	8330A	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	300.0	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	314.0	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	7471A	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	8015B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	8315A	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	9012B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3050B	6010B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3050B	6020	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3546	1625C	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8015B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8015M	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8082	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8270C	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8270C SIM	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	5035	8015M	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	5035	8260B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	5035	8260B SIM	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	8330	8330A	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	300.0	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	314.0	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	7471A	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	8015B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	8015M	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	8315A	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	9012B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0DUP	P313375D272103A	DUP	3060A	7199	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0MS	P313375R272029A	MS	3060A	7199	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3050B	6010B	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3050B	6020	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3060A	7199	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3550B	8082	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3550B	8270C	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3550B	8270C SIM	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	5035	8260B SIM	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	METHOD	300.0	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	METHOD	314.0	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	METHOD	7471A	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3050B	6010B	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3050B	6020	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3060A	7199	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3550B	8082	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3550B	8270C	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3550B	8270C SIM	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	METHOD	300.0	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	METHOD	314.0	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	METHOD	7471A	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3050B	6010B	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3050B	6020	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3060A	7199	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3550B	8082	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3550B	8270C	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3550B	8270C SIM	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	5035	8260B	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	5035	8260B SIM	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	METHOD	300.0	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	METHOD	314.0	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	METHOD	7471A	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3050B	6010B	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3060A	7199	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3550B	8082	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3550B	8270C	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3550B	8270C SIM	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	METHOD	300.0	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	METHOD	314.0	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.6		0.95	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.95	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	13.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-045-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	12.4		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5DN-SB-11.5-12.5 *Collected:* 6/10/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	24.2		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	22.9		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.88	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.88	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	29300		7.07	MDL	23.4	PQL	mg/Kg	J	E
MANGANESE	589		0.0421	MDL	0.584	PQL	mg/Kg	J	E, E
PHOSPHORUS	262		0.409	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	3730		13.2	MDL	58.4	PQL	mg/Kg	J	Q
TIN	2.83	J	0.374	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.31	J	0.538	MDL	5.84	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	26900		6.55	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	237		0.0390	MDL	0.541	PQL	mg/Kg	J	E, E
PHOSPHORUS	215		0.379	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2920		12.2	MDL	54.1	PQL	mg/Kg	J	Q
TIN	2.54	J	0.347	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.96	J	0.498	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	34000		7.14	MDL	23.6	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	230		0.0425	MDL	0.590	PQL	mg/Kg	J	E, E
PHOSPHORUS	221		0.413	MDL	11.8	PQL	mg/Kg	J	Q
POTASSIUM	3510		13.3	MDL	59.0	PQL	mg/Kg	J	Q
TIN	2.77	J	0.378	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	4.47	J	0.543	MDL	5.90	PQL	mg/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	26100		6.69	MDL	22.1	PQL	mg/Kg	J	E
BORON	4.71	J	0.398	MDL	5.53	PQL	mg/Kg	J	Z
MANGANESE	212		0.0398	MDL	0.553	PQL	mg/Kg	J	E, E
PHOSPHORUS	269		0.387	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3060		12.5	MDL	55.3	PQL	mg/Kg	J	Q
TIN	2.51	J	0.354	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	4.74	J	0.509	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SB-11.5-12.5 *Collected:* 6/10/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18800		6.47	MDL	21.4	PQL	mg/Kg	J	E
BORON	2.21	J	0.385	MDL	5.34	PQL	mg/Kg	U	B
MANGANESE	357		0.0385	MDL	0.534	PQL	mg/Kg	J	E, E
PHOSPHORUS	166		0.374	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	1680		12.1	MDL	53.4	PQL	mg/Kg	J	Q
TIN	2.57	J	0.342	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.44	J	0.492	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	32200		6.98	MDL	23.1	PQL	mg/Kg	J	E
MANGANESE	392		0.0415	MDL	0.577	PQL	mg/Kg	J	E, E
PHOSPHORUS	430		0.404	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3590		13.0	MDL	57.7	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.75	J	0.369	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20100		6.57	MDL	21.7	PQL	mg/Kg	J	E
BORON	3.19	J	0.391	MDL	5.43	PQL	mg/Kg	U	B
MANGANESE	169		0.0391	MDL	0.543	PQL	mg/Kg	J	E, E
PHOSPHORUS	272		0.380	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2890		12.3	MDL	54.3	PQL	mg/Kg	J	Q
TIN	2.47	J	0.348	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.85	J	0.500	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	29800		6.96	MDL	23.0	PQL	mg/Kg	J	E
MANGANESE	493		0.0414	MDL	0.575	PQL	mg/Kg	J	E, E
PHOSPHORUS	275		0.403	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3730		13.0	MDL	57.5	PQL	mg/Kg	J	Q
TIN	2.56	J	0.368	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.91	J	0.529	MDL	5.75	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14800		6.50	MDL	21.5	PQL	mg/Kg	J	E
BORON	1.94	J	0.387	MDL	5.37	PQL	mg/Kg	U	B
MANGANESE	115		0.0387	MDL	0.537	PQL	mg/Kg	J	E, E
PHOSPHORUS	250		0.376	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	1960		12.1	MDL	53.7	PQL	mg/Kg	J	Q
SODIUM	81.9	J	6.39	MDL	107	PQL	mg/Kg	J	Z
TIN	2.50	J	0.344	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.55	J	0.494	MDL	5.37	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 11:00:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0665	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 11:00:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	18.1		0.0119	MDL	0.234	PQL	mg/Kg	J	Q, A

Sample ID: SL-041-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 11:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.70		0.0917	MDL	0.458	PQL	mg/Kg	J	Q
BERYLLIUM	0.861		0.0183	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	40.3		0.138	MDL	0.458	PQL	mg/Kg	J	Q
COPPER	18.4		0.0917	MDL	0.458	PQL	mg/Kg	J	Q
NICKEL	23.9		0.115	MDL	0.458	PQL	mg/Kg	J	Q
SILVER	0.0648	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z
ZINC	74.1		0.642	MDL	3.44	PQL	mg/Kg	J	Q, A

Sample ID: SL-041-SA5DN-SB-9.0-10.0 ***Collected:*** 6/10/2011 10:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	3.15		0.0113	MDL	0.221	PQL	mg/Kg	J	Q, A

Sample ID: SL-041-SA5DN-SB-9.0-10.0 ***Collected:*** 6/10/2011 10:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0809	MDL	0.219	PQL	mg/Kg	J	Z
ARSENIC	2.91		0.0875	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.228		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.0853	J	0.0481	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	15.2		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COPPER	4.66		0.0875	MDL	0.437	PQL	mg/Kg	J	Q
NICKEL	7.91		0.109	MDL	0.437	PQL	mg/Kg	J	Q
THALLIUM	0.0669	J	0.0328	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	18.6		0.612	MDL	3.28	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-045-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 11:50:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0776	J	0.0678	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 11:50:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.0		0.0117	MDL	0.229	PQL	mg/Kg	J	Q, A

Sample ID: SL-045-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 11:50:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.53		0.0935	MDL	0.468	PQL	mg/Kg	J	Q
BERYLLIUM	1.06		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	39.7		0.140	MDL	0.468	PQL	mg/Kg	J	Q
COPPER	20.2		0.0935	MDL	0.468	PQL	mg/Kg	J	Q
NICKEL	23.7		0.117	MDL	0.468	PQL	mg/Kg	J	Q
SILVER	0.0746	J	0.0166	MDL	0.117	PQL	mg/Kg	J	Z
ZINC	75.6		0.655	MDL	3.51	PQL	mg/Kg	J	Q, A

Sample ID: SL-045-SA5DN-SB-9.0-10.0 **Collected:** 6/10/2011 11:40:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	11.7		0.0113	MDL	0.221	PQL	mg/Kg	J	Q, A

Sample ID: SL-045-SA5DN-SB-9.0-10.0 **Collected:** 6/10/2011 11:40:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	9.61		0.0911	MDL	0.456	PQL	mg/Kg	J	Q
BERYLLIUM	1.31		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	45.7		0.137	MDL	0.456	PQL	mg/Kg	J	Q
COPPER	21.2		0.0911	MDL	0.456	PQL	mg/Kg	J	Q
NICKEL	33.6		0.114	MDL	0.456	PQL	mg/Kg	J	Q
SILVER	0.0411	J	0.0162	MDL	0.114	PQL	mg/Kg	J	Z
ZINC	86.7		0.638	MDL	3.42	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-048-SA5DN-SB-11.5-12.5 *Collected:* 6/10/2011 3:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0659	J	0.0632	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SB-11.5-12.5 *Collected:* 6/10/2011 3:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	4.98		0.0110	MDL	0.216	PQL	mg/Kg	J	Q, A

Sample ID: SL-048-SA5DN-SB-11.5-12.5 *Collected:* 6/10/2011 3:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.11		0.0872	MDL	0.436	PQL	mg/Kg	J	Q
BERYLLIUM	0.897		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.0972	J	0.0479	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	27.4		0.131	MDL	0.436	PQL	mg/Kg	J	Q
COPPER	12.4		0.0872	MDL	0.436	PQL	mg/Kg	J	Q
NICKEL	18.3		0.109	MDL	0.436	PQL	mg/Kg	J	Q
SILVER	0.0469	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	51.7		0.610	MDL	3.27	PQL	mg/Kg	J	Q, A

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0688	J	0.0663	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.2		0.0118	MDL	0.231	PQL	mg/Kg	J	Q, A

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.92		0.0914	MDL	0.457	PQL	mg/Kg	J	Q
BERYLLIUM	1.11		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	40.7		0.137	MDL	0.457	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	22.6		0.0914	MDL	0.457	PQL	mg/Kg	J	Q
NICKEL	28.8		0.114	MDL	0.457	PQL	mg/Kg	J	Q
SILVER	0.0609	J	0.0162	MDL	0.114	PQL	mg/Kg	J	Z
ZINC	93.6		0.640	MDL	3.43	PQL	mg/Kg	J	Q, A

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	9.00		0.0113	MDL	0.221	PQL	mg/Kg	J	Q, A

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.82		0.0903	MDL	0.452	PQL	mg/Kg	J	Q
BERYLLIUM	0.793		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	27.6		0.135	MDL	0.452	PQL	mg/Kg	J	Q
COPPER	15.5		0.0903	MDL	0.452	PQL	mg/Kg	J	Q
NICKEL	23.9		0.113	MDL	0.452	PQL	mg/Kg	J	Q
SILVER	0.0361	J	0.0160	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	62.9		0.632	MDL	3.39	PQL	mg/Kg	J	Q, A

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.174	J	0.0667	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	15.7		0.0117	MDL	0.230	PQL	mg/Kg	J	Q, A

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.43		0.0920	MDL	0.460	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	1.18		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	44.9		0.138	MDL	0.460	PQL	mg/Kg	J	Q
COPPER	23.4		0.0920	MDL	0.460	PQL	mg/Kg	J	Q
NICKEL	31.3		0.115	MDL	0.460	PQL	mg/Kg	J	Q
SILVER	0.0715	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z
ZINC	99.3		0.644	MDL	3.45	PQL	mg/Kg	J	Q, A

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.175	J	0.0617	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.90		0.0110	MDL	0.215	PQL	mg/Kg	J	Q, A

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0787	MDL	0.213	PQL	mg/Kg	J	Z
ARSENIC	3.69		0.0851	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.522		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.0584	J	0.0468	MDL	0.106	PQL	mg/Kg	J	Z
CHROMIUM	16.9		0.128	MDL	0.425	PQL	mg/Kg	J	Q
COPPER	6.05		0.0851	MDL	0.425	PQL	mg/Kg	J	Q
NICKEL	8.58		0.106	MDL	0.425	PQL	mg/Kg	J	Q
SILVER	0.0400	J	0.0151	MDL	0.106	PQL	mg/Kg	J	Z
ZINC	41.4		0.595	MDL	3.19	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0422	J	0.0076	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0151	J	0.0077	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0125	J	0.0074	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.0	U	6.0	MDL	12	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	6.0	U	6.0	MDL	12	PQL	mg/Kg	UJ	Q
Propylene glycol	6.0	U	6.0	MDL	12	PQL	mg/Kg	UJ	Q

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.2	J	0.95	MDL	2.9	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	7.3		0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-045-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 11:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	5.2		0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	4.1		0.44	MDL	1.3	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.6	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.6	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
1,3-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
1,4-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2,4,5-TRICHLOROPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2,4,6-TRICHLOROPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2,4-DICHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2,4-DIMETHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	S
2,4-DINITROTOLUENE	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2,6-DINITROTOLUENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2-CHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2-NITROANILINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	S
3-NITROANILINE	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLORO-3-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
4-CHLOROANILINE	75	U	75	MDL	190	PQL	ug/Kg	UJ	S
4-CHLOROPHENYL-PHENYLETHER	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
4-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
4-NITROANILINE	75	U	75	MDL	190	PQL	ug/Kg	UJ	S
4-NITROPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
ANILINE	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	S
BENZOIC ACID	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
BENZYL ALCOHOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
BIS(2-CHLOROETHOXY)METHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
BIS(2-CHLOROETHYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	380	PQL	ug/Kg	J	Z, S
CARBAZOLE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
DIBENZOFURAN	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
HEXACHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
HEXACHLOROBUTADIENE	75	U	75	MDL	190	PQL	ug/Kg	UJ	S
HEXACHLOROCYCLOPENTADIENE	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
HEXACHLOROETHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
ISOPHORONE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
N-NITROSO-DI-N-PROPYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
N-NITROSODIPHENYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
PENTACHLOROPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
PHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	S

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.51	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.91	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.7	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.95	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.83	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.6	J	6.8	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	7.1	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.83	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.80	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 11:00:00 **Analysis Type:** RES **Dilution:** 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.7	J	0.27	MDL	4.5	PQL	ug/Kg	UJ	L, B
TOLUENE	0.11	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 **Collected:** 6/10/2011 10:50:00 **Analysis Type:** RES **Dilution:** 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.4	J	0.26	MDL	4.4	PQL	ug/Kg	UJ	L, B
TOLUENE	0.11	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 11:50:00 **Analysis Type:** RES **Dilution:** 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.09	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-9.0-10.0 **Collected:** 6/10/2011 11:40:00 **Analysis Type:** RES **Dilution:** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.9		6.9	MDL	8.3	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.2	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B

Sample ID: SL-048-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 3:10:00 **Analysis Type:** RES **Dilution:** 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.7	J	0.26	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.10	J	0.09	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 2:10:00 **Analysis Type:** RES **Dilution:** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-111-SA8N-SB-3.0-4.0** ***Collected:*** **6/10/2011 12:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.89**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	1.5	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.09	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE178

Method Blank Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16808BB220244	6/21/2011 2:44:00 AM	ALUMINUM	5.85 mg/Kg	SL-041-SA5DN-SB-4.0-5.0
		BORON	0.868 mg/Kg	SL-041-SA5DN-SB-9.0-10.0
		CALCIUM	14.7 mg/Kg	SL-045-SA5DN-SB-4.0-5.0
		IRON	3.86 mg/Kg	SL-045-SA5DN-SB-9.0-10.0
		MAGNESIUM	0.630 mg/Kg	SL-048-SA5DN-SB-11.5-12.5
		PHOSPHORUS	1.54 mg/Kg	SL-048-SA5DN-SB-4.0-5.0
		STRONTIUM	0.0819 mg/Kg	SL-049-SA5DN-SB-15.5-16.5
		TIN	1.52 mg/Kg	SL-049-SA5DN-SB-4.0-5.0
				SL-111-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5DN-SB-4.0-5.0(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-041-SA5DN-SB-9.0-10.0(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-045-SA5DN-SB-4.0-5.0(RES)	TIN	2.77 mg/Kg	2.77U mg/Kg
SL-045-SA5DN-SB-9.0-10.0(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-048-SA5DN-SB-11.5-12.5(RES)	BORON	2.21 mg/Kg	2.21U mg/Kg
SL-048-SA5DN-SB-11.5-12.5(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-048-SA5DN-SB-4.0-5.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-049-SA5DN-SB-15.5-16.5(RES)	BORON	3.19 mg/Kg	3.19U mg/Kg
SL-049-SA5DN-SB-15.5-16.5(RES)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-049-SA5DN-SB-4.0-5.0(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-111-SA8N-SB-3.0-4.0(RES)	BORON	1.94 mg/Kg	1.94U mg/Kg
SL-111-SA8N-SB-3.0-4.0(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P71719AB322215A	6/20/2011 10:15:00 PM	EFH (C30-C40)	2.2 mg/Kg	SL-041-SA5DN-SB-4.0-5.0
				SL-041-SA5DN-SB-9.0-10.0
				SL-045-SA5DN-SB-4.0-5.0
				SL-045-SA5DN-SB-9.0-10.0
				SL-111-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5DN-SB-9.0-10.0(REA2)	EFH (C30-C40)	7.3 mg/Kg	7.3U mg/Kg
SL-045-SA5DN-SB-9.0-10.0(REA2)	EFH (C30-C40)	5.2 mg/Kg	5.2U mg/Kg
SL-111-SA8N-SB-3.0-4.0(REA2)	EFH (C30-C40)	4.1 mg/Kg	4.1U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB84B210341A	6/15/2011 3:41:00 AM	ACETONE METHYLENE CHLORIDE	9.0 ug/Kg 1.4 ug/Kg	SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.5U ug/Kg
SL-041-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.4 ug/Kg	4.4U ug/Kg
SL-045-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.1U ug/Kg
SL-045-SA5DN-SB-9.0-10.0(RES)	ACETONE	8.9 ug/Kg	8.9U ug/Kg
SL-045-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.2U ug/Kg
SL-048-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.2U ug/Kg
SL-049-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.1U ug/Kg
SL-111-SA8N-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE178 | Laboratory: LL

EDD Filename: DE178_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-041-SA5DN-SB-4.0-5.0MS SL-041-SA5DN-SB-4.0-5.0MSD (SL-041-SA5DN-SB-4.0-5.0)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	44 - -	4 6 6	59.00-109.00 63.00-107.00 63.00-107.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-041-SA5DN-SB-4.0-5.0MSD (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	ARSENIC BERYLLIUM COPPER NICKEL ZINC	- - - - -	153 133 143 153 200	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ARSENIC BERYLLIUM COPPER NICKEL ZINC	J(all detects)
SL-041-SA5DN-SB-4.0-5.0MS (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	VANADIUM	29	-	75.00-125.00	-	VANADIUM	No Qual, >4x
SL-041-SA5DN-SB-4.0-5.0MS (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	CHROMIUM	35	-	75.00-125.00	-	CHROMIUM	J(all detects) UJ(all non-detects)
SL-041-SA5DN-SB-4.0-5.0MS SL-041-SA5DN-SB-4.0-5.0MSD (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	BARIUM	177	397	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-041-SA5DN-SB-4.0-5.0MSD (SL-041-SA5DN-SB-4.0-5.0)	4-CHLOROANILINE	-	-	23.00-95.00	54 (30.00)	4-CHLOROANILINE	J(all detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-041-SA5DN-SB-4.0-5.0MS (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	FLUORIDE	75	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-041-SA5DN-SB-4.0-5.0DUP (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	Nitrate-NO3	29	20.00	No Qual OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-041-SA5DN-SB-4.0-5.0DUP (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	ANTIMONY SELENIUM	24 22	20.00 20.00	No Qual OK by Difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-111-SA8N-SB-3.0-4.0DUP (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	HEXAVALENT CHROMIUM	38	20.00	No Qual OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11648AQ242114A (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-111-SA8N-SB-3.0-4.0)	PETN	123	-	80.00-120.00	-	PETN	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16826AQ220936A (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	ANTIMONY	137	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits
P16826AQ220936C (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	MOLYBDENUM	121	-	80.00-120.00	-	MOLYBDENUM	No Qual, SRM within QC Limits

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB84Q210207A LCSB84Y210231A (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	METHYLENE CHLORIDE	128	125	76.00-124.00	-	METHYLENE CHLORIDE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-041-SA5DN-SB -9.0-10.0	2,4,6-TRIBROMOPHENOL	21	35.00-130.00	All Target Analytes	
	2-FLUOROBIPHENYL	22	45.00-130.00		
	2-FLUOROPHENOL	22	25.00-130.00		J (all detects)
	Nitrobenzene-d5	22	40.00-130.00		UJ (all non-detects)
	PHENOL-D6	22	25.00-120.00		
	Terphenyl-d14	20	45.00-135.00		

Reporting Limit Outliers

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.3	1.8	PQL	mg/Kg	J (all detects)
SL-111-SA8N-SB-3.0-4.0	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	TIN	J	2.83	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.31	5.84	PQL	mg/Kg	
SL-041-SA5DN-SB-9.0-10.0	TIN	J	2.54	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.96	5.41	PQL	mg/Kg	
SL-045-SA5DN-SB-4.0-5.0	TIN	J	2.77	11.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.47	5.90	PQL	mg/Kg	
SL-045-SA5DN-SB-9.0-10.0	BORON	J	4.71	5.53	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	11.1	PQL	mg/Kg	
	Zirconium	J	4.74	5.53	PQL	mg/Kg	
SL-048-SA5DN-SB-11.5-12.5	BORON	J	2.21	5.34	PQL	mg/Kg	J (all detects)
	TIN	J	2.57	10.7	PQL	mg/Kg	
	Zirconium	J	3.44	5.34	PQL	mg/Kg	
SL-048-SA5DN-SB-4.0-5.0	TIN	J	2.75	11.5	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SB-15.5-16.5	BORON	J	3.19	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	2.47	10.9	PQL	mg/Kg	
	Zirconium	J	3.85	5.43	PQL	mg/Kg	
SL-049-SA5DN-SB-4.0-5.0	TIN	J	2.56	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.91	5.75	PQL	mg/Kg	
SL-111-SA8N-SB-3.0-4.0	BORON	J	1.94	5.37	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.9	107	PQL	mg/Kg	
	TIN	J	2.50	10.7	PQL	mg/Kg	
	Zirconium	J	1.55	5.37	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	SELENIUM	J	0.216	0.458	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0648	0.115	PQL	mg/Kg	
SL-041-SA5DN-SB-9.0-10.0	ANTIMONY	J	0.174	0.219	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0853	0.109	PQL	mg/Kg	
	THALLIUM	J	0.0669	0.109	PQL	mg/Kg	
SL-045-SA5DN-SB-4.0-5.0	SELENIUM	J	0.0776	0.468	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0746	0.117	PQL	mg/Kg	
SL-045-SA5DN-SB-9.0-10.0	SILVER	J	0.0411	0.114	PQL	mg/Kg	J (all detects)
SL-048-SA5DN-SB-11.5-12.5	CADMIUM	J	0.0972	0.109	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0659	0.436	PQL	mg/Kg	
	SILVER	J	0.0469	0.109	PQL	mg/Kg	
SL-048-SA5DN-SB-4.0-5.0	SELENIUM	J	0.0688	0.457	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0609	0.114	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5DN-SB-15.5-16.5	SILVER	J	0.0361	0.113	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SB-4.0-5.0	SELENIUM	J	0.174	0.460	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0715	0.115	PQL	mg/Kg	
SL-111-SA8N-SB-3.0-4.0	ANTIMONY	J	0.141	0.213	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0584	0.106	PQL	mg/Kg	
	SELENIUM	J	0.175	0.425	PQL	mg/Kg	
	SILVER	J	0.0400	0.106	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.2	PQL	mg/Kg	J (all detects)
SL-111-SA8N-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.62	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5DN-SB-15.5-16.5	MERCURY	J	0.0422	0.108	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SB-4.0-5.0	MERCURY	J	0.0151	0.109	PQL	mg/Kg	J (all detects)
SL-111-SA8N-SB-3.0-4.0	MERCURY	J	0.0125	0.105	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	EFH (C15-C20)	J	1.2	2.9	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-9.0-10.0	AROCLOR 1260	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.6	3.7	PQL	ug/Kg	
SL-049-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	1.7	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.6	3.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.7	4.5	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.5	PQL	ug/Kg	
SL-041-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	2.4	4.4	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.4	PQL	ug/Kg	
SL-045-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.3	4.1	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.1	PQL	ug/Kg	
SL-045-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	2.2	4.2	PQL	ug/Kg	J (all detects)
SL-048-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.7	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.10	4.2	PQL	ug/Kg	
SL-049-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.5	4.1	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.15	4.1	PQL	ug/Kg	
SL-111-SA8N-SB-3.0-4.0	METHYLENE CHLORIDE	J	1.5	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.9	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	390	PQL	ug/Kg	J (all detects)
SL-041-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	380	PQL	ug/Kg	J (all detects)
SL-049-SA5DN-SB-15.5-16.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	ANTHRACENE	J	0.51	2.0	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	0.91	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.7	2.0	PQL	ug/Kg	
SL-041-SA5DN-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.95	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.83	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.89	1.9	PQL	ug/Kg	
	PYRENE	J	1.7	1.9	PQL	ug/Kg	
SL-049-SA5DN-SB-15.5-16.5	BENZO(A)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.6	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-049-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.0	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	2.0	PQL	ug/Kg	
	CHRYSENE	J	1.8	2.0	PQL	ug/Kg	
	Di-n-butylphthalate	J	12	21	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	0.83	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.80	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.0	PQL	ug/Kg	

LDC #: 26277I4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/20/11
SDG #: DE178 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No final
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	Ba, V, Zn >5X
VII.	Duplicate Sample Analysis	N	Sb, Se, <5X (final Al, Mn, Fe, Mg DB/22)
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Pb, Zn
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-041-SA5DN-SB-4.0-5.0	11	#1 ICS (ICP/MS-Pb, Zn)	21		31	
2	SL-041-SA5DN-SB-9.0-10.0	12	↓ ICSA	22		32	
3	SL-045-SA5DN-SB-4.0-5.0	13	↓ ICSAB	23		33	
4	SL-045-SA5DN-SB-9.0-10.0	14		24		34	
5	SL-048-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-048-SA5DN-SB-11.5-12.5	16		26		36	
7	SL-049-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-049-SA5DN-SB-15.5-16.5	18		28		38	
9	SL-111-SA8N-SB-3.0-4.0	19		29		39	
10		20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE178
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6313367BKG Matrix Spike Lab Sample ID: 6313367MS Matrix Spike Duplicate Lab Sample ID: 6313367MSD
% Solids for Sample: 83.9
Batch Id(s): P16826A, P16811C

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Antimony	121	0.2583		1.3964		1.4266		1.3753	1.3753	MG/KG	83		85		2		75 - 125	20	MS
Arsenic	75	5.7028		8.0888		9.2120		2.2921	2.2921	MG/KG	104		153	N	13		75 - 125	20	MS
[redacted]	137	158.7971		179.0364		204.2954		11.4605	11.4605	MG/KG	177		397		13			20	MS
Beryllium	9	0.8607		1.7541		2.0831		0.9168	0.9168	MG/KG	97		133	N	17		75 - 125	20	MS
Cadmium	111	0.4687		1.5630		1.7585		1.1461	1.1461	MG/KG	95		113		12		75 - 125	20	MS
Chromium	52	40.2723		44.2606		49.8991		11.4605	11.4605	MG/KG	35	N	84		12		75 - 125	20	MS
Cobalt	59	11.4743		73.3703		82.4929		57.3026	57.3026	MG/KG	108		124		12		75 - 125	20	MS
Copper	63	18.3987		30.4850		34.7712		11.4605	11.4605	MG/KG	105		143	N	13		75 - 125	20	MS
Mercury		0.0082	U	0.1668		0.1621		0.1983	0.1891	MG/KG	84		86		3		65 - 135	20	CV
Molybdenum	98	0.4389		12.5951		14.3165		11.4605	11.4605	MG/KG	106		121		13		75 - 125	20	MS
Nickel	60	23.8608		36.6966		41.3496		11.4605	11.4605	MG/KG	112		153	N	12		75 - 125	20	MS
Selenium	78	0.2160	B	2.4548		2.7780		2.2921	2.2921	MG/KG	98		112		12		75 - 125	20	MS
Silver	107	0.0648	B	12.2192		13.4065		11.4605	11.4605	MG/KG	106		116		9		75 - 125	20	MS
Thallium	203	0.5102		0.9217		1.0138		0.4584	0.4584	MG/KG	90		110		10		75 - 125	20	MS
Vanadium	51	68.1443		71.4679		81.7365		11.4605	11.4605	MG/KG	29		119		13			20	MS
Zinc	66	74.1267		87.0083		97.0019		11.4605	11.4605	MG/KG	112		200		11			20	MS

† Pb, P, K J Lt (Q) > SMPDZ 1/7
Mn J Lu J (RPD, Z)
fully Lt

DE178

METHODS:
P = ICP-Atomic Emission Spectrometer
MS = ICP-Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE178
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6313367BKG
% Solids for Duplicate: 83.9
Batch ID(s): P16826A, P16811C
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6313367DUP
% Solids for Sample: 83.9

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Antimony	121	0.2	0.2583		0.3300		24		MS
Arsenic	75		5.7028		6.5590		14		MS
Barium	137		158.7971		177.4390		11		MS
Beryllium	9		0.8607		1.0043		15		MS
Cadmium	111	0.1	0.4687		0.4003		16		MS
Chromium	52		40.2723		37.4326		7		MS
Cobalt	59		11.4743		13.4271		16		MS
Copper	63		18.3987		20.0687		9		MS
Mercury			0.0082	U	0.0079	U			CV
Molybdenum	98	0.1	0.4389		0.5034		14		MS
Nickel	60		23.8608		27.0714		13		MS
Selenium	78		0.2160	B	0.1727	B	22		MS
Silver	107		0.0648	B	0.0713	B	10		MS
Thallium	203	0.1	0.5102		0.4668		9		MS
Vanadium	51		68.1443		65.6604		4		MS
Zinc	66		74.1267		80.7420		9		MS

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Mb. fine

Sb, Se <5X

fine

(Al, Mn for Smp #6177)

DE178 3483

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE179

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	TB-061311	6314474	TB	5030B	8015M	III
13-Jun-2011	TB-061311	6314474	TB	5030B	8260B	III
13-Jun-2011	TB-061311	6314474	TB	5030B	8260B SIM	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3050B	6010B	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3050B	6020	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3060A	7199	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3546	1625C	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3550B	8015B	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3550B	8015M	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3550B	8082	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3550B	8270C	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	3550B	8270C SIM	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	5035	8015M	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	5035	8260B	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	5035	8260B SIM	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	8330	8330A	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	METHOD	300.0	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	METHOD	314.0	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	METHOD	7471A	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	METHOD	8015B	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	METHOD	8015M	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	METHOD	8315A	III
13-Jun-2011	SL-047-SA5DN-SB-4.0-5.0	6314468	N	METHOD	9012B	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3050B	6010B	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3050B	6020	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3546	1625C	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3550B	8015B	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3550B	8015M	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3550B	8082	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3550B	8270C	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	3550B	8270C SIM	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	5035	8015M	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	5035	8260B	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	5035	8260B SIM	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	8330	8330A	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	METHOD	300.0	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	METHOD	314.0	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	METHOD	7471A	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	METHOD	8015B	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	METHOD	8015M	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	METHOD	8315A	III
13-Jun-2011	SL-047-SA5DN-SB-10.0-11.0	6314469	N	METHOD	9012B	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3050B	6010B	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3050B	6020	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3060A	7199	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3546	1625C	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3550B	8015B	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3550B	8015M	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3550B	8082	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3550B	8270C	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	5035	8015M	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	5035	8260B	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	5035	8260B SIM	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	8330	8330A	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	METHOD	300.0	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	METHOD	314.0	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	METHOD	7471A	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	METHOD	8015B	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	METHOD	8015M	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	METHOD	8315A	III
13-Jun-2011	SL-046-SA5DN-SB-4.0-5.0	6314466	N	METHOD	9012B	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3050B	6010B	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3050B	6020	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3060A	7199	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3546	1625C	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3550B	8015B	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3550B	8015M	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3550B	8082	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3550B	8270C	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	3550B	8270C SIM	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	5035	8015M	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	5035	8260B	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	5035	8260B SIM	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	8330	8330A	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	METHOD	300.0	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	METHOD	6850	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	METHOD	7471A	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	METHOD	8015B	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	METHOD	8015M	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	METHOD	8315A	III
13-Jun-2011	SL-046-SA5DN-SB-9.0-10.0	6314467	N	METHOD	9012B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3050B	6010B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3060A	7199	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3546	1625C	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3550B	8015B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3550B	8015M	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3550B	8082	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3550B	8270C	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	3550B	8270C SIM	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	5035	8015M	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	5035	8260B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	5035	8260B SIM	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	8330	8330A	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	METHOD	300.0	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	METHOD	314.0	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	METHOD	7471A	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	METHOD	8015B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	METHOD	8015M	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	METHOD	8315A	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0	6314462	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D220554	DUP	METHOD	7471A	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D220820A	DUP	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D220820B	DUP	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D220820C	DUP	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D220820D	DUP	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D221030	DUP	3050B	6010B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D271439A	DUP	METHOD	300.0	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D271626A	DUP	METHOD	9012B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0DU	P314462D272224A	DUP	METHOD	314.0	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R220555	MS	METHOD	7471A	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R220823A	MS	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R220823B	MS	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R220823C	MS	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R220823D	MS	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R221034	MS	3050B	6010B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R242102A	MS	METHOD	8315A	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R260157	MS	3550B	8270C SIM	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R261745	MS	3550B	8270C	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R271453A	MS	METHOD	300.0	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R271627A	MS	METHOD	9012B	III
13-Jun-2011	SL-042-SA5DN-SB-4.0-5.0MS	P314462R272248A	MS	METHOD	314.0	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3050B	6010B	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3050B	6020	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3060A	7199	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3546	1625C	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3550B	8015M	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3550B	8082	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3550B	8270C	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	3550B	8270C SIM	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	5035	8015M	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	5035	8260B	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	5035	8260B SIM	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	8330	8330A	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	METHOD	300.0	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	METHOD	314.0	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	METHOD	6850	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	METHOD	7471A	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	METHOD	8015B	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	METHOD	8015M	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	METHOD	8315A	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0	6314463	N	METHOD	9012B	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0D	P314463D271312A	DUP	3060A	7199	III
13-Jun-2011	SL-042-SA5DN-SB-9.0-10.0M	P314463R271238A	MS	3060A	7199	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3050B	6010B	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3050B	6020	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3060A	7199	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3546	1625C	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3550B	8015B	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3550B	8015M	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3550B	8082	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	3550B	8270C SIM	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	5035	8015M	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	5035	8260B	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	5035	8260B SIM	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	8330	8330A	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	METHOD	300.0	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	METHOD	314.0	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	METHOD	7471A	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	METHOD	8015B	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	METHOD	8015M	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	METHOD	8315A	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0	6314464	N	METHOD	9012B	III
13-Jun-2011	SL-043-SA5DN-SB-4.0-5.0MS	P314464R322126A	MS	METHOD	8015B	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3050B	6010B	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3050B	6020	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3060A	7199	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3546	1625C	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3550B	8015B	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3550B	8015M	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3550B	8082	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3550B	8270C	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	3550B	8270C SIM	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	5035	8015M	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	5035	8260B	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	5035	8260B SIM	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	8330	8330A	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	METHOD	300.0	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	METHOD	314.0	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	METHOD	7471A	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	METHOD	8015B	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	METHOD	8015M	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	METHOD	8315A	III
13-Jun-2011	SL-043-SA5DN-SB-9.0-10.0	6314465	N	METHOD	9012B	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	3050B	6010B	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	3050B	6020	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	3060A	7199	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	3550B	8082	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	3550B	8270C	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	3550B	8270C SIM	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	5035	8260B	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	5035	8260B SIM	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	METHOD	300.0	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	METHOD	314.0	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0	6314472	N	METHOD	7471A	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0DU	P314472D270354B	DUP	METHOD	314.0	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0DU	P314472D271757B	DUP	METHOD	300.0	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0MS	P314472R270417B	MS	METHOD	314.0	III
13-Jun-2011	SL-202-SA5DN-SB-4.0-5.0MS	P314472R271812B	MS	METHOD	300.0	III
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	3050B	6010B	III
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	3050B	6020	III
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	3060A	7199	III
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	3550B	8270C	III
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	3550B	8270C SIM	III
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	METHOD	300.0	III
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	METHOD	314.0	III
13-Jun-2011	SL-202-SA5DN-SB-9.0-10.0	6314473	N	METHOD	7471A	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	3050B	6010B	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	3050B	6020	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	3060A	7199	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	3550B	8082	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	3550B	8270C	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	3550B	8270C SIM	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	5035	8260B	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	5035	8260B SIM	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	METHOD	300.0	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	METHOD	314.0	III
13-Jun-2011	SL-054-SA5DN-SB-4.0-5.0	6314470	N	METHOD	7471A	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	3050B	6010B	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	3050B	6020	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	3060A	7199	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	3550B	8082	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	3550B	8270C	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	3550B	8270C SIM	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	METHOD	300.0	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	METHOD	314.0	III
13-Jun-2011	SL-054-SA5DN-SB-9.0-10.0	6314471	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE179 Laboratory: LL

EDD Filename: DE179_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.1		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.4		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-043-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 12:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.9		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	14.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-046-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.4		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-047-SA5DN-SB-10.0-11.0 *Collected:* 6/13/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.86	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-047-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	14.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	9.3		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.7		0.96	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.6		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.9		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.49	J	0.420	MDL	5.84	PQL	mg/Kg	J	Z
CALCIUM	14700		2.92	MDL	23.4	PQL	mg/Kg	J	E
PHOSPHORUS	239		0.409	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	3430		13.2	MDL	58.4	PQL	mg/Kg	J	Q
TIN	3.76	J	0.374	MDL	11.7	PQL	mg/Kg	U	B
TITANIUM	1490		0.0829	MDL	1.17	PQL	mg/Kg	J	L
Zirconium	5.81	J	0.537	MDL	5.84	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-9.0-10.0 ***Collected:*** 6/13/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.44	J	0.382	MDL	5.31	PQL	mg/Kg	J	Z
CALCIUM	5450		2.66	MDL	21.2	PQL	mg/Kg	J	E
PHOSPHORUS	345		0.372	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	1380		12.0	MDL	53.1	PQL	mg/Kg	J	Q
TIN	2.11	J	0.340	MDL	10.6	PQL	mg/Kg	U	B
TITANIUM	670		0.0754	MDL	1.06	PQL	mg/Kg	J	L
Zirconium	3.75	J	0.489	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 ***Collected:*** 6/13/2011 11:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.75	J	0.408	MDL	5.67	PQL	mg/Kg	J	Z
CALCIUM	14500		2.84	MDL	22.7	PQL	mg/Kg	J	E
PHOSPHORUS	254		0.397	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3410		12.8	MDL	56.7	PQL	mg/Kg	J	Q
TIN	2.77	J	0.363	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1400		0.0805	MDL	1.13	PQL	mg/Kg	J	L
Zirconium	5.23	J	0.522	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-9.0-10.0 ***Collected:*** 6/13/2011 12:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.55	J	0.409	MDL	5.68	PQL	mg/Kg	J	Z
CALCIUM	5530		2.84	MDL	22.7	PQL	mg/Kg	J	E
PHOSPHORUS	274		0.398	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	3490		12.8	MDL	56.8	PQL	mg/Kg	J	Q
TIN	3.09	J	0.364	MDL	11.4	PQL	mg/Kg	U	B
TITANIUM	1480		0.0807	MDL	1.14	PQL	mg/Kg	J	L
Zirconium	5.15	J	0.523	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-4.0-5.0 ***Collected:*** 6/13/2011 9:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.60	J	0.408	MDL	5.67	PQL	mg/Kg	J	Z
CALCIUM	6340		2.83	MDL	22.7	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	313		0.397	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3880		12.8	MDL	56.7	PQL	mg/Kg	J	Q
TIN	3.11	J	0.363	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1700		0.0805	MDL	1.13	PQL	mg/Kg	J	L

Sample ID: SL-046-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.95	J	0.405	MDL	5.63	PQL	mg/Kg	J	Z
CALCIUM	6680		2.82	MDL	22.5	PQL	mg/Kg	J	E
PHOSPHORUS	198		0.394	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3100		12.7	MDL	56.3	PQL	mg/Kg	J	Q
TIN	2.90	J	0.360	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1320		0.0800	MDL	1.13	PQL	mg/Kg	J	L
Zirconium	5.01	J	0.518	MDL	5.63	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-10.0-11.0 *Collected:* 6/13/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	9420		2.60	MDL	20.8	PQL	mg/Kg	J	E
PHOSPHORUS	294		0.364	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	2270		11.8	MDL	52.0	PQL	mg/Kg	J	Q
TIN	2.85	J	0.333	MDL	10.4	PQL	mg/Kg	U	B
TITANIUM	1360		0.0739	MDL	1.04	PQL	mg/Kg	J	L
Zirconium	3.25	J	0.479	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6560		2.77	MDL	22.2	PQL	mg/Kg	J	E
PHOSPHORUS	397		0.388	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3660		12.5	MDL	55.5	PQL	mg/Kg	J	Q
TIN	3.01	J	0.355	MDL	11.1	PQL	mg/Kg	U	B
TITANIUM	1620		0.0788	MDL	1.11	PQL	mg/Kg	J	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-054-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.57	J	0.432	MDL	6.00	PQL	mg/Kg	J	Z
CALCIUM	5390		3.00	MDL	24.0	PQL	mg/Kg	J	E
PHOSPHORUS	391		0.420	MDL	12.0	PQL	mg/Kg	J	Q
POTASSIUM	3540		13.6	MDL	60.0	PQL	mg/Kg	J	Q
TIN	3.09	J	0.384	MDL	12.0	PQL	mg/Kg	U	B
TITANIUM	1680		0.0852	MDL	1.20	PQL	mg/Kg	J	L
Zirconium	5.49	J	0.552	MDL	6.00	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	7860		2.90	MDL	23.2	PQL	mg/Kg	J	E
PHOSPHORUS	460		0.406	MDL	11.6	PQL	mg/Kg	J	Q
POTASSIUM	3330		13.1	MDL	58.0	PQL	mg/Kg	J	Q
TIN	3.33	J	0.371	MDL	11.6	PQL	mg/Kg	U	B
TITANIUM	1590		0.0824	MDL	1.16	PQL	mg/Kg	J	L

Sample ID: SL-202-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	10600		3.02	MDL	24.1	PQL	mg/Kg	J	E
PHOSPHORUS	549		0.422	MDL	12.1	PQL	mg/Kg	J	Q
POTASSIUM	4230		13.6	MDL	60.3	PQL	mg/Kg	J	Q
TIN	3.15	J	0.386	MDL	12.1	PQL	mg/Kg	U	B
TITANIUM	1680		0.0856	MDL	1.21	PQL	mg/Kg	J	L

Sample ID: SL-202-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.94	J	0.407	MDL	5.65	PQL	mg/Kg	J	Z
CALCIUM	11400		2.82	MDL	22.6	PQL	mg/Kg	J	E
PHOSPHORUS	372		0.395	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3480		12.8	MDL	56.5	PQL	mg/Kg	J	Q
TIN	3.08	J	0.362	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1490		0.0802	MDL	1.13	PQL	mg/Kg	J	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS **Method:** 6010B **Matrix:** SO

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0664	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.408		0.0847	MDL	0.229	PQL	mg/Kg	UJ	Q, B
COPPER	17.7		0.0916	MDL	0.458	PQL	mg/Kg	J	E
LEAD	10.5		0.0117	MDL	0.229	PQL	mg/Kg	J	Q, E, E
SILVER	0.0530	J	0.0163	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0667	J	0.0616	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.168	J	0.0786	MDL	0.212	PQL	mg/Kg	UJ	Q, B
COPPER	9.40		0.0850	MDL	0.425	PQL	mg/Kg	J	E
LEAD	5.73		0.0108	MDL	0.212	PQL	mg/Kg	J	Q, E, E
SILVER	0.0246	J	0.0151	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0667	J	0.0664	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.261		0.0848	MDL	0.229	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	16.4		0.0916	MDL	0.458	PQL	mg/Kg	J	E
LEAD	10.2		0.0117	MDL	0.229	PQL	mg/Kg	J	Q, E, E
SILVER	0.0480	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 12:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.251		0.0850	MDL	0.230	PQL	mg/Kg	UJ	Q, B
COPPER	19.7		0.0918	MDL	0.459	PQL	mg/Kg	J	E
LEAD	10.8		0.0117	MDL	0.230	PQL	mg/Kg	J	Q, E, E
SILVER	0.0538	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0665	J	0.0645	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.421		0.0823	MDL	0.222	PQL	mg/Kg	UJ	Q, B
COPPER	22.1		0.0889	MDL	0.445	PQL	mg/Kg	J	E
LEAD	13.7		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, E, E
SILVER	0.0992	J	0.0158	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 10:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0667	J	0.0647	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 10:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.469		0.0825	MDL	0.223	PQL	mg/Kg	UJ	Q, B
COPPER	25.9		0.0892	MDL	0.446	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-046-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 10:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.9		0.0114	MDL	0.223	PQL	mg/Kg	J	Q, E, E
SILVER	0.0747	J	0.0158	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-10.0-11.0 *Collected:* 6/13/2011 9:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0619	J	0.0609	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-10.0-11.0 *Collected:* 6/13/2011 9:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.158	J	0.0778	MDL	0.210	PQL	mg/Kg	UJ	Q, B
COPPER	13.7		0.0841	MDL	0.420	PQL	mg/Kg	J	E
LEAD	7.02		0.0107	MDL	0.210	PQL	mg/Kg	J	Q, E, E
SILVER	0.0260	J	0.0149	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.496		0.0813	MDL	0.220	PQL	mg/Kg	UJ	Q, B
COPPER	21.4		0.0879	MDL	0.440	PQL	mg/Kg	J	E
LEAD	14.6		0.0112	MDL	0.220	PQL	mg/Kg	J	Q, E, E
SILVER	0.0646	J	0.0156	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 3:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0775	J	0.0683	MDL	0.471	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 3:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.307		0.0871	MDL	0.235	PQL	mg/Kg	UJ	Q, B
COPPER	17.5		0.0941	MDL	0.471	PQL	mg/Kg	J	E
LEAD	11.7		0.0120	MDL	0.235	PQL	mg/Kg	J	Q, E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-054-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 3:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0594	J	0.0167	MDL	0.118	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 3:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0673	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 3:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.309		0.0858	MDL	0.232	PQL	mg/Kg	UJ	Q, B
COPPER	24.4		0.0928	MDL	0.464	PQL	mg/Kg	J	E
LEAD	12.3		0.0118	MDL	0.232	PQL	mg/Kg	J	Q, E, E
SILVER	0.0609	J	0.0165	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 2:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.0700	MDL	0.483	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 2:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.395		0.0893	MDL	0.241	PQL	mg/Kg	UJ	Q, B
COPPER	25.0		0.0965	MDL	0.483	PQL	mg/Kg	J	E
LEAD	16.1		0.0123	MDL	0.241	PQL	mg/Kg	J	Q, E, E
SILVER	0.0636	J	0.0171	MDL	0.121	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 2:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.338		0.0836	MDL	0.226	PQL	mg/Kg	UJ	Q, B
COPPER	17.4		0.0904	MDL	0.452	PQL	mg/Kg	J	E
LEAD	10.6		0.0115	MDL	0.226	PQL	mg/Kg	J	Q, E, E
SILVER	0.0593	J	0.0160	MDL	0.113	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.88	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-10.0-11.0 *Collected:* 6/13/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 Laboratory: LL

EDD Filename: DE179_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 7199 **Matrix:** SO

Sample ID: SL-202-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 7471A **Matrix:** SO

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0398	J	0.0079	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0124	J	0.0076	MDL	0.107	PQL	mg/Kg	J	Z

Method Category: SVOA **Method:** 1625C **Matrix:** SO

Sample ID: SL-047-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	187	U	187	MDL	374	PQL	ng/Kg	UJ	H

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.60	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.84	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.6	J	0.91	MDL	2.7	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 12:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.3	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.52	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES *Dilution:* 20.76

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.2	J	0.2	MDL	1	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:00:00 *Analysis Type:* RES *Dilution:* 21.33

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.3	J	0.2	MDL	1	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.87	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.59	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.74	J	0.45	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 3:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.85	J	0.47	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	390	U	390	MDL	1200	PQL	ug/Kg	UJ	Q, L
BENZO(A)ANTHRACENE	29	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	22	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	26	J	20	MDL	200	PQL	ug/Kg	J	Z
CHRYSENE	34	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	27	J	20	MDL	200	PQL	ug/Kg	J	Z
PYRENE	30	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE179 Laboratory: LL

EDD Filename: DE179_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-043-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 12:05:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L

Sample ID: SL-046-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 10:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	L

Sample ID: SL-047-SA5DN-SB-10.0-11.0 *Collected:* 6/13/2011 9:10:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	350	U	350	MDL	1100	PQL	ug/Kg	UJ	L

Sample ID: SL-047-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L

Sample ID: SL-054-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 3:10:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	400	U	400	MDL	1200	PQL	ug/Kg	UJ	L

Sample ID: SL-054-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 3:15:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	400	U	400	MDL	1200	PQL	ug/Kg	UJ	L

Sample ID: SL-202-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 2:20:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	400	U	400	MDL	1200	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Method Category: SVOA **Method:** 8270C SIM **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.8	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.92	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.93	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.79	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	0.89	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.7	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	8.2	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	14	J	6.9	MDL	21	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory:** LL

EDD Filename: DE179_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-202-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.90	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	0.67	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-042-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:00:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOLUENE	0.23	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-042-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 11:10:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	7.4		0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.17	J	0.08	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 11:55:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	8.7		0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.23	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-043-SA5DN-SB-9.0-10.0 *Collected:* 6/13/2011 12:05:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	5.6		0.24	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.19	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-046-SA5DN-SB-4.0-5.0 *Collected:* 6/13/2011 9:50:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	5.7		0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.20	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 Laboratory: LL

EDD Filename: DE179_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-046-SA5DN-SB-9.0-10.0 **Collected:** 6/13/2011 10:00:00 **Analysis Type:** RES **Dilution:** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.6	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.18	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-10.0-11.0 **Collected:** 6/13/2011 9:10:00 **Analysis Type:** RES **Dilution:** 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	5.2		0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.21	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-047-SA5DN-SB-4.0-5.0 **Collected:** 6/13/2011 9:00:00 **Analysis Type:** RES **Dilution:** 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	4.2	J	0.26	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.21	J	0.09	MDL	4.3	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA5DN-SB-4.0-5.0 **Collected:** 6/13/2011 3:10:00 **Analysis Type:** RES **Dilution:** 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	4.1		0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.23	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-202-SA5DN-SB-4.0-5.0 **Collected:** 6/13/2011 2:20:00 **Analysis Type:** RES **Dilution:** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.5	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.17	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE179

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE179
EDD Filename: DE179_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 1625C **Preparation Method: 3546**
Matrix: SO

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
SL-047-SA5DN-SB-4.0-5.0 (RES)	Sampling To Extraction	17.00	14.00	DAYS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P17208BB221009	6/24/2011 10:09:00 AM	IRON MAGNESIUM MANGANESE PHOSPHORUS TIN	4.19 mg/Kg 0.703 mg/Kg 0.0380 mg/Kg 1.71 mg/Kg 1.71 mg/Kg	SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0 SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-042-SA5DN-SB-4.0-5.0(RES)	TIN	3.76 mg/Kg	3.76U mg/Kg
SL-042-SA5DN-SB-9.0-10.0(RES)	TIN	2.11 mg/Kg	2.11U mg/Kg
SL-043-SA5DN-SB-4.0-5.0(RES)	TIN	2.77 mg/Kg	2.77U mg/Kg
SL-043-SA5DN-SB-9.0-10.0(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-046-SA5DN-SB-4.0-5.0(RES)	TIN	3.11 mg/Kg	3.11U mg/Kg
SL-046-SA5DN-SB-9.0-10.0(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-047-SA5DN-SB-10.0-11.0(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-047-SA5DN-SB-4.0-5.0(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-054-SA5DN-SB-4.0-5.0(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-054-SA5DN-SB-9.0-10.0(RES)	TIN	3.33 mg/Kg	3.33U mg/Kg
SL-202-SA5DN-SB-4.0-5.0(RES)	TIN	3.15 mg/Kg	3.15U mg/Kg
SL-202-SA5DN-SB-9.0-10.0(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P17226AB220808A	6/22/2011 8:08:00 AM	ANTIMONY	0.101 mg/Kg	SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0 SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-042-SA5DN-SB-4.0-5.0(RES)	ANTIMONY	0.408 mg/Kg	0.408U mg/Kg
SL-042-SA5DN-SB-9.0-10.0(RES)	ANTIMONY	0.168 mg/Kg	0.168U mg/Kg
SL-043-SA5DN-SB-4.0-5.0(RES)	ANTIMONY	0.261 mg/Kg	0.261U mg/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-043-SA5DN-SB-9.0-10.0(RES)	ANTIMONY	0.251 mg/Kg	0.251U mg/Kg
SL-046-SA5DN-SB-4.0-5.0(RES)	ANTIMONY	0.421 mg/Kg	0.421U mg/Kg
SL-046-SA5DN-SB-9.0-10.0(RES)	ANTIMONY	0.469 mg/Kg	0.469U mg/Kg
SL-047-SA5DN-SB-10.0-11.0(RES)	ANTIMONY	0.158 mg/Kg	0.158U mg/Kg
SL-047-SA5DN-SB-4.0-5.0(RES)	ANTIMONY	0.496 mg/Kg	0.496U mg/Kg
SL-054-SA5DN-SB-4.0-5.0(RES)	ANTIMONY	0.307 mg/Kg	0.307U mg/Kg
SL-054-SA5DN-SB-9.0-10.0(RES)	ANTIMONY	0.309 mg/Kg	0.309U mg/Kg
SL-202-SA5DN-SB-4.0-5.0(RES)	ANTIMONY	0.395 mg/Kg	0.395U mg/Kg
SL-202-SA5DN-SB-9.0-10.0(RES)	ANTIMONY	0.338 mg/Kg	0.338U mg/Kg

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB88B210142A	6/18/2011 1:42:00 AM	METHYLENE CHLORIDE	0.98 ug/Kg	SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-042-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	7.4 ug/Kg	7.4U ug/Kg
SL-043-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	8.7 ug/Kg	8.7U ug/Kg
SL-043-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	5.6 ug/Kg	5.6U ug/Kg
SL-046-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	5.7 ug/Kg	5.7U ug/Kg
SL-046-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	3.6 ug/Kg	4.2U ug/Kg
SL-047-SA5DN-SB-10.0-11.0(RES)	METHYLENE CHLORIDE	5.2 ug/Kg	5.2U ug/Kg
SL-047-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	4.2 ug/Kg	4.3U ug/Kg
SL-054-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	4.1 ug/Kg	4.1U ug/Kg
SL-202-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.5 ug/Kg	4.2U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5DN-SB-4.0-5.0MSD (SL-042-SA5DN-SB-4.0-5.0)	BENZOIC ACID	-	-	10.00-173.00	46 (30.00)	BENZOIC ACID	J (all detects)
SL-042-SA5DN-SB-4.0-5.0MS SL-042-SA5DN-SB-4.0-5.0MSD (SL-042-SA5DN-SB-4.0-5.0)	2,4-DINITROPHENOL	14	15	20.00-143.00	-	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5DN-SB-4.0-5.0MS SL-042-SA5DN-SB-4.0-5.0MSD (SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0 SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0)	ANTIMONY	64	53	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
	LEAD	-	284	75.00-125.00	34 (20.00)	LEAD	Zn, No Qual, >4x
	ZINC	64	126	75.00-125.00	-	ZINC	
SL-042-SA5DN-SB-4.0-5.0MS SL-042-SA5DN-SB-4.0-5.0MSD (SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0 SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0)	BARIUM	144	148	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5DN-SB-4.0-5.0MS SL-042-SA5DN-SB-4.0-5.0MSD (SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0 SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0)	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM TITANIUM	1239 1046 242 154 156 187	2136 2072 272 145 166 224	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM TITANIUM	J(all detects) Al, Fe, Mg, Ti, No Qual, >4x
SL-042-SA5DN-SB-4.0-5.0MS SL-042-SA5DN-SB-4.0-5.0MSD (SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0 SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0)	CALCIUM MANGANESE	713 -2	-38 -	75.00-125.00 75.00-125.00	22 (20.00) -	CALCIUM MANGANESE	J(all detects) UJ(all non-detects) Ca, Mn, No Qual %R, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-042-SA5DN-SB-4.0-5.0MS (SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0)	FLUORIDE	69	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-202-SA5DN-SB-4.0-5.0MS (SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0)	FLUORIDE	74	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5DN-SB-4.0-5.0DUP (SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0)	Nitrate-NO3	27	20.00	No Qual, OK by Difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5DN-SB-4.0-5.0DUP (SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0 SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0)	BORON TIN	39 38	20.00 20.00	No Qual OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5DN-SB-4.0-5.0DUP (SL-042-SA5DN-SB-4.0-5.0 SL-042-SA5DN-SB-9.0-10.0 SL-043-SA5DN-SB-4.0-5.0 SL-043-SA5DN-SB-9.0-10.0 SL-046-SA5DN-SB-4.0-5.0 SL-046-SA5DN-SB-9.0-10.0 SL-047-SA5DN-SB-10.0-11.0 SL-047-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-4.0-5.0 SL-054-SA5DN-SB-9.0-10.0 SL-202-SA5DN-SB-4.0-5.0 SL-202-SA5DN-SB-9.0-10.0)	ANTIMONY CADMIUM COPPER LEAD SELENIUM	53 65 60 38 48	20.00 20.00 20.00 20.00 20.00	J(all detects) UJ(all non-detects) Sb, Cd, Se, No Qual, OK by Difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-202-SA5DN-SB-4.0-5.0DUP (SL-202-SA5DN-SB-4.0-5.0 SL -202-SA5DN-SB-9.0-10.0)	FLUORIDE	36	20.00	No Qual OK by Difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-042-SA5DN-SB-9.0-10.0DUP (SL-042-SA5DN-SB-4.0-5.0 SL -042-SA5DN-SB-9.0-10.0 SL -043-SA5DN-SB-4.0-5.0 SL -043-SA5DN-SB-9.0-10.0 SL -046-SA5DN-SB-4.0-5.0 SL -046-SA5DN-SB-9.0-10.0 SL -047-SA5DN-SB-10.0-11.0 SL -047-SA5DN-SB-4.0-5.0 SL -054-SA5DN-SB-4.0-5.0 SL -054-SA5DN-SB-9.0-10.0 SL -202-SA5DN-SB-4.0-5.0 SL -202-SA5DN-SB-9.0-10.0)	HEXAVALENT CHROMIUM	58	20.00	No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LGLCSQ261652 (SL-042-SA5DN -SB-4.0-5.0 SL -042-SA5DN -SB-9.0-10.0 SL -043-SA5DN -SB-4.0-5.0 SL -043-SA5DN -SB-9.0-10.0 SL -046-SA5DN -SB-4.0-5.0 SL -046-SA5DN -SB-9.0-10.0 SL -047-SA5DN -SB-10.0-11.0 SL -047-SA5DN -SB-4.0-5.0 SL -054-SA5DN -SB-4.0-5.0 SL -054-SA5DN -SB-9.0-10.0 SL -202-SA5DN -SB-4.0-5.0)	2,4-DINITROPHENOL	32	-	37.00-120.00	-	2,4-DINITROPHENOL	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P17226AQ220811A (SL-042-SA5DN -SB-4.0-5.0 SL -042-SA5DN -SB-9.0-10.0 SL -043-SA5DN -SB-4.0-5.0 SL -043-SA5DN -SB-9.0-10.0 SL -046-SA5DN -SB-4.0-5.0 SL -046-SA5DN -SB-9.0-10.0 SL -047-SA5DN -SB-10.0-11.0 SL -047-SA5DN -SB-4.0-5.0 SL -054-SA5DN -SB-4.0-5.0 SL -054-SA5DN -SB-9.0-10.0 SL -202-SA5DN -SB-4.0-5.0 SL -202-SA5DN -SB-9.0-10.0)	ANTIMONY	142	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB88Q210352A (SL-042-SA5DN -SB-4.0-5.0 SL -042-SA5DN -SB-9.0-10.0 SL -043-SA5DN -SB-4.0-5.0 SL -043-SA5DN -SB-9.0-10.0 SL -046-SA5DN -SB-4.0-5.0 SL -046-SA5DN -SB-9.0-10.0 SL -047-SA5DN -SB-10.0-11.0 SL -047-SA5DN -SB-4.0-5.0 SL -054-SA5DN -SB-4.0-5.0 SL -202-SA5DN -SB-4.0-5.0)	1,1-DICHLOROETHENE	124	-	73.00-123.00	-	1,1-DICHLOROETHENE	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.8	PQL	mg/Kg	J (all detects)
SL-042-SA5DN-SB-9.0-10.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	BORON	J	5.49	5.84	PQL	mg/Kg	J (all detects)
	TIN	J	3.76	11.7	PQL	mg/Kg	
	Zirconium	J	5.81	5.84	PQL	mg/Kg	
SL-042-SA5DN-SB-9.0-10.0	BORON	J	2.44	5.31	PQL	mg/Kg	J (all detects)
	TIN	J	2.11	10.6	PQL	mg/Kg	
	Zirconium	J	3.75	5.31	PQL	mg/Kg	
SL-043-SA5DN-SB-4.0-5.0	BORON	J	4.75	5.67	PQL	mg/Kg	J (all detects)
	TIN	J	2.77	11.3	PQL	mg/Kg	
	Zirconium	J	5.23	5.67	PQL	mg/Kg	
SL-043-SA5DN-SB-9.0-10.0	BORON	J	3.55	5.68	PQL	mg/Kg	J (all detects)
	TIN	J	3.09	11.4	PQL	mg/Kg	
	Zirconium	J	5.15	5.68	PQL	mg/Kg	
SL-046-SA5DN-SB-4.0-5.0	BORON	J	5.60	5.67	PQL	mg/Kg	J (all detects)
	TIN	J	3.11	11.3	PQL	mg/Kg	
SL-046-SA5DN-SB-9.0-10.0	BORON	J	2.95	5.63	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	11.3	PQL	mg/Kg	
	Zirconium	J	5.01	5.63	PQL	mg/Kg	
SL-047-SA5DN-SB-10.0-11.0	TIN	J	2.85	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.25	5.20	PQL	mg/Kg	
SL-047-SA5DN-SB-4.0-5.0	TIN	J	3.01	11.1	PQL	mg/Kg	J (all detects)
SL-054-SA5DN-SB-4.0-5.0	BORON	J	4.57	6.00	PQL	mg/Kg	J (all detects)
	TIN	J	3.09	12.0	PQL	mg/Kg	
	Zirconium	J	5.49	6.00	PQL	mg/Kg	
SL-054-SA5DN-SB-9.0-10.0	TIN	J	3.33	11.6	PQL	mg/Kg	J (all detects)
SL-202-SA5DN-SB-4.0-5.0	TIN	J	3.15	12.1	PQL	mg/Kg	J (all detects)
SL-202-SA5DN-SB-9.0-10.0	BORON	J	4.94	5.65	PQL	mg/Kg	J (all detects)
	TIN	J	3.08	11.3	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	SELENIUM	J	0.113	0.458	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0530	0.114	PQL	mg/Kg	
SL-042-SA5DN-SB-9.0-10.0	ANTIMONY	J	0.168	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0667	0.425	PQL	mg/Kg	
	SILVER	J	0.0246	0.106	PQL	mg/Kg	
SL-043-SA5DN-SB-4.0-5.0	SELENIUM	J	0.0667	0.458	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0480	0.115	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-043-SA5DN-SB-9.0-10.0	SILVER	J	0.0538	0.115	PQL	mg/Kg	J (all detects)
SL-046-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0665 0.0992	0.445 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-046-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.0667 0.0747	0.446 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-047-SA5DN-SB-10.0-11.0	ANTIMONY SELENIUM SILVER	J J J	0.158 0.0619 0.0260	0.210 0.420 0.105	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-047-SA5DN-SB-4.0-5.0	SILVER	J	0.0646	0.110	PQL	mg/Kg	J (all detects)
SL-054-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0775 0.0594	0.471 0.118	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-054-SA5DN-SB-9.0-10.0	SELENIUM SILVER	J J	0.130 0.0609	0.464 0.116	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-202-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.104 0.0636	0.483 0.121	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-202-SA5DN-SB-9.0-10.0	SILVER	J	0.0593	0.113	PQL	mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.37	1.2	PQL	mg/Kg	J (all detects)
SL-042-SA5DN-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)
SL-043-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-046-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.88	1.2	PQL	mg/Kg	J (all detects)
SL-046-SA5DN-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.41	1.2	PQL	mg/Kg	J (all detects)
SL-047-SA5DN-SB-10.0-11.0	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-047-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)
SL-054-SA5DN-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.55	1.2	PQL	mg/Kg	J (all detects)
SL-202-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-202-SA5DN-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-046-SA5DN-SB-4.0-5.0	MERCURY	J	0.0398	0.112	PQL	mg/Kg	J (all detects)
SL-047-SA5DN-SB-4.0-5.0	MERCURY	J	0.0124	0.107	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	EFH (C15-C20)	J	0.60	1.4	PQL	mg/Kg	J (all detects)
SL-042-SA5DN-SB-9.0-10.0	EFH (C30-C40)	J	0.84	1.3	PQL	mg/Kg	J (all detects)
SL-043-SA5DN-SB-4.0-5.0	EFH (C15-C20)	J	1.6	2.7	PQL	mg/Kg	J (all detects)
SL-043-SA5DN-SB-9.0-10.0	EFH (C21-C30) EFH (C30-C40)	J J	1.3 0.52	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-046-SA5DN-SB-4.0-5.0	GASOLINE RANGE ORGANICS (C5-C12)	J	0.2	1	PQL	mg/Kg	J (all detects)
SL-047-SA5DN-SB-4.0-5.0	GASOLINE RANGE ORGANICS (C5-C12)	J	0.3	1	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	0.87	2.0	PQL	ug/Kg	J (all detects)
SL-042-SA5DN-SB-9.0-10.0	AROCLOR 1260	J	0.59	1.9	PQL	ug/Kg	J (all detects)
SL-043-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	0.74	1.9	PQL	ug/Kg	J (all detects)
SL-054-SA5DN-SB-9.0-10.0	AROCLOR 1260	J	0.85	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	TOLUENE	J	0.23	4.0	PQL	ug/Kg	J (all detects)
SL-042-SA5DN-SB-9.0-10.0	TOLUENE	J	0.17	3.8	PQL	ug/Kg	J (all detects)
SL-043-SA5DN-SB-4.0-5.0	TOLUENE	J	0.23	4.1	PQL	ug/Kg	J (all detects)
SL-043-SA5DN-SB-9.0-10.0	TOLUENE	J	0.19	3.9	PQL	ug/Kg	J (all detects)
SL-046-SA5DN-SB-4.0-5.0	TOLUENE	J	0.20	4.0	PQL	ug/Kg	J (all detects)
SL-046-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	3.6 0.18	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-047-SA5DN-SB-10.0-11.0	TOLUENE	J	0.21	4.0	PQL	ug/Kg	J (all detects)
SL-047-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	4.2 0.21	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-054-SA5DN-SB-4.0-5.0	TOLUENE	J	0.23	4.0	PQL	ug/Kg	J (all detects)
SL-202-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	3.5 0.17	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE179 **Laboratory: LL**

EDD Filename: DE179_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	29	200	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	22	200	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	26	200	PQL	ug/Kg	
	CHRYSENE	J	34	200	PQL	ug/Kg	
	FLUORANTHENE	J	27	200	PQL	ug/Kg	
	PYRENE	J	30	200	PQL	ug/Kg	
SL-042-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	370	PQL	ug/Kg	J (all detects)
SL-043-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-042-SA5DN-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	1.8	2.0	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.4	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.0	PQL	ug/Kg	
SL-042-SA5DN-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.92	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	PYRENE	J	1.3	1.8	PQL	ug/Kg	
SL-043-SA5DN-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.93	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.79	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.89	1.9	PQL	ug/Kg	
SL-043-SA5DN-SB-9.0-10.0	Di-n-octylphthalate	J	8.7	21	PQL	ug/Kg	J (all detects)
SL-046-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.2	21	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	14	21	PQL	ug/Kg	
SL-202-SA5DN-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.90	2.0	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.67	2.0	PQL	ug/Kg	

LDC #: 26277J4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE179 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: W

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	Ca, Fe, Mg, Mn, Ti, Zn 7 4X, Na 9 4 3 R
V.	ICP Interference Check Sample (ICS) Analysis	N	RPD
VI.	Matrix Spike Analysis	N	Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn 74X, Na 943R
VII.	Duplicate Sample Analysis	SW	Sb, B, Cd, Se, Sn CSX
VIII.	Laboratory Control Samples (LCS)	SW	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	A	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-042-SA5DN-SB-4.0-5.0	11	SL-202-SA5DN-SB-4.0-5.0	21		31	
2	SL-042-SA5DN-SB-9.0-10.0	12	SL-202-SA5DN-SB-9.0-10.0	22		32	
3	SL-043-SA5DN-SB-4.0-5.0	13	#1 MS	23		33	
4	SL-043-SA5DN-SB-9.0-10.0	14	↓ MSD	24		34	
5	SL-046-SA5DN-SB-4.0-5.0	15	↓ Dup	25		35	
6	SL-046-SA5DN-SB-9.0-10.0	16		26		36	
7	SL-047-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-047-SA5DN-SB-10.0-11.0	18		28		38	
9	SL-054-SA5DN-SB-4.0-5.0	19		29		39	
10	SL-054-SA5DN-SB-9.0-10.0	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE179
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6314462BKG Matrix Spike Lab Sample ID: 6314462MS Matrix Spike Duplicate Lab Sample ID: 6314462MSD
% Solids for Sample: 84.8
Batch Id(s): P17208B, P17226A, P17211D

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum		34979.1098		37901.9116		39870.8681		235.8491	228.9797	MG/KG	1239		2136		5			20	P'
Antimony	121	0.4076		1.2944		1.1362		1.3873	1.3739	MG/KG	64	N	53	N	13		75 - 125	20	MS
Arsenic	75	7.2106		9.4987		9.4454		2.3122	2.2898	MG/KG	99		98		1		75 - 125	20	MS
Barium	137	135.7391		152.3770		152.7294		11.5612	11.4490	MG/KG	144		148		0			20	MS
Beryllium	9	1.0563		2.0089		1.8772		0.9249	0.9159	MG/KG	103		90		7		75 - 125	20	MS
Boron		5.4876	B	238.6887		233.1505		235.8491	228.9797	MG/KG	99		99		2		84 - 115	20	P
Cadmium	111	0.1948		1.5774		1.4316		1.1561	1.1449	MG/KG	120		108		10		75 - 125	20	MS
Calcium		14693.4453		18057.6981		14517.5192		471.6981	457.9593	MG/KG	713		-38		22	*		20	P
Chromium	52	42.4528		54.7771		55.8710		11.5612	11.4490	MG/KG	107		117		2		75 - 125	20	MS
Cobalt	59	11.1422		74.8936		71.6477		57.8061	57.2449	MG/KG	110		106		4		75 - 125	20	MS
Copper	63	17.6910		29.1112		31.5763		11.5612	11.4490	MG/KG	99		121		8		75 - 125	20	MS
Iron		35405.9114		36639.9764		37777.5806		117.9245	114.4898	MG/KG	1046		2072		3			20	P
Lead	208	10.4758		14.3036		20.2372		3.4684	3.4347	MG/KG	110		284	N	34	*	75 - 125	20	MS
Lithium		28.5844		149.3149		145.2292		117.9245	114.4898	MG/KG	102		102		3		82 - 114	20	P
Magnesium		7160.1987		7730.5590		7782.9593		235.8491	228.9797	MG/KG	242		272		1			20	P
Manganese		414.5666		413.4080		469.7701		58.9623	57.2449	MG/KG	-2		96		13			20	P
Mercury		0.0082	U	0.1895		0.1772		0.1929	0.1939	MG/KG	98		91		7		65 - 135	20	CV
Molybdenum	98	0.4660		13.8249		12.8480		11.5612	11.4490	MG/KG	116		108		7		75 - 125	20	MS
Nickel	60	22.6942		34.2675		36.1330		11.5612	11.4490	MG/KG	100		117		5		75 - 125	20	MS
Phosphorus		239.3389		420.5059		404.8200		117.9245	114.4898	MG/KG	154	N	145	N	4		75 - 125	20	P
Potassium		3433.5641		5271.5542		5338.0083		1179.2453	1144.8983	MG/KG	156	N	166	N	1		75 - 125	20	P
Selenium	78	0.1130	B	2.4186		2.3928		2.3122	2.2898	MG/KG	100		100		1		75 - 125	20	MS
Silver	107	0.0530	B	13.5844		12.2825		11.5612	11.4490	MG/KG	117		107		10		75 - 125	20	MS
Sodium		513.6851		1650.0660		1636.0128		1179.2453	1144.8983	MG/KG	96		98		1		75 - 125	20	P
Strontium		46.1657		160.1450		159.1867		117.9245	114.4898	MG/KG	97		99		1		75 - 115	20	P
Thallium	203	0.3959		0.8930		0.8768		0.4624	0.4580	MG/KG	108		105		2		75 - 125	20	MS
Tin		3.7607	B	424.7370		407.2644		471.6981	457.9593	MG/KG	89		88		4		80 - 110	20	P
Titanium		1489.5467		1710.5200		1746.3226		117.9245	114.4898	MG/KG	187		224		2			20	P
Vanadium	51	77.9218		91.1025		91.4774		11.5612	11.4490	MG/KG	114		118		0			20	MS
Zinc	66	68.3275		75.7029		82.7761		11.5612	11.4490	MG/KG	64		126		9			20	MS
Zirconium		5.8075	B	121.7429		115.4710		117.9245	114.4898	MG/KG	98		96		5		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

for Sb JMJ (Q)
Ca JMJ (Z)
Mg JMJ (Z Q)

P, K, JMJ (Q)

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE179
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6314462BKG
% Solids for Duplicate: 84.8
Batch ID(s): P17208B, P17226A, P17211D
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6314462DUP
% Solids for Sample: 84.8

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			34979.1098		30879.9031		12		P
Antimony	121	0.2	0.4076		0.7030		53	*	MS
Arsenic	75		7.2106		6.7444		7		MS
Barium	137		135.7391		132.0755		3		MS
Beryllium	9		1.0563		0.9819		7		MS
Boron			5.4876	B	3.7158	B	39		P
Cadmium	111	0.1	0.1948		0.3810		65	*	MS
Calcium			14693.4453		15017.9835		2		P
Chromium	52		42.4528		40.4572		5		MS
Cobalt	59		11.1422		11.8197		6		MS
Copper	63		17.6910		32.7014		60	*	MS
Iron			35405.9114		33561.6618		5		P
Lead	208		10.4758		15.3642		38	*	MS
Lithium			28.5844		26.5527		7		P
Magnesium			7160.1987		6824.1618		5		P
Manganese			414.5666		354.4210		16		P
Mercury			0.0082	U	0.0080	U			CV
Molybdenum	98	0.1	0.4660		0.4989		7		MS
Nickel	60		22.6942		22.2446		2		MS
Phosphorus			239.3389		249.6740		4		P
Potassium			3433.5641		3311.1092		4		P
Selenium	78		0.1130	B	0.0693	B	48		MS
Silver	107		0.0530	B	0.0488	B	8		MS
Sodium		116.8	513.6851		482.2073		6		P
Strontium			46.1657		44.1304		5		P
Thallium	203	0.1	0.3959		0.3379		16		MS
Tin			3.7607	B	2.5469	B	38		P
Titanium			1489.5467		1246.6022		18		P
Vanadium	51		77.9218		70.5733		10		MS
Zinc	66		68.3275		76.1747		11		MS
Zirconium			5.8075	B	5.4661	B	6		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

for Cu, Pb. (Z)

DE179 3732

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 7
LABORATORY CONTROL SAMPLE
SDG No.: DE179
Matrix: SOIL

Analyte	Mass	Lab Sample ID	Units	True	Found	C	Limit		%R	M	In Spec
Aluminum		P17208BQ	MG/KG	14146.0	14759.8		8676.7	15560.3	104	P	Yes
Antimony	121	P17226AQ	MG/KG	99.2	141.2		26.3	179.7	142	MS	Yes
Arsenic	75	P17226AQ	MG/KG	109.0	110.8		90.5	123.5	102	MS	Yes
Barium	137	P17226AQ	MG/KG	345.0	365.2		280.4	381.6	106	MS	Yes
Beryllium	9	P17226AQ	MG/KG	75.2	75.1		64.4	83.8	100	MS	Yes
Boron		P17208BQ	MG/KG	167.0	163.2		130.6	183.9	98	P	Yes
Cadmium	111	P17226AQ	MG/KG	244.0	256.4		200.0	288.0	105	MS	Yes
Calcium		P17208BQ	MG/KG	9858.0	9950.8		8634.5	10843.6	101	P	Yes
Chromium	52	P17226AQ	MG/KG	80.6	91.3		64.1	97.0	113	MS	Yes
Cobalt	59	P17226AQ	MG/KG	85.8	91.4		70.3	101.0	107	MS	Yes
Copper	63	P17226AQ	MG/KG	67.4	68.4		56.2	74.4	101	MS	Yes
Iron		P17208BQ	MG/KG	23615.0	23763.1		14448.8	25976.6	101	P	Yes
Lead	208	P17226AQ	MG/KG	111.0	109.8		91.9	122.1	99	MS	Yes
Lithium		P17208BQ	UG/L	1000.0	1002.5		800.0	1200.0	100	P	Yes
Magnesium		P17208BQ	MG/KG	4434.0	4519.7		3649.7	4877.1	102	P	Yes
Manganese		P17208BQ	MG/KG	450.0	470.0		400.6	503.4	104	P	Yes
Mercury		P17211DQ	MG/KG	2.8	2.5		2.5	3.5	89	CV	Yes
Molybdenum	98	P17226AQ	MG/KG	47.2	53.0		36.8	57.5	112	MS	Yes
Nickel	60	P17226AQ	MG/KG	103.5	101.7		83.5	113.9	98	MS	Yes
Phosphorus		P17208BQ	UG/L	1000.0	1061.5		800.0	1200.0	106	P	Yes
Potassium		P17208BQ	MG/KG	5021.0	5128.9		3926.8	5523.2	102	P	Yes
Selenium	78	P17226AQ	MG/KG	183.0	189.0		151.6	202.4	103	MS	Yes
Silver	107	P17226AQ	MG/KG	48.0	49.2		39.0	53.4	103	MS	Yes
Sodium		P17208BQ	MG/KG	1099.0	1071.1		957.0	1209.1	97	P	Yes
Strontium		P17208BQ	MG/KG	105.6	109.0		90.4	116.2	103	P	Yes
Thallium	203	P17226AQ	MG/KG	286.0	283.8		237.4	314.6	99	MS	Yes
Tin		P17208BQ	MG/KG	180.0	185.7		161.3	204.7	103	P	Yes
Titanium		P17208BQ	MG/KG	579.0	725.2		463.2	694.8	125	P	No
Vanadium	51	P17226AQ	MG/KG	130.0	134.4		108.8	151.2	103	MS	Yes
Zinc	66	P17226AQ	MG/KG	390.0	400.7		317.4	438.6	103	MS	Yes
Zirconium		P17208BQ	UG/L	1000.0	1011.9		800.0	1200.0	101	P	Yes

JJH/P. (L)

DE179 3713

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

SAMPLE DELIVERY GROUP

DE180

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	TB-061411	6315643	TB	5030B	8015M	III
14-Jun-2011	TB-061411	6315643	TB	5030B	8260B	III
14-Jun-2011	TB-061411	6315643	TB	5030B	8260B SIM	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3050B	6010B	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3050B	6020	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3060A	7199	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3546	1625C	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3550B	8015B	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3550B	8015M	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3550B	8082	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3550B	8270C	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	3550B	8270C SIM	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	5035	8015M	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	5035	8260B	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	5035	8260B SIM	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	8330	8330A	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	METHOD	300.0	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	METHOD	314.0	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	METHOD	7471A	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	METHOD	8015B	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	METHOD	8015M	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	METHOD	8315A	III
14-Jun-2011	SL-035-SA5DN-SB-4.0-5.0	6315638	N	METHOD	9012B	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3050B	6010B	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3050B	6020	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3546	1625C	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3550B	8015B	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3550B	8015M	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3550B	8082	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3550B	8270C	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	3550B	8270C SIM	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	5035	8015M	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	5035	8260B	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	5035	8260B SIM	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	8330	8330A	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	METHOD	300.0	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	METHOD	314.0	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	METHOD	7471A	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	METHOD	8015B	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	METHOD	8015M	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	METHOD	8315A	III
14-Jun-2011	SL-035-SA5DN-SB-9.5-10.5	6315639	N	METHOD	9012B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3050B	6010B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3050B	6020	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3060A	7199	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3546	1625C	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3550B	8015B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3550B	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3550B	8082	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3550B	8270C	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	5035	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	5035	8260B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	5035	8260B SIM	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	8330	8330A	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	METHOD	300.0	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	METHOD	314.0	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	METHOD	7471A	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	METHOD	8015B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	METHOD	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	METHOD	8315A	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0	6315633	N	METHOD	9012B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3050B	6010B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3050B	6020	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3060A	7199	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3546	1625C	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3550B	8015B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3550B	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3550B	8082	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3550B	8270C	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	3550B	8270C SIM	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	5035	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	5035	8260B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	5035	8260B SIM	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	8330	8330A	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	METHOD	300.0	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	METHOD	7471A	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	METHOD	8015B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	METHOD	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	METHOD	8315A	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0MS	6315634	MS	METHOD	9012B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0DU	6315636	DUP	3050B	6010B	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0DU	6315636	DUP	3050B	6020	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0DU	6315636	DUP	3060A	7199	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0DU	6315636	DUP	METHOD	300.0	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0DU	6315636	DUP	METHOD	314.0	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0DU	6315636	DUP	METHOD	7471A	III
14-Jun-2011	SL-033-SA5DN-SB-4.0-5.0DU	6315636	DUP	METHOD	9012B	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3050B	6010B	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3050B	6020	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3060A	7199	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3546	1625C	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3550B	8015B	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3550B	8015M	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3550B	8082	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3550B	8270C	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	3550B	8270C SIM	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	5035	8015M	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	5035	8260B	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	5035	8260B SIM	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	8330	8330A	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	METHOD	314.0	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	METHOD	7471A	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	METHOD	8015B	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	METHOD	8015M	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	METHOD	8315A	III
14-Jun-2011	DUP14-SA5DN-QC-061411	6315642	FD	METHOD	9012B	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3050B	6010B	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3050B	6020	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3060A	7199	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3546	1625C	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3550B	8015B	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3550B	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3550B	8082	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3550B	8270C	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	3550B	8270C SIM	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	5035	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	5035	8260B	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	5035	8260B SIM	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	8330	8330A	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	METHOD	300.0	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	METHOD	314.0	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	METHOD	6850	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	METHOD	7471A	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	METHOD	8015B	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	METHOD	8015M	III
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	SL-033-SA5DN-SB-11.0-12.0	6315637	N	METHOD	9012B	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3050B	6010B	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3050B	6020	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3060A	7199	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3546	1625C	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3550B	8015B	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3550B	8015M	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3550B	8082	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3550B	8270C	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	3550B	8270C SIM	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	5035	8015M	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	5035	8260B	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	5035	8260B SIM	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	8330	8330A	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	METHOD	300.0	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	METHOD	314.0	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	METHOD	7471A	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	METHOD	8015B	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	METHOD	8015M	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	METHOD	8315A	III
14-Jun-2011	SL-032-SA5DN-SB-4.0-5.0	6315631	N	METHOD	9012B	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3050B	6010B	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3050B	6020	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3060A	7199	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3546	1625C	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3550B	8015M	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3550B	8082	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3550B	8270C	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	3550B	8270C SIM	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	5035	8015M	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	5035	8260B	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	5035	8260B SIM	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	8330	8330A	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	METHOD	300.0	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	METHOD	314.0	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	METHOD	6850	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	METHOD	7471A	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	METHOD	8015B	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	METHOD	8015M	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	METHOD	8315A	III
14-Jun-2011	SL-032-SA5DN-SB-10.0-11.0	6315632	N	METHOD	9012B	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	3005A	6010B	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	3020A	6020	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	3510C	8082	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	3510C	8270C	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	3510C	8270C SIM	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	5030B	8260B	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	5030B	8260B SIM	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	Gen Prep	300.0	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	Gen Prep	314.0	III
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	Gen Prep	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	EB17-SA5DN-SB-061411	6315644	EB	METHOD	7470A	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3050B	6010B	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3050B	6020	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3060A	7199	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3546	1625C	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3550B	8015B	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3550B	8015M	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3550B	8082	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3550B	8270C	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	3550B	8270C SIM	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	5035	8015M	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	5035	8260B	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	5035	8260B SIM	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	8330	8330A	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	METHOD	300.0	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	METHOD	314.0	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	METHOD	7471A	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	METHOD	8015B	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	METHOD	8015M	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	METHOD	8315A	III
14-Jun-2011	SL-044-SA5DN-SB-4.0-5.0	6315640	N	METHOD	9012B	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3050B	6010B	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3050B	6020	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3060A	7199	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3546	1625C	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3550B	8015B	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3550B	8015M	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3550B	8082	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3550B	8270C	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	3550B	8270C SIM	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	5035	8015M	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	5035	8260B	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	5035	8260B SIM	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	8330	8330A	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	METHOD	300.0	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	METHOD	314.0	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	METHOD	7471A	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	METHOD	8015B	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	METHOD	8015M	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	METHOD	8315A	III
14-Jun-2011	SL-044-SA5DN-SB-12.0-13.0	6315641	N	METHOD	9012B	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory:** LL

EDD Filename: PrepDE180_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.4		0.93	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.93	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5DN-SB-10.0-11.0 *Collected:* 6/14/2011 12:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.8		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-032-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 12:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	20.7		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-033-SA5DN-SB-11.0-12.0 *Collected:* 6/14/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	9.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5DN-SB-9.5-10.5 *Collected:* 6/14/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory:** LL

EDD Filename: PrepDE180_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-044-SA5DN-SB-12.0-13.0 *Collected:* 6/14/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-044-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 2:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.8		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

Method Category: GENCHEM

Method: 314.0 **Matrix:** AQ

Sample ID: EB17-SA5DN-SB-061411 *Collected:* 6/14/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.70	U	0.70	MDL	2.0	PQL	ug/L	UJ	L

Method Category: METALS

Method: 6010B **Matrix:** AQ

Sample ID: EB17-SA5DN-SB-061411 *Collected:* 6/14/2011 1:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0053	J	0.0022	MDL	0.0500	PQL	mg/L	U	B

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1340		0.0802	MDL	1.13	PQL	mg/Kg	J	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory:** LL

EDD Filename: PrepDE180_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP14-SA5DN-QC-061411 ***Collected:*** 6/14/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.66	J	0.419	MDL	5.82	PQL	mg/Kg	J	Z
CALCIUM	11400		2.91	MDL	23.3	PQL	mg/Kg	J	E
MANGANESE	441		0.0419	MDL	0.582	PQL	mg/Kg	J	E
PHOSPHORUS	334		0.407	MDL	11.6	PQL	mg/Kg	J	Q
POTASSIUM	3760		13.2	MDL	58.2	PQL	mg/Kg	J	Q
TIN	4.07	J	0.373	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	4.55	J	0.536	MDL	5.82	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5DN-SB-10.0-11.0 ***Collected:*** 6/14/2011 12:25:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1260		0.0760	MDL	1.07	PQL	mg/Kg	J	L

Sample ID: SL-032-SA5DN-SB-10.0-11.0 ***Collected:*** 6/14/2011 12:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4030		2.60	MDL	20.8	PQL	mg/Kg	J	E
MANGANESE	318		0.0374	MDL	0.520	PQL	mg/Kg	J	E
PHOSPHORUS	316		0.364	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	2370		11.7	MDL	52.0	PQL	mg/Kg	J	Q
TIN	2.65	J	0.333	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	3.55	J	0.478	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 12:20:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1110		0.0810	MDL	1.14	PQL	mg/Kg	J	L

Sample ID: SL-032-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 12:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.82	J	0.399	MDL	5.54	PQL	mg/Kg	J	Z
CALCIUM	9080		2.77	MDL	22.1	PQL	mg/Kg	J	E
MANGANESE	268		0.0399	MDL	0.554	PQL	mg/Kg	J	E
PHOSPHORUS	209		0.387	MDL	11.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory:** LL

EDD Filename: PrepDE180_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-032-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 12:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2950		12.5	MDL	55.4	PQL	mg/Kg	J	Q
TIN	2.84	J	0.354	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	5.06	J	0.509	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-11.0-12.0 *Collected:* 6/14/2011 11:50:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1310		0.0778	MDL	1.10	PQL	mg/Kg	J	L

Sample ID: SL-033-SA5DN-SB-11.0-12.0 *Collected:* 6/14/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	18700		2.71	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	341		0.0391	MDL	0.542	PQL	mg/Kg	J	E
PHOSPHORUS	608		0.380	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2290		12.3	MDL	54.2	PQL	mg/Kg	J	Q
TIN	2.61	J	0.347	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.43	J	0.499	MDL	5.42	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1240		0.0817	MDL	1.15	PQL	mg/Kg	J	L

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.35	J	0.419	MDL	5.81	PQL	mg/Kg	U	B, F
CALCIUM	15300		2.91	MDL	23.3	PQL	mg/Kg	J	E
MANGANESE	290		0.0419	MDL	0.581	PQL	mg/Kg	J	E
PHOSPHORUS	228		0.407	MDL	11.6	PQL	mg/Kg	J	Q
POTASSIUM	3130		13.1	MDL	58.1	PQL	mg/Kg	J	Q
TIN	3.08	J	0.372	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	4.48	J	0.535	MDL	5.81	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-035-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 8:55:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1150		0.0807	MDL	1.14	PQL	mg/Kg	J	L

Sample ID: SL-035-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.31	J	0.422	MDL	5.85	PQL	mg/Kg	U	B, F
CALCIUM	16500		2.93	MDL	23.4	PQL	mg/Kg	J	E
MANGANESE	169		0.0422	MDL	0.585	PQL	mg/Kg	J	E
PHOSPHORUS	127		0.410	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	2480		13.2	MDL	58.5	PQL	mg/Kg	J	Q
TIN	2.96	J	0.375	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	5.04	J	0.539	MDL	5.85	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5DN-SB-9.5-10.5 *Collected:* 6/14/2011 9:05:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1500		0.0779	MDL	1.10	PQL	mg/Kg	J	L

Sample ID: SL-035-SA5DN-SB-9.5-10.5 *Collected:* 6/14/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	8730		2.80	MDL	22.4	PQL	mg/Kg	J	E
MANGANESE	370		0.0403	MDL	0.560	PQL	mg/Kg	J	E
PHOSPHORUS	498		0.392	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2430		12.7	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.35	J	0.358	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	4.61	J	0.515	MDL	5.60	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-12.0-13.0 *Collected:* 6/14/2011 3:05:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1190		0.0779	MDL	1.10	PQL	mg/Kg	J	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-044-SA5DN-SB-12.0-13.0 *Collected:* 6/14/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.699	J	0.399	MDL	5.54	PQL	mg/Kg	U	B, F
CALCIUM	17100		2.77	MDL	22.2	PQL	mg/Kg	J	E
MANGANESE	269		0.0399	MDL	0.554	PQL	mg/Kg	J	E
PHOSPHORUS	355		0.388	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2570		12.5	MDL	55.4	PQL	mg/Kg	J	Q
TIN	2.57	J	0.354	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	4.50	J	0.510	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 2:55:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1240		0.0819	MDL	1.15	PQL	mg/Kg	J	L

Sample ID: SL-044-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 2:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.63	J	0.415	MDL	5.77	PQL	mg/Kg	J	Z
CALCIUM	10300		2.88	MDL	23.1	PQL	mg/Kg	J	E
MANGANESE	392		0.0415	MDL	0.577	PQL	mg/Kg	J	E
PHOSPHORUS	282		0.404	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3570		13.0	MDL	57.7	PQL	mg/Kg	J	Q
TIN	2.62	J	0.369	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	5.41	J	0.531	MDL	5.77	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0974	J	0.0675	MDL	0.466	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE180 Laboratory: LL

EDD Filename: PrepDE180_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0861	U	0.0861	MDL	0.233	PQL	mg/Kg	UJ	Q, E, FD
CHROMIUM	28.1		0.140	MDL	0.466	PQL	mg/Kg	J	A
COBALT	10.8		0.0233	MDL	0.116	PQL	mg/Kg	J	A
COPPER	14.9		0.0931	MDL	0.466	PQL	mg/Kg	J	Q, A
LEAD	9.10		0.0119	MDL	0.233	PQL	mg/Kg	J	Q, A
NICKEL	18.7		0.116	MDL	0.466	PQL	mg/Kg	J	Q, A
SILVER	0.0521	J	0.0165	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	42.7		0.0256	MDL	0.116	PQL	mg/Kg	J	A
ZINC	77.4		0.652	MDL	3.49	PQL	mg/Kg	J	E, A

Sample ID: SL-032-SA5DN-SB-10.0-11.0 *Collected:* 6/14/2011 12:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0792	U	0.0792	MDL	0.214	PQL	mg/Kg	UJ	Q, E
CHROMIUM	20.2		0.128	MDL	0.428	PQL	mg/Kg	J	A
COBALT	5.75		0.0214	MDL	0.107	PQL	mg/Kg	J	A
COPPER	8.82		0.0856	MDL	0.428	PQL	mg/Kg	J	Q, A
LEAD	4.07		0.0109	MDL	0.214	PQL	mg/Kg	J	Q, A
NICKEL	12.9		0.107	MDL	0.428	PQL	mg/Kg	J	Q, A
SILVER	0.0409	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	39.3		0.0235	MDL	0.107	PQL	mg/Kg	J	A
ZINC	48.8		0.599	MDL	3.21	PQL	mg/Kg	J	E, A

Sample ID: SL-032-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 12:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0872	J	0.0827	MDL	0.224	PQL	mg/Kg	J	Z, Q, E
CHROMIUM	28.9		0.134	MDL	0.447	PQL	mg/Kg	J	A
COBALT	9.65		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	12.2		0.0894	MDL	0.447	PQL	mg/Kg	J	Q, A
LEAD	8.23		0.0114	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	16.3		0.112	MDL	0.447	PQL	mg/Kg	J	Q, A
SILVER	0.104	J	0.0159	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	52.0		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	55.8		0.626	MDL	3.35	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-033-SA5DN-SB-11.0-12.0 *Collected:* 6/14/2011 11:50:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0825	J	0.0648	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-11.0-12.0 *Collected:* 6/14/2011 11:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0827	U	0.0827	MDL	0.223	PQL	mg/Kg	UJ	Q, E
CHROMIUM	21.0		0.134	MDL	0.447	PQL	mg/Kg	J	A
COBALT	7.18		0.0223	MDL	0.112	PQL	mg/Kg	J	A
COPPER	9.05		0.0894	MDL	0.447	PQL	mg/Kg	J	Q, A
LEAD	4.72		0.0114	MDL	0.223	PQL	mg/Kg	J	Q, A
NICKEL	12.6		0.112	MDL	0.447	PQL	mg/Kg	J	Q, A
SILVER	0.0300	J	0.0159	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	39.4		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	56.5		0.626	MDL	3.35	PQL	mg/Kg	J	E, A

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.106	J	0.0668	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0937	J	0.0852	MDL	0.230	PQL	mg/Kg	J	Z, Q, E, FD
CHROMIUM	30.0		0.138	MDL	0.461	PQL	mg/Kg	J	A
COBALT	10.9		0.0230	MDL	0.115	PQL	mg/Kg	J	A
COPPER	14.2		0.0921	MDL	0.461	PQL	mg/Kg	J	Q, A
LEAD	9.16		0.0117	MDL	0.230	PQL	mg/Kg	J	Q, A
NICKEL	18.4		0.115	MDL	0.461	PQL	mg/Kg	J	Q, A
SILVER	0.0490	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	52.7		0.0253	MDL	0.115	PQL	mg/Kg	J	A
ZINC	75.0		0.645	MDL	3.45	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory:** LL

EDD Filename: PrepDE180_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-035-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 8:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0973	J	0.0850	MDL	0.230	PQL	mg/Kg	J	Z, Q, E
CADMIUM	0.0996	J	0.0505	MDL	0.115	PQL	mg/Kg	J	Z
CHROMIUM	30.6		0.138	MDL	0.459	PQL	mg/Kg	J	A
COBALT	6.73		0.0230	MDL	0.115	PQL	mg/Kg	J	A
COPPER	12.6		0.0918	MDL	0.459	PQL	mg/Kg	J	Q, A
LEAD	8.82		0.0117	MDL	0.230	PQL	mg/Kg	J	Q, A
NICKEL	14.5		0.115	MDL	0.459	PQL	mg/Kg	J	Q, A
SILVER	0.0255	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	52.8		0.0253	MDL	0.115	PQL	mg/Kg	J	A
ZINC	52.6		0.643	MDL	3.44	PQL	mg/Kg	J	E, A

Sample ID: SL-035-SA5DN-SB-9.5-10.5 ***Collected:*** 6/14/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0829	U	0.0829	MDL	0.224	PQL	mg/Kg	UJ	Q, E
CADMIUM	0.110	J	0.0493	MDL	0.112	PQL	mg/Kg	J	Z
CHROMIUM	42.7		0.134	MDL	0.448	PQL	mg/Kg	J	A
COBALT	8.41		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	13.1		0.0896	MDL	0.448	PQL	mg/Kg	J	Q, A
LEAD	7.27		0.0114	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	27.2		0.112	MDL	0.448	PQL	mg/Kg	J	Q, A
SILVER	0.0244	J	0.0159	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	46.5		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	53.9		0.627	MDL	3.36	PQL	mg/Kg	J	E, A

Sample ID: SL-044-SA5DN-SB-12.0-13.0 ***Collected:*** 6/14/2011 3:05:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0661	J	0.0655	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-12.0-13.0 ***Collected:*** 6/14/2011 3:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0836	U	0.0836	MDL	0.226	PQL	mg/Kg	UJ	Q, E
CHROMIUM	19.6		0.136	MDL	0.452	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory:** LL

EDD Filename: PrepDE180_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-044-SA5DN-SB-12.0-13.0 *Collected:* 6/14/2011 3:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.99		0.0226	MDL	0.113	PQL	mg/Kg	J	A
COPPER	10.1		0.0904	MDL	0.452	PQL	mg/Kg	J	Q, A
LEAD	4.67		0.0115	MDL	0.226	PQL	mg/Kg	J	Q, A
NICKEL	10.5		0.113	MDL	0.452	PQL	mg/Kg	J	Q, A
SILVER	0.0265	J	0.0160	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	37.1		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	53.9		0.633	MDL	3.39	PQL	mg/Kg	J	E, A

Sample ID: SL-044-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 2:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0656	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 2:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0965	J	0.0837	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
CHROMIUM	31.5		0.136	MDL	0.452	PQL	mg/Kg	J	A
COBALT	11.6		0.0226	MDL	0.113	PQL	mg/Kg	J	A
COPPER	18.6		0.0905	MDL	0.452	PQL	mg/Kg	J	Q, A
LEAD	11.8		0.0115	MDL	0.226	PQL	mg/Kg	J	Q, A
NICKEL	20.3		0.113	MDL	0.452	PQL	mg/Kg	J	Q, A
SILVER	0.0884	J	0.0161	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	56.3		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	107		0.633	MDL	3.39	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-032-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 12:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.79	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5DN-SB-9.5-10.5 *Collected:* 6/14/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-12.0-13.0 *Collected:* 6/14/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 2:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.267		0.0078	MDL	0.111	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory:** LL

EDD Filename: PrepDE180_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-032-SA5DN-SB-10.0-11.0 ***Collected:*** 6/14/2011 12:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0361	J	0.0076	MDL	0.108	PQL	mg/Kg	U	B, B

Sample ID: SL-032-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 12:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0265	J	0.0079	MDL	0.113	PQL	mg/Kg	U	B, B

Sample ID: SL-033-SA5DN-SB-11.0-12.0 ***Collected:*** 6/14/2011 11:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0264	J	0.0075	MDL	0.107	PQL	mg/Kg	U	B, B

Sample ID: SL-033-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0691	J	0.0079	MDL	0.112	PQL	mg/Kg	UJ	FD, B

Sample ID: SL-035-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 8:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0388	J	0.0079	MDL	0.112	PQL	mg/Kg	U	B, B

Sample ID: SL-035-SA5DN-SB-9.5-10.5 ***Collected:*** 6/14/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0538	J	0.0075	MDL	0.107	PQL	mg/Kg	U	B, B

Sample ID: SL-044-SA5DN-SB-12.0-13.0 ***Collected:*** 6/14/2011 3:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0151	J	0.0077	MDL	0.109	PQL	mg/Kg	U	B, B

Sample ID: SL-044-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 2:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0399	J	0.0077	MDL	0.109	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 Laboratory: LL

EDD Filename: PrepDE180_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS
Method: 7471A **Matrix:** SO

Method Category: SVOA
Method: 1625C **Matrix:** SO

Sample ID: SL-035-SA5DN-SB-9.5-10.5 *Collected:* 6/14/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	28.5	J	18.7	MDL	37.3	PQL	ng/Kg	J	Z

Method Category: SVOA
Method: 6850 **Matrix:** SO

Sample ID: SL-032-SA5DN-SB-10.0-11.0 *Collected:* 6/14/2011 12:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	3.2	J	2.3	MDL	5.5	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	22		2.3	MDL	7.0	PQL	mg/Kg	J	FD
EFH (C30-C40)	75		2.3	MDL	7.0	PQL	mg/Kg	J	FD
EFH (C8-C11)	2.3	U	2.3	MDL	7.0	PQL	mg/Kg	UJ	FD

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.8	U	5.8	MDL	12	PQL	mg/Kg	UJ	Q

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	11		0.46	MDL	1.4	PQL	mg/Kg	J	FD
EFH (C30-C40)	25		0.46	MDL	1.4	PQL	mg/Kg	J	FD
EFH (C8-C11)	0.54	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z, Q, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-035-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 8:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.47	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 2:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.49	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.83	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z, FD
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	FD

Sample ID: SL-033-SA5DN-SB-11.0-12.0 *Collected:* 6/14/2011 11:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.60	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z, FD
Aroclor 5460	1.8	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-044-SA5DN-SB-12.0-13.0 *Collected:* 6/14/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE180 Laboratory: LL

EDD Filename: PrepDE180_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-12.0-13.0 *Collected:* 6/14/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	19	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	62	J	19	MDL	190	PQL	ug/Kg	J	Z
Butylbenzylphthalate	22	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	25	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	68	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	69	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	110	J	19	MDL	190	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB17-SA5DN-SB-061411 *Collected:* 6/14/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.014	J	0.010	MDL	0.050	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.015	J	0.010	MDL	0.050	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.20	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Diethylphthalate	0.059	J	0.050	MDL	1.0	PQL	ug/L	U	B
Di-n-butylphthalate	0.081	J	0.050	MDL	1.0	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.78	U	0.78	MDL	1.9	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.88	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(G,H,I)PERYLENE	0.78	U	0.78	MDL	1.9	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	0.78	U	0.78	MDL	1.9	PQL	ug/Kg	UJ	FD
Butylbenzylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	FD
CHRYSENE	0.73	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.3	J	7.0	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.99	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	FD
BENZO(G,H,I)PERYLENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, FD
Butylbenzylphthalate	8.3	J	6.9	MDL	21	PQL	ug/Kg	J	Z, FD
CHRYSENE	1.1	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-12.0-13.0 *Collected:* 6/14/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	16	J	6.8	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-033-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 10:35:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.1	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: EB17-SA5DN-SB-061411 *Collected:* 6/14/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOLUENE	1	J	0.7	MDL	5	PQL	ug/L	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: DUP14-SA5DN-QC-061411 *Collected:* 6/14/2011 10:45:00 *Analysis Type:* RES *Dilution:* 0.8

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.4		6.2	MDL	7.4	PQL	ug/Kg	UJ	B, FD
CHLOROFORM	0.19	J	0.11	MDL	3.7	PQL	ug/Kg	J	Z, FD
METHYLENE CHLORIDE	15		0.22	MDL	3.7	PQL	ug/Kg	J	FD
TOLUENE	0.33	J	0.07	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-032-SA5DN-SB-10.0-11.0 *Collected:* 6/14/2011 12:25:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.6		6.2	MDL	7.5	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	3.2	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.29	J	0.07	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-032-SA5DN-SB-4.0-5.0 *Collected:* 6/14/2011 12:20:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	11		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	3.2	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.31	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5DN-SB-11.0-12.0 *Collected:* 6/14/2011 11:50:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	10		6.7	MDL	8.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	4.5		0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.35	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory:** LL

EDD Filename: PrepDE180_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-033-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6.6	U	6.6	MDL	7.9	PQL	ug/Kg	UJ	FD
CHLOROFORM	0.12	U	0.12	MDL	3.9	PQL	ug/Kg	UJ	FD
Chlorotrifluoroethylene	0.49	U	0.49	MDL	4.9	PQL	ug/Kg	UJ	Q
METHYLENE CHLORIDE	3.6	J	0.24	MDL	3.9	PQL	ug/Kg	UJ	Q, B, FD
TOLUENE	0.24	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 8:55:00 ***Analysis Type:*** RES ***Dilution:*** 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.8		6.6	MDL	7.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	4.2		0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.47	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5DN-SB-9.5-10.5 ***Collected:*** 6/14/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.0		6.7	MDL	8.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	5.2		0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.45	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-12.0-13.0 ***Collected:*** 6/14/2011 3:05:00 ***Analysis Type:*** RES ***Dilution:*** 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.6		7.2	MDL	8.7	PQL	ug/Kg	U	B
CHLOROFORM	0.14	J	0.13	MDL	4.3	PQL	ug/Kg	J	Z
TOLUENE	0.42	J	0.09	MDL	4.3	PQL	ug/Kg	J	Z

Sample ID: SL-044-SA5DN-SB-4.0-5.0 ***Collected:*** 6/14/2011 2:55:00 ***Analysis Type:*** RES ***Dilution:*** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.4		6.8	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	4.9		0.24	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.33	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE180

Method Blank Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P17248BB221736	6/24/2011 5:36:00 PM	BORON MAGNESIUM	0.0034 mg/L 0.0092 mg/L	EB17-SA5DN-SB-061411

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB17-SA5DN-SB-061411(REA2)	BORON	0.0053 mg/L	0.0053U mg/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16808CB221824	6/24/2011 6:24:00 PM	BORON CALCIUM IRON MAGNESIUM MANGANESE PHOSPHORUS STRONTIUM TIN	0.483 mg/Kg 10.7 mg/Kg 3.28 mg/Kg 1.44 mg/Kg 0.0550 mg/Kg 1.59 mg/Kg 0.0550 mg/Kg 2.05 mg/Kg	DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP14-SA5DN-QC-061411(RES)	TIN	4.07 mg/Kg	4.07U mg/Kg
SL-032-SA5DN-SB-10.0-11.0(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-032-SA5DN-SB-4.0-5.0(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-033-SA5DN-SB-11.0-12.0(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-033-SA5DN-SB-4.0-5.0(RES)	BORON	2.35 mg/Kg	2.35U mg/Kg
SL-033-SA5DN-SB-4.0-5.0(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-035-SA5DN-SB-4.0-5.0(RES)	BORON	1.31 mg/Kg	1.31U mg/Kg
SL-035-SA5DN-SB-4.0-5.0(RES)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-035-SA5DN-SB-9.5-10.5(RES)	TIN	2.35 mg/Kg	2.35U mg/Kg
SL-044-SA5DN-SB-12.0-13.0(RES)	BORON	0.699 mg/Kg	0.699U mg/Kg
SL-044-SA5DN-SB-12.0-13.0(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-044-SA5DN-SB-4.0-5.0(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16826BB220933A	6/20/2011 9:33:00 AM	COPPER	0.109 mg/Kg	DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0

Method: 7471A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16811DB220706	6/21/2011 7:06:00 AM	MERCURY	0.0133 mg/Kg	DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-032-SA5DN-SB-10.0-11.0(RES)	MERCURY	0.0361 mg/Kg	0.0361U mg/Kg
SL-032-SA5DN-SB-4.0-5.0(RES)	MERCURY	0.0265 mg/Kg	0.0265U mg/Kg
SL-033-SA5DN-SB-11.0-12.0(RES)	MERCURY	0.0264 mg/Kg	0.0264U mg/Kg
SL-035-SA5DN-SB-4.0-5.0(RES)	MERCURY	0.0388 mg/Kg	0.0388U mg/Kg
SL-035-SA5DN-SB-9.5-10.5(RES)	MERCURY	0.0538 mg/Kg	0.0538U mg/Kg
SL-044-SA5DN-SB-12.0-13.0(RES)	MERCURY	0.0151 mg/Kg	0.0151U mg/Kg
SL-044-SA5DN-SB-4.0-5.0(RES)	MERCURY	0.0399 mg/Kg	0.0399U mg/Kg

Method: 8015B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P66660AB322325A	6/15/2011 11:25:00 PM	ETHANOL	150 ug/Kg	DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB90B210115A	6/20/2011 1:15:00 AM	ACETONE METHYLENE CHLORIDE	11 ug/Kg 1.0 ug/Kg	DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP14-SA5DN-QC-061411(RES)	ACETONE	8.4 ug/Kg	8.4U ug/Kg
SL-032-SA5DN-SB-10.0-11.0(RES)	ACETONE	8.6 ug/Kg	8.6U ug/Kg
SL-032-SA5DN-SB-10.0-11.0(RES)	METHYLENE CHLORIDE	3.2 ug/Kg	3.7U ug/Kg
SL-032-SA5DN-SB-4.0-5.0(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-032-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.2 ug/Kg	4.1U ug/Kg
SL-033-SA5DN-SB-11.0-12.0(RES)	ACETONE	10 ug/Kg	10U ug/Kg
SL-033-SA5DN-SB-11.0-12.0(RES)	METHYLENE CHLORIDE	4.5 ug/Kg	4.5U ug/Kg
SL-033-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.6 ug/Kg	3.9U ug/Kg
SL-035-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.8 ug/Kg	8.8U ug/Kg
SL-035-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	4.2 ug/Kg	4.2U ug/Kg
SL-035-SA5DN-SB-9.5-10.5(RES)	ACETONE	9.0 ug/Kg	9.0U ug/Kg
SL-035-SA5DN-SB-9.5-10.5(RES)	METHYLENE CHLORIDE	5.2 ug/Kg	5.2U ug/Kg
SL-044-SA5DN-SB-12.0-13.0(RES)	ACETONE	9.6 ug/Kg	9.6U ug/Kg
SL-044-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.4 ug/Kg	8.4U ug/Kg
SL-044-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	4.9 ug/Kg	4.9U ug/Kg

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWE16B260803	7/1/2011 8:03:00 AM	Diethylphthalate	0.057 ug/L	EB17-SA5DN-SB-061411

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB17-SA5DN-SB-061411(RES)	Diethylphthalate	0.059 ug/L	1.0U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (SL-033-SA5DN-SB-4.0-5.0)	DIETHYLENE GLYCOL	50	53	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (SL-033-SA5DN-SB-4.0-5.0)	m-Terphenyl	68	69	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (SL-033-SA5DN-SB-4.0-5.0)	EFH (C15-C20) EFH (C30-C40)	344 5317	139 171	49.00-123.00 49.00-123.00	85 (20.00) 142 (20.00)	EFH (C15-C20) EFH (C30-C40)	J(all detects) EFH (C30-C40), No Qual, >4x
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (SL-033-SA5DN-SB-4.0-5.0)	EFH (C12-C14) EFH (C8-C11)	0 0	- 36	49.00-123.00 49.00-123.00	200 (20.00) 200 (20.00)	EFH (C12-C14) EFH (C8-C11)	J(all detects) UJ(all non-detects) MS Diluted Out
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (SL-033-SA5DN-SB-4.0-5.0)	EFH (C21-C30)	2840	21	49.00-123.00	151 (20.00)	EFH (C21-C30)	No Qual, >4x

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	ZINC	156	-29	75.00-125.00	26 (20.00)	ZINC	J(all detects) UJ(all non-detects) No Qual %R, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	ANTIMONY COPPER LEAD NICKEL	33 - 65 -	45 70 62 64	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	27 (20.00) - - -	ANTIMONY COPPER LEAD NICKEL	J(all detects) UJ(all non-detects)
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	BARIUM	9	-52	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	ALUMINUM IRON MANGANESE PHOSPHORUS POTASSIUM	1095 3647 195 147 142	1773 4280 270 197 156	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MANGANESE PHOSPHORUS POTASSIUM	J(all detects) Al, Fe, Mn, No Qual, >4x
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	CALCIUM MAGNESIUM	-439 1	-253 325	75.00-125.00 75.00-125.00	- -	CALCIUM MAGNESIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	FLUORIDE	72	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	TITANIUM	235	220	75.00-125.00	-	TITANIUM	No Qual, >4x

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-033-SA5DN-SB-4.0-5.0MS (SL-033-SA5DN-SB-4.0-5.0)	ACETONE METHYLENE CHLORIDE	216 144	- -	15.00-210.00 61.00-141.00	- -	ACETONE METHYLENE CHLORIDE	J(all detects)
SL-033-SA5DN-SB-4.0-5.0MS SL-033-SA5DN-SB-4.0-5.0MSD (SL-033-SA5DN-SB-4.0-5.0)	Chlorotrifluoroethylene	61	59	70.00-130.00	-	Chlorotrifluoroethylene	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-033-SA5DN-SB-4.0-5.0DUP (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	FLUORIDE	37	20.00	No Qual, OK by Difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-033-SA5DN-SB-4.0-5.0DUP (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	CALCIUM MANGANESE	49 59	20.00 20.00	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-033-SA5DN-SB-4.0-5.0DUP (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	ANTIMONY SELENIUM	200 26	20.00 20.00	No Qual, OK by Difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-033-SA5DN-SB-4.0-5.0DUP (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	MERCURY	46	20.00	No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 314.0
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
Q1173Y271530B (EB17-SA5DN-SB-061411)	PERCHLORATE	-	-	85.00-115.00	16 (15.00)	PERCHLORATE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16826BQ220936A (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	ANTIMONY	65	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC Limits

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16808CQ221828 (DUP14-SA5DN-QC-061411 SL-032-SA5DN-SB-10.0-11.0 SL-032-SA5DN-SB-4.0-5.0 SL-033-SA5DN-SB-11.0-12.0 SL-033-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-4.0-5.0 SL-035-SA5DN-SB-9.5-10.5 SL-044-SA5DN-SB-12.0-13.0 SL-044-SA5DN-SB-4.0-5.0)	IRON	79	-	80.00-120.00	-	IRON	No Qual, SRM within QC Limits

Field Duplicate RPD Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-033-SA5DN-SB-4.0-5.0	DUP14-SA5DN-QC-061411			
MOISTURE	14.0	14.1	1		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-033-SA5DN-SB-4.0-5.0	DUP14-SA5DN-QC-061411			
FLUORIDE	5.2	6.4	21	50.00	No Qualifiers Applied
Nitrate-NO3	1.9	1.4	30	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-033-SA5DN-SB-4.0-5.0	DUP14-SA5DN-QC-061411			
ALUMINUM	29000	28600	1	50.00	No Qualifiers Applied
BORON	2.35	3.66	44	50.00	
CALCIUM	15300	11400	29	50.00	
IRON	30400	34800	13	50.00	
LITHIUM	25.2	25.0	1	50.00	
MAGNESIUM	6920	6820	1	50.00	
MANGANESE	290	441	41	50.00	
PHOSPHORUS	228	334	38	50.00	
POTASSIUM	3130	3760	18	50.00	
SODIUM	416	386	7	50.00	
STRONTIUM	43.7	43.8	0	50.00	
TIN	3.08	4.07	28	50.00	
TITANIUM	1240	1340	8	50.00	
Zirconium	4.48	4.55	2	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-033-SA5DN-SB-4.0-5.0	DUP14-SA5DN-QC-061411			
ARSENIC	5.90	4.97	17	50.00	No Qualifiers Applied
BARIUM	145	161	10	50.00	
BERYLLIUM	0.816	0.850	4	50.00	
CADMIUM	0.288	0.348	19	50.00	
CHROMIUM	30.0	28.1	7	50.00	
COBALT	10.9	10.8	1	50.00	
COPPER	14.2	14.9	5	50.00	
LEAD	9.16	9.10	1	50.00	
MOLYBDENUM	0.321	0.259	21	50.00	
NICKEL	18.4	18.7	2	50.00	
SELENIUM	0.106	0.0974	8	50.00	
SILVER	0.0490	0.0521	6	50.00	
THALLIUM	0.346	0.355	3	50.00	
VANADIUM	52.7	42.7	21	50.00	
ZINC	75.0	77.4	3	50.00	
ANTIMONY	0.0937	0.233 U	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-033-SA5DN-SB-4.0-5.0	Concentration (mg/Kg) DUP14-SA5DN-QC-061411	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.79	0.60	27	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-033-SA5DN-SB-4.0-5.0	Concentration (mg/Kg) DUP14-SA5DN-QC-061411	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0691	0.267	118	50.00	J(all detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-033-SA5DN-SB-4.0-5.0	Concentration (mg/Kg) DUP14-SA5DN-QC-061411	Sample RPD	eQAPP RPD	Flag
EFH (C21-C30)	11	22	67	50.00	J(all detects)
EFH (C30-C40)	25	75	100	50.00	
EFH (C8-C11)	0.54	7.0 U	200	50.00	UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-033-SA5DN-SB-4.0-5.0	Concentration (ug/Kg) DUP14-SA5DN-QC-061411	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	1.4	0.83	51	50.00	J(all detects)
Aroclor 5460	1.8	3.8 U	200	50.00	UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-033-SA5DN-SB-4.0-5.0	Concentration (ug/Kg) DUP14-SA5DN-QC-061411	Sample RPD	eQAPP RPD	Flag
TOLUENE	0.24	0.33	32	50.00	No Qualifiers Applied
ACETONE	7.9 U	8.4	200	50.00	J(all detects)
CHLOROFORM	3.9 U	0.19	200	50.00	
METHYLENE CHLORIDE	3.6	15	123	50.00	UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-033-SA5DN-SB-4.0-5.0	Concentration (ug/Kg) DUP14-SA5DN-QC-061411	Sample RPD	eQAPP RPD	Flag
CHRYSENE	1.1	0.73	40	50.00	No Qualifiers Applied
Di-n-butylphthalate	9.6	7.3	27	50.00	
BENZO(A)PYRENE	0.99	1.9 U	200	50.00	J(all detects)
BENZO(B)FLUORANTHENE	1.9 U	0.88	200	50.00	
BENZO(G,H,I)PERYLENE	1.2	1.9 U	200	50.00	
BENZO(K)FLUORANTHENE	1.3	1.9 U	200	50.00	UJ(all non-detects)
Butylbenzylphthalate	8.3	21 U	200	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: PrepDE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	*Concentration (pH unit)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-033-SA5DN-SB-4.0-5.0	DUP14-SA5DN-QC-061411			
PH	8.58	8.17	5	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB17-SA5DN-SB-061411	BORON	J	0.0053	0.0500	PQL	mg/L	J (all detects)

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB17-SA5DN-SB-061411	TOLUENE	J	1	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB17-SA5DN-SB-061411	1-METHYLNAPHTHALENE	J	0.014	0.050	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.015	0.050	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.20	1.0	PQL	ug/L	
	Diethylphthalate	J	0.059	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.081	1.0	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5DN-SB-9.5-10.5	N-NITROSODIMETHYLAMINE	J	28.5	37.3	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5DN-QC-061411	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)
SL-033-SA5DN-SB-11.0-12.0	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)
SL-035-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.8	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5DN-QC-061411	BORON	J	3.66	5.82	PQL	mg/Kg	J (all detects)
	TIN	J	4.07	11.6	PQL	mg/Kg	
	Zirconium	J	4.55	5.82	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5DN-SB-10.0-11.0	TIN	J	2.65	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.55	5.20	PQL	mg/Kg	
SL-032-SA5DN-SB-4.0-5.0	BORON	J	2.82	5.54	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	11.1	PQL	mg/Kg	
	Zirconium	J	5.06	5.54	PQL	mg/Kg	
SL-033-SA5DN-SB-11.0-12.0	TIN	J	2.61	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.43	5.42	PQL	mg/Kg	
SL-033-SA5DN-SB-4.0-5.0	BORON	J	2.35	5.81	PQL	mg/Kg	J (all detects)
	TIN	J	3.08	11.6	PQL	mg/Kg	
	Zirconium	J	4.48	5.81	PQL	mg/Kg	
SL-035-SA5DN-SB-4.0-5.0	BORON	J	1.31	5.85	PQL	mg/Kg	J (all detects)
	TIN	J	2.96	11.7	PQL	mg/Kg	
	Zirconium	J	5.04	5.85	PQL	mg/Kg	
SL-035-SA5DN-SB-9.5-10.5	TIN	J	2.35	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.61	5.60	PQL	mg/Kg	
SL-044-SA5DN-SB-12.0-13.0	BORON	J	0.699	5.54	PQL	mg/Kg	J (all detects)
	TIN	J	2.57	11.1	PQL	mg/Kg	
	Zirconium	J	4.50	5.54	PQL	mg/Kg	
SL-044-SA5DN-SB-4.0-5.0	BORON	J	3.63	5.77	PQL	mg/Kg	J (all detects)
	TIN	J	2.62	11.5	PQL	mg/Kg	
	Zirconium	J	5.41	5.77	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5DN-QC-061411	SELENIUM	J	0.0974	0.466	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0521	0.116	PQL	mg/Kg	
SL-032-SA5DN-SB-10.0-11.0	SILVER	J	0.0409	0.107	PQL	mg/Kg	J (all detects)
SL-032-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.0872	0.224	PQL	mg/Kg	J (all detects)
	SILVER	J	0.104	0.112	PQL	mg/Kg	
SL-033-SA5DN-SB-11.0-12.0	SELENIUM	J	0.0825	0.447	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0300	0.112	PQL	mg/Kg	
SL-033-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.0937	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.106	0.461	PQL	mg/Kg	
	SILVER	J	0.0490	0.115	PQL	mg/Kg	
SL-035-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.0973	0.230	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0996	0.115	PQL	mg/Kg	
	SILVER	J	0.0255	0.115	PQL	mg/Kg	
SL-035-SA5DN-SB-9.5-10.5	CADMIUM	J	0.110	0.112	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0244	0.112	PQL	mg/Kg	
SL-044-SA5DN-SB-12.0-13.0	SELENIUM	J	0.0661	0.452	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0265	0.113	PQL	mg/Kg	
SL-044-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.0965	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.116	0.452	PQL	mg/Kg	
	SILVER	J	0.0884	0.113	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5DN-SB-10.0-11.0	PERCHLORATE	J	3.2	5.5	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5DN-QC-061411	HEXAVALENT CHROMIUM	J	0.60	1.2	PQL	mg/Kg	J (all detects)
SL-032-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.62	1.1	PQL	mg/Kg	J (all detects)
SL-033-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.79	1.2	PQL	mg/Kg	J (all detects)
SL-035-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.2	PQL	mg/Kg	J (all detects)
SL-035-SA5DN-SB-9.5-10.5	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SB-12.0-13.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.45	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5DN-SB-10.0-11.0	MERCURY	J	0.0361	0.108	PQL	mg/Kg	J (all detects)
SL-032-SA5DN-SB-4.0-5.0	MERCURY	J	0.0265	0.113	PQL	mg/Kg	J (all detects)
SL-033-SA5DN-SB-11.0-12.0	MERCURY	J	0.0264	0.107	PQL	mg/Kg	J (all detects)
SL-033-SA5DN-SB-4.0-5.0	MERCURY	J	0.0691	0.112	PQL	mg/Kg	J (all detects)
SL-035-SA5DN-SB-4.0-5.0	MERCURY	J	0.0388	0.112	PQL	mg/Kg	J (all detects)
SL-035-SA5DN-SB-9.5-10.5	MERCURY	J	0.0538	0.107	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SB-12.0-13.0	MERCURY	J	0.0151	0.109	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SB-4.0-5.0	MERCURY	J	0.0399	0.109	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-033-SA5DN-SB-4.0-5.0	EFH (C8-C11)	J	0.54	1.4	PQL	mg/Kg	J (all detects)
SL-035-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.47	1.4	PQL	mg/Kg	J (all detects)
SL-044-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.49	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5DN-QC-061411	AROCLOR 1260	J	0.83	2.0	PQL	ug/Kg	J (all detects)
SL-033-SA5DN-SB-11.0-12.0	AROCLOR 1260	J	0.60	1.9	PQL	ug/Kg	J (all detects)
SL-033-SA5DN-SB-4.0-5.0	AROCLOR 1260 Aroclor 5460	J J	1.4 1.8	2.0 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-044-SA5DN-SB-12.0-13.0	AROCLOR 1260	J	1.3	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5DN-QC-061411	CHLOROFORM TOLUENE	J J	0.19 0.33	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-032-SA5DN-SB-10.0-11.0	METHYLENE CHLORIDE TOLUENE	J J	3.2 0.29	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-032-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	3.2 0.31	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-033-SA5DN-SB-11.0-12.0	TOLUENE	J	0.35	4.0	PQL	ug/Kg	J (all detects)
SL-033-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	3.6 0.24	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-035-SA5DN-SB-4.0-5.0	TOLUENE	J	0.47	4.0	PQL	ug/Kg	J (all detects)
SL-035-SA5DN-SB-9.5-10.5	TOLUENE	J	0.45	4.0	PQL	ug/Kg	J (all detects)
SL-044-SA5DN-SB-12.0-13.0	CHLOROFORM TOLUENE	J J	0.14 0.42	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-044-SA5DN-SB-4.0-5.0	TOLUENE	J	0.33	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5DN-QC-061411	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	390	PQL	ug/Kg	J (all detects)
SL-044-SA5DN-SB-12.0-13.0	ANTHRACENE BENZO(A)ANTHRACENE Butylbenzylphthalate CARBAZOLE CHRYSENE PHENANTHRENE PYRENE	J J J J J J J	19 62 22 25 68 69 110	190 190 190 190 190 190 190	PQL PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE180 **Laboratory: LL**

EDD Filename: DE180_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
DUP14-SA5DN-QC-061411	BENZO(B)FLUORANTHENE	J	0.88	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.73	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.3	21	PQL	ug/Kg	
SL-033-SA5DN-SB-4.0-5.0	BENZO(A)PYRENE	J	0.99	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.3	21	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.6	21	PQL	ug/Kg	
SL-044-SA5DN-SB-12.0-13.0	DIBENZO(A,H)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	16	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.9	PQL	ug/Kg	

LDC #: 26277K4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11
SDG #: DE180 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn 74X, Na, post spike R
VII.	Duplicate Sample Analysis	SW	Sb, Hg, Se <5X
VIII.	Laboratory Control Samples (LCS)	SW	Sb Mg Ti Jdt/p
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr, Co, Cu, Pb, Ni, V, Zn
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=10

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	SL-032-SA5DN-SB-4.0-5.0	11	SL-033-SA5DN-SB-4.0-5.0MS	21		31	
2	SL-032-SA5DN-SB-10.0-11.0	12	SL-033-SA5DN-SB-4.0-5.0MSD	22		32	
3	SL-033-SA5DN-SB-4.0-5.0	13	SL-033-SA5DN-SB-4.0-5.0DUP	23		33	
4	SL-033-SA5DN-SB-11.0-12.0	14		24		34	
5	SL-035-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-035-SA5DN-SB-9.5-10.5	16		26		36	
7	SL-044-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-044-SA5DN-SB-12.0-13.0	18		28		38	
9	DUP14-SA5DN-QC-061411	19		29		39	
10	EB17-SA5DN-SB-061411	20		30		40	

Notes:

LDC #: 26277K4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/Kg

Soil preparation factor applied: 166.7X
Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8		
Hg			0.15	0.125	0.027	0.036	0.069	0.026	0.039	0.054	0.040	0.015		

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 26277K4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer:
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

(Y) N N/A Were field blanks identified in this SDG?

(Y) N N/A Were target analytes detected in the field blanks?

Blank units: mg/L **Associated sample units:** mg/Kg

Sampling date: 6/14/11 Soil factor applied 100X

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification											
	10	Action Level	3	5	8								
B	0.0053	2.65	2.3	1.3	0.70								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE180
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6315633BKG Matrix Spike Lab Sample ID: 6315634MS Matrix Spike Duplicate Lab Sample ID: 6315635MSD
% Solids for Sample: 86.0
Batch Id(s): P16808C, P16826B, P16811D, P17908D

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		28964.6000		31413.4951		32930.2572		223.6136	223.6136	MG/KG	1095		1773		5			20	P
Antimony	121	0.0937	B	0.5475		0.7214		1.3547	1.3815	MG/KG	33	N	45	N	27	*	75 - 125	20	MS
Arsenic	75	5.9015		7.6834		8.0129		2.2578	2.3026	MG/KG	79		92		4		75 - 125	20	MS
Barium	137	145.4294		146.4213		139.3967		11.2892	11.5128	MG/KG	9		-52		5			20	MS
Beryllium	9	0.8160		1.6390		1.6081		0.9031	0.9210	MG/KG	91		86		2		75 - 125	20	MS
Boron		2.3453	B	211.0946		215.7021		223.6136	223.6136	MG/KG	93		95		2		84 - 115	20	P
Cadmium	111	0.2883		1.2992		1.4674		1.1289	1.1513	MG/KG	90		102		12		75 - 125	20	MS
Calcium		15286.5791		13322.2920		14155.5926		447.2272	447.2272	MG/KG	-439		-253		6			20	P
Chromium	52	30.0253		40.6864		39.4658		11.2892	11.5128	MG/KG	94		82		3		75 - 125	20	MS
Cobalt	59	10.8589		61.2102		62.4683		56.4462	57.5639	MG/KG	89		90		2		75 - 125	20	MS
Copper	63	14.1999		23.4816		22.2634		11.2892	11.5128	MG/KG	82		70	N	5		75 - 125	20	MS
Iron		30417.1837		34494.9307		35203.0613		111.8068	111.8068	MG/KG	3647		4280		2			20	P
Lead	208	9.1596		11.3502		11.3009		3.3868	3.4538	MG/KG	65	N	62	N	0		75 - 125	20	MS
Lithium		25.2093		135.1878		139.1391		111.8068	111.8068	MG/KG	98		102		3		82 - 114	20	P
Magnesium		6918.9779		6921.5686		7644.9620		223.6136	223.6136	MG/KG	1		325		10			20	P
Manganese		289.5174		398.3318		440.2381		55.9034	55.9034	MG/KG	195		270		10			20	P
Mercury		0.0691	B	0.2273		0.1980		0.1894	0.1904	MG/KG	84		68	N	14		80 - 120	20	CV
Molybdenum	98	0.3210		10.5464		11.4575		11.2892	11.5128	MG/KG	91		97		8		75 - 125	20	MS
Nickel	60	18.4227		26.8909		25.8347		11.2892	11.5128	MG/KG	75		64	N	4		75 - 125	20	MS
Phosphorus		228.0291		392.2585		448.4571		111.8068	111.8068	MG/KG	147	N	197	N	13		75 - 125	20	P
Potassium		3127.1547		4717.4519		4875.0190		1118.0680	1118.0680	MG/KG	142	N	156	N	3		75 - 125	20	P
Selenium	78	0.1065	B	2.1752		2.3440		2.2578	2.3026	MG/KG	92		97		7		75 - 125	20	MS
Silver	107	0.0490	B	11.3976		11.8490		11.2892	11.5128	MG/KG	101		102		4		75 - 125	20	MS
Sodium		416.0919		1412.8790		1469.5874		1118.0680	1118.0680	MG/KG	89		94		4		75 - 125	20	P
Strontium		43.7453		146.0711		150.2873		111.8068	111.8068	MG/KG	92		95		3		75 - 115	20	P
Thallium	203	0.3463		0.8438		0.8195		0.4516	0.4605	MG/KG	110		103		3		75 - 125	20	MS
Tin		3.0802	B	385.1733		392.7952		447.2272	447.2272	MG/KG	85		87		2		80 - 110	20	P
Titanium		1236.5266		1502.3188		1492.2512		112.8923	116.2791	MG/KG	235		220		1			20	P
Vanadium	51	52.7285		65.1840		62.4914		11.2892	11.5128	MG/KG	110		85		4			20	MS
Zinc	66	74.9712		92.5943		71.5865		11.2892	11.5128	MG/KG	156		-29		26	*		20	MS
Zirconium		4.4849	B	110.3880		111.9041		111.8068	111.8068	MG/KG	95		96		1		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE180
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6315633BKG
% Solids for Duplicate: 84.7
Batch ID(s): P16808C, P16826B, P16811D, P17908D
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6315636DUP
% Solids for Sample: 86.0

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			28964.6000		27434.5992		5		P
Antimony	121		0.0937	B	0.0819	U	200		MS
Arsenic	75		5.9015		5.1717		13		MS
Barium	137		145.4294		137.8295		5		MS
Beryllium	9		0.8160		0.8514		4		MS
Boron			2.3453	B	2.1822	B	7		P
Cadmium	111	0.1	0.2883		0.2963		3		MS
Calcium			15286.5791		25285.6695		49	*	P
Chromium	52		30.0253		28.5271		5		MS
Cobalt	59		10.8589		11.0676		2		MS
Copper	63		14.1999		13.6412		4		MS
Iron			30417.1837		31126.8480		2		P
Lead	208		9.1596		9.2071		1		MS
Lithium			25.2093		24.1533		4		P
Magnesium			6918.9779		6614.2052		5		P
Manganese			289.5174		529.2797		59	*	P
Mercury			0.0691	B	0.0431	B	46		CV
Molybdenum	98	0.1	0.3210		0.3386		5		MS
Nickel	60		18.4227		18.4009		0		MS
Phosphorus			228.0291		242.9702		6		P
Potassium			3127.1547		3161.6471		1		P
Selenium	78		0.1065	B	0.1388	B	26		MS
Silver	107		0.0490	B	0.0574	B	16		MS
Sodium		116.3	416.0919		397.6225		5		P
Strontium			43.7453		45.1163		3		P
Thallium	203	0.1	0.3463		0.3331		4		MS
Tin			3.0802	B	2.7252	B	12		P
Titanium			1236.5266		1203.0323		3		P
Vanadium	51		52.7285		44.7619		16		MS
Zinc	66		74.9712		72.7353		3		MS
Zirconium			4.4849	B	5.2213	B	15		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE180 4495

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 7
LABORATORY CONTROL SAMPLE
SDG No.: DE180
Matrix: SOIL

Analyte	Mass	Lab Sample ID	Units	True	Found	C	Limit	.	%R	M	In Spec
Aluminum		P16808CQ	MG/KG	14146.0	12124.1		8676.7	15560.3	86	P	Yes
Antimony	121	P16826BQ	MG/KG	99.2	64.2		26.3	179.7	65	MS	Yes
Arsenic	75	P16826BQ	MG/KG	109.0	109.5		90.5	123.5	100	MS	Yes
Barium	137	P16826BQ	MG/KG	345.0	341.8		280.4	381.6	99	MS	Yes
Beryllium	9	P16826BQ	MG/KG	75.2	75.8		64.4	83.8	101	MS	Yes
Boron		P16808CQ	MG/KG	167.0	147.8		130.6	183.9	89	P	Yes
Cadmium	111	P16826BQ	MG/KG	244.0	248.8		200.0	288.0	102	MS	Yes
Calcium		P16808CQ	MG/KG	9858.0	9613.6		8634.5	10843.6	98	P	Yes
Chromium	52	P16826BQ	MG/KG	80.6	82.6		64.1	97.0	102	MS	Yes
Cobalt	59	P16826BQ	MG/KG	85.8	83.0		70.3	101.0	97	MS	Yes
Copper	63	P16826BQ	MG/KG	67.4	62.4		56.2	74.4	93	MS	Yes
Iron		P16808CQ	MG/KG	23615.0	18617.5		14448.8	25976.6	79	P	Yes
Lead	208	P16826BQ	MG/KG	111.0	105.0		91.9	122.1	95	MS	Yes
Lithium		P16808CQ	UG/L	1000.0	986.2		800.0	1200.0	99	P	Yes
Magnesium		P16808CQ	MG/KG	4434.0	4067.8		3649.7	4877.1	92	P	Yes
Manganese		P16808CQ	MG/KG	450.0	423.9		400.6	503.4	94	P	Yes
Mercury		P16811DQ	MG/KG	2.8	2.9		2.5	3.5	104	CV	Yes
Molybdenum	98	P16826BQ	MG/KG	47.2	48.4		36.8	57.5	103	MS	Yes
Nickel	60	P16826BQ	MG/KG	103.5	92.7		83.5	113.9	90	MS	Yes
Phosphorus		P16808CQ	UG/L	1000.0	1021.2		800.0	1200.0	102	P	Yes
Potassium		P16808CQ	MG/KG	5021.0	4620.2		3926.8	5523.2	92	P	Yes
Selenium	78	P16826BQ	MG/KG	183.0	183.6		151.6	202.4	100	MS	Yes
Silver	107	P16826BQ	MG/KG	48.0	47.2		39.0	53.4	98	MS	Yes
Sodium		P16808CQ	MG/KG	1099.0	1034.7		957.0	1209.1	94	P	Yes
Strontium		P16808CQ	MG/KG	105.6	102.5		90.4	116.2	97	P	Yes
Thallium	203	P16826BQ	MG/KG	286.0	284.5		237.4	314.6	99	MS	Yes
Tin		P16808CQ	MG/KG	180.0	169.9		161.3	204.7	94	P	Yes
Titanium		P17908DQ	MG/KG	579.0	707.2		463.2	694.8	122	P	No
Vanadium	51	P16826BQ	MG/KG	130.0	121.2		108.8	151.2	93	MS	Yes
Zinc	66	P16826BQ	MG/KG	390.0	390.8		317.4	438.6	100	MS	Yes
Zirconium		P16808CQ	UG/L	1000.0	989.9		800.0	1200.0	99	P	Yes

JLH 9/P (L)

~~DE408 5406~~

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	
AF = Cold Vapor Atomic Fluorescence	

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE180
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6315633BKG Serial Dilution Lab Sample ID: 6315633L
Batch ID(s): P16808C, P16826B, P17908D
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		249095.5600		233454.6000		6		P
Antimony	121	0.4071	B	1.8500	U	100		MS
Arsenic	75	25.6300		29.3100		14		MS
Barium	137	631.6000		688.0000		9		MS
Beryllium	9	3.5440		4.2985		21		MS
Boron		20.1700	B	35.9000	B	78		P
Cadmium	111	1.2520		2.1350	B	71		MS
Calcium		131464.5800		138201.6000		5		P
Chromium	52	130.4000		163.5500		25	E	MS
Cobalt	59	47.1600		52.8500		12	E	MS
Copper	63	61.6700		76.6000		24	E	MS
Iron		261587.7800		266115.1000		2		P
Lead	208	39.7800		49.0950		23	E	MS
Lithium		216.8000		223.3500		3		P
Magnesium		59503.2100		61422.7000		3		P
Manganese		2489.8500		2652.0500		7		P
Molybdenum	98	1.3940		1.5930	B	14		MS
Nickel	60	80.0100		100.6000		26	E	MS
Phosphorus		1961.0500		1983.3000		1		P
Potassium		26893.5300		27027.0000		0		P
Selenium	78	0.4625	B	1.4500	U	100		MS
Silver	107	0.2129	B	0.3550	U	100		MS
Sodium		3578.3900		3601.1000	B	1		P
Strontium		376.2100		388.5500		3		P
Thallium	203	1.5040		1.5435	B	3		MS
Tin		26.4900	B	31.5000	B	19		P
Titanium		10740.4700		11601.6500		8		P
Vanadium	51	229.0000		276.7500		21	E	MS
Zinc	66	325.6000		378.0000		16	E	MS
Zirconium		38.5700	B	44.0500	B	14		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE180 4497
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE181

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	TB-061511	6316989	TB	5030B	8015M	III
15-Jun-2011	TB-061511	6316989	TB	5030B	8260B	III
15-Jun-2011	TB-061511	6316989	TB	5030B	8260B SIM	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3050B	6010B	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3050B	6020	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3060A	7199	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3546	1625C	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3550B	8015B	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3550B	8015M	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3550B	8082	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3550B	8270C	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	3550B	8270C SIM	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	5035	8015M	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	5035	8260B	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	5035	8260B SIM	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	8330	8330A	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	METHOD	300.0	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	METHOD	314.0	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	METHOD	7471A	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	METHOD	8015B	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	METHOD	8015M	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	METHOD	8315A	III
15-Jun-2011	SL-029-SA5DN-SB-4.0-5.0	6316977	N	METHOD	9012B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3050B	6010B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3050B	6020	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3546	1625C	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3550B	8015B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3550B	8015M	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3550B	8082	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3550B	8270C	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	3550B	8270C SIM	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	5035	8015M	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	5035	8260B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	5035	8260B SIM	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	8330	8330A	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	METHOD	300.0	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	METHOD	314.0	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	METHOD	7471A	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	METHOD	8015B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	METHOD	8015M	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	METHOD	8315A	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0	6316978	N	METHOD	9012B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3050B	6010B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3050B	6020	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3060A	7199	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3546	1625C	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3550B	8015B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3550B	8015M	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3550B	8082	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3550B	8270C	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	5035	8015M	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	5035	8260B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	5035	8260B SIM	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	8330	8330A	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	METHOD	300.0	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	METHOD	314.0	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	METHOD	7471A	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	METHOD	8015B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	METHOD	8015M	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	METHOD	8315A	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316979	MS	METHOD	9012B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316980	MS	3050B	6010B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0MS	6316980	MS	5035	8260B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0DU	6316981	DUP	3050B	6010B	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0DU	6316981	DUP	3050B	6020	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0DU	6316981	DUP	3060A	7199	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0DU	6316981	DUP	METHOD	300.0	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0DU	6316981	DUP	METHOD	314.0	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0DU	6316981	DUP	METHOD	7471A	III
15-Jun-2011	SL-030-SA5DN-SB-4.0-5.0DU	6316981	DUP	METHOD	9012B	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3050B	6010B	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3050B	6020	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3060A	7199	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3546	1625C	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3550B	8015B	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3550B	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3550B	8082	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3550B	8270C	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	3550B	8270C SIM	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	5035	8015M	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	5035	8260B	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	5035	8260B SIM	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	8330	8330A	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	METHOD	300.0	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	METHOD	314.0	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	METHOD	7471A	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	METHOD	8015B	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	METHOD	8015M	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	METHOD	8315A	III
15-Jun-2011	DUP15-SA5DN-QC-061511	6316988	FD	METHOD	9012B	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3050B	6010B	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3050B	6020	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3060A	7199	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3546	1625C	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3550B	8015B	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3550B	8015M	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3550B	8082	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3550B	8270C	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	3550B	8270C SIM	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	5035	8015M	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	5035	8260B	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	8330	8330A	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	METHOD	300.0	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	METHOD	314.0	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	METHOD	7471A	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	METHOD	8015B	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	METHOD	8015M	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	METHOD	8315A	III
15-Jun-2011	SL-020-SA5DN-SB-3.5-4.5	6316976	N	METHOD	9012B	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3050B	6010B	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3050B	6020	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3060A	7199	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3546	1625C	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3550B	8015B	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3550B	8015M	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3550B	8082	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3550B	8270C	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	3550B	8270C SIM	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	5035	8015M	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	5035	8260B	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	5035	8260B SIM	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	8330	8330A	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	METHOD	300.0	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	METHOD	314.0	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	METHOD	6850	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	METHOD	7471A	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	METHOD	8015M	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	METHOD	8315A	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0	6316982	N	METHOD	9012B	III
15-Jun-2011	SL-031-SA5DN-SB-4.0-5.0MS	P316982R241925A	MS	METHOD	6850	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3050B	6010B	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3050B	6020	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3060A	7199	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3546	1625C	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3550B	8015B	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3550B	8015M	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3550B	8082	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3550B	8270C	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	3550B	8270C SIM	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	5035	8015M	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	5035	8260B	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	5035	8260B SIM	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	8330	8330A	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	METHOD	300.0	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	METHOD	314.0	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	METHOD	7471A	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	METHOD	8015B	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	METHOD	8015M	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	METHOD	8315A	III
15-Jun-2011	SL-034-SA5DN-SB-4.0-5.0	6316983	N	METHOD	9012B	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	3005A	6010B	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	3020A	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	3510C	8015B	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	3510C	8015M	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	3510C	8082	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	3510C	8270C	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	3510C	8270C SIM	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	3520C	1625C	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	5030B	8015M	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	5030B	8260B	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	5030B	8260B SIM	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	8330	8330A	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	Gen Prep	300.0	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	Gen Prep	314.0	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	Gen Prep	7199	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	Gen Prep	8015B	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	Gen Prep	8015M	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	METHOD	7470A	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	METHOD	8315A	III
15-Jun-2011	EB18-SA5DN-SB-061511	6316990	EB	METHOD	9012B	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	3050B	6010B	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	3050B	6020	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	3060A	7199	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	3550B	8082	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	3550B	8270C	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	3550B	8270C SIM	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	5035	8260B	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	METHOD	300.0	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	METHOD	314.0	III
15-Jun-2011	SL-055-SA5DN-SB-4.0-5.0	6316984	N	METHOD	7471A	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	3050B	6010B	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	3050B	6020	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	3060A	7199	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	3550B	8082	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	3550B	8270C	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	3550B	8270C SIM	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	METHOD	300.0	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	METHOD	314.0	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	METHOD	6850	III
15-Jun-2011	SL-055-SA5DN-SB-9.0-10.0	6316985	N	METHOD	7471A	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	3050B	6010B	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	3050B	6020	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	3060A	7199	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	3550B	8082	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	3550B	8270C	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	3550B	8270C SIM	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	5035	8260B	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	5035	8260B SIM	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	METHOD	300.0	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	METHOD	314.0	III
15-Jun-2011	SL-056-SA5DN-SB-4.0-5.0	6316986	N	METHOD	7471A	III
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	3050B	6010B	III
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	3060A	7199	III
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	3550B	8082	III
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	3550B	8270C	III
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	3550B	8270C SIM	III
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	METHOD	300.0	III
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	METHOD	314.0	III
15-Jun-2011	SL-056-SA5DN-SB-9.0-10.0	6316987	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE181 **Laboratory: LL**

EDD Filename: DE181_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: DUP15-SA5DN-QC-061511 *Collected:* 6/15/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-020-SA5DN-SB-3.5-4.5 *Collected:* 6/15/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.8		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-029-SA5DN-SB-4.0-5.0 *Collected:* 6/15/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA5DN-SB-4.0-5.0 *Collected:* 6/15/2011 9:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.1		0.92	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5DN-SB-4.0-5.0 *Collected:* 6/15/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.8		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-034-SA5DN-SB-4.0-5.0 *Collected:* 6/15/2011 12:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	11.0		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-055-SA5DN-SB-4.0-5.0 *Collected:* 6/15/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.0		0.94	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE181 **Laboratory: LL**

EDD Filename: DE181_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-055-SA5DN-SB-9.0-10.0 *Collected:* 6/15/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-056-SA5DN-SB-4.0-5.0 *Collected:* 6/15/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.5		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-056-SA5DN-SB-9.0-10.0 *Collected:* 6/15/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.7		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix: AQ**

Sample ID: EB18-SA5DN-SB-061511 *Collected:* 6/15/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.70	U	0.70	MDL	2.0	PQL	ug/L	UJ	L

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: EB18-SA5DN-SB-061511 *Collected:* 6/15/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0033	J	0.0022	MDL	0.0500	PQL	mg/L	U	B

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP15-SA5DN-QC-061511 *Collected:* 6/15/2011 10:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4520		2.76	MDL	22.1	PQL	mg/Kg	J	E, E, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE181 **Laboratory:** LL

EDD Filename: DE181_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP15-SA5DN-QC-061511 *Collected:* 6/15/2011 10:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	156		0.0398	MDL	0.552	PQL	mg/Kg	J	Q, E
PHOSPHORUS	215		0.387	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2240		12.5	MDL	55.2	PQL	mg/Kg	J	Q
STRONTIUM	20.7		0.0276	MDL	0.552	PQL	mg/Kg	J	FD
TIN	2.52	J	0.353	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.00	J	0.508	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA5DN-SB-3.5-4.5 *Collected:* 6/15/2011 10:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	9140		2.78	MDL	22.3	PQL	mg/Kg	J	E, E
MANGANESE	276		0.0401	MDL	0.557	PQL	mg/Kg	J	Q, E
PHOSPHORUS	272		0.390	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2350		12.6	MDL	55.7	PQL	mg/Kg	J	Q
TIN	2.36	J	0.356	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.03	J	0.512	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5DN-SB-4.0-5.0 *Collected:* 6/15/2011 9:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	15300		2.72	MDL	21.8	PQL	mg/Kg	J	E, E
MANGANESE	232		0.0392	MDL	0.544	PQL	mg/Kg	J	Q, E
PHOSPHORUS	185		0.381	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	1960		12.3	MDL	54.4	PQL	mg/Kg	J	Q
TIN	2.28	J	0.348	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.41	J	0.501	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA5DN-SB-4.0-5.0 *Collected:* 6/15/2011 9:55:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	22100		2.76	MDL	22.1	PQL	mg/Kg	J	E, E, FD
MANGANESE	179		0.0398	MDL	0.553	PQL	mg/Kg	J	Q, E
PHOSPHORUS	174		0.387	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2440		12.5	MDL	55.3	PQL	mg/Kg	J	Q
STRONTIUM	36.3		0.0276	MDL	0.553	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling