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MEMORANDUM

Date: May 25, 2012

To: Russell Henderson, Project Manager, OTIE
Superfund Technical Assessment and Response Team (START) for Region 4

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Subject: Data Validation for
35th Avenue - Five Mile Creek
Birmingham, AL
Project TDD No. TNA-05-003-0169

Laboratory: Spectrum Analytical, Inc. in Tampa, Florida.
Sample Delivery Group (SDG): 3505835

1.0 INTRODUCTION

The START chemist for Region 4 validated analytical data for 6 soil samples for semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAH), metals, and Total Organic Carbon (TOC) and 2 soil samples for polychlorinated biphenyls (PCBs). Samples were collected at the 35th Avenue - Five Mile Creek site on April 23, 2012. The samples were analyzed under SDG 3505835 by Spectrum Analytical, Inc. of Tampa, Florida using U.S. Environmental Protection Agency (U.S. EPA) methods 8270D, 8270D-SIM, 8082, 6010B, 7471A, and 9060.

Laboratory data were validated using guidelines set forth in the U.S. EPA Contract Laboratory Program National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (EPA-540-R-08-01, June 2008), NFG for Inorganic Superfund Data Review (EPA-540-R-10-011, January 2010), and applicable methodologies. The purpose of the chemical data quality evaluation process is to assess the usability of data for the project decision-making process.

Organic data validation consisted of a review of the following QC audits:

- Chain of custody and sample receipt forms review
- Sample preservation and holding time
- Blank results
- Surrogate recoveries
- Matrix spike and Matrix Spike Duplicate (MS/MSD) recovery results
- Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) recovery results
- Field Duplicates (when applicable)
- Initial Calibration Curve
- Continuing Calibration Verification (CCV)
- Tune Criteria

Inorganic data validation consisted of a review of the following QC audits:

- Chain of custody and sample receipt forms review

- Sample preservation and holding time
- Blank results
- Duplicate Sample Results
- LCS recovery results
- MS/MSD recovery results
- Field Duplicates (when applicable)
- Laboratory Sample Duplicates
- Serial Dilutions
- Initial Calibration Curve
- Initial and Continuing Calibration Verification

Section 2.0 of this memorandum discusses the results of organic data validation. Section 3.0 of this memorandum discusses the results of inorganic data validation. Section 4.0 of this memorandum discusses the results of the wet chemistry validation. Section 5.0 presents an overall assessment of the data. The attachment to this memorandum contains the laboratory reporting forms as well as START's handwritten data qualifications where warranted.

2.0 ORGANIC DATA VALIDATION RESULTS

The results of START's organic data validation are summarized below by QC audit reviewed. The data qualifiers listed below were applied to sample analytical results where warranted (see attachment):

- J – The analyte was detected. The reported concentration was considered estimated.
- U – The analyte was not detected.
- UJ – The analyte was not detected. The reporting limit was considered estimated.

After the START project staff received the data packages, they were inventoried for completeness and then reviewed according to matrix-specific protocols and data quality objectives established for the project.

2.1 SOIL SAMPLES BY METHOD 8270D

2.1.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on April 23, 2012 and were received on ice within 4°C ± 2°C.

2.1.2 SAMPLE PRESERVATION AND HOLDING TIME

The samples were extracted on April 25, 2012 and analyzed on April 26, 2012. SVOC samples were analyzed within holding time criteria. No discrepancies were noted.

2.1.3 BLANK RESULTS

The purpose of laboratory (or field) blank analysis is to determine the existence and magnitude of contamination resulting from laboratory (or field) activities. One laboratory method blank sample (127239MB) was run with this SDG.

No laboratory method blank detects were noted.

2.1.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds. Surrogate spike compounds included 2-Fluorophenol, Phenol-d5, Nitrobenzene-d5, 2-Fluorobiphenyl, 2,4,6-Tribromophenol, and Terphenyl-d14.

Surrogate recoveries were within laboratory derived acceptable limits with the following exceptions:

Samples EPAFMC-SD-05 and EPAFMC-SD-06 required large dilutions due to high concentrations of target and non-target analytes therefore the surrogates were diluted out and cannot be evaluated.

2.1.5 MS/MSD RECOVERY RESULTS

Data for MS/MSD are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

MS/MSD analysis was requested for this SDG on sample EPAFMC-SD-01. Sample EPAFMC-SD-01 had a final volume of 11 ml instead of 1 ml; the MS and MSD had final volumes of 1 ml and were run at a 5x dilution. The discrepancy in volumes indicates a lack of sample homogeneity.

The MS had the following analytes recovered outside acceptable QC criteria and were biased low: 2,4-Dimethylphenol at 23.1 %, 2,4-Dinitrophenol at 0%R, 4,6-Dinitro-2-methylphenol at 0%R, Hexachlorocyclopentadiene at 0 % and the following analytes were biased high: 2-Methylnaphthalene at 213 % with criteria of (33-120), Acenaphthene at198 % R, Anthracene at 264% R, Benzo(a)anthracene at 184%R, Benzo(a)pyrene at 152% R, Benzo(b)fluoranthene at 152 % R, Bis(2-ethylhexyl)phthalate at 150%R, Carbazole at 207% R, Chrysene at 175% R, Dibenzofuran at 204% R, Fluoranthene at 349% R, Fluorene at 223% R, Naphthalene at 638%R, Phenanthrene at 490% R and Pyrene at 227% R.

The MSD had the following analytes recovered outside acceptable QC criteria and were biased low: 2,4-Dimethyl phenol at 24.4 %R, 2,4-Dinitrophenol at 0 %R, 4,6-Dinitro-2-methylphenol at 0 %R, Benzo(a)anthracene at 0% R, Benzo(a)pyrene at 16.5 % R, Benzo(b)fluoranthene at 0 % R, Benzo(g,h,i)perylene at 26.5 % R, Benzo(k)fluoranthene at 11.7 % R, Chrysene at 0 % R, Fluoranthene at 0 % R, Hexachlorocyclopentadiene at 0 % R, Phenanthrene at 0 % R, Pyrene at 0 %R.

The following analytes exceeded RPD criteria: 1,1'-Biphenyl at 51.5 % RSD, 2-Methylnaphthalene at 93.5

% RSD, Acenaphthene at 90.3 % RSD, Acenaphthylene at 38.1 RSD, Anthracene at 62.1 %RSD, Benzo(a)anthracene at 52.2 % RSD, Benzo(a)pyrene at 47.9 % RSD, Benzo(b)fluoranthene at44.9 % RSD, Benzo(g,h,i)perylene at 34 % RSD, Benzo(k)fluoranthene at 52.4 % RSD, Bis(2-ethylhexyl)phthalate at 67.2 % RSD, Carbazole at 67.4 %RSD, Chrysene at 59 % RSD, Dibenzofuranat 81.7 % RSD, Di-n-octylphthalate at 30.1 % RSD, Fluoranthene at 63 % with ,Fluorene at 93.4 %RSD, Indeno(1,2,3-cd)pyrene at 32.4 % RSD, Naphthalene at 146.4 % RSD, Phenanthrene at 108.5% RSD and Pyrene at 62 % RSD.

Therefore, sample EPAFMC-SD-01 was flagged estimated UJ for 2,4-Dimethyl phenol, Naphthalene, 2-methylnaphthalene, 2,4-dinitrophenol, dibenzofuran, 4,6-dinitro-2-methylphenol, Bis(2-ethylhexyl) phthalate, di-n-octylphthalate, carbazole and 1.1'-biphenyl; and flagged as estimated J for Acenaphthylene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, pyrene, Benzo(a) anthracene, chrysene, Benzo(b) fluoranthene, Benzo(k) fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene and Benzo(g,h,i) perylene.

2.1.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS were fortified with the full list of SVOCs and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

The LCS recoveries were within QC limits.

2.1.7 FIELD DUPLICATES

Data for field duplicates were collected and analyzed for chemical constituents to measure the cumulative uncertainty (i.e., precision) of the sample collection, splitting, handling, storage, preparation and analysis operations, as well as natural sample heterogeneity that is not eliminated through simple mixing in the field. Field duplicates are two samples prepared by mixing a volume of sample and splitting it into two separate sample containers that are labeled as individual field samples.

Sample EPAFMC-SD-05 had a duplicate collected (EPAFMC-SD-06) for SVOC analysis. No deficiencies were noted.

2.1.8 INITIAL CALIBRATION

A calibration curve is a method for determining the concentration of a substance in an unknown sample by comparing the unknown to a set of standard samples of known concentrations. The calibration curve plots instrument response verses known concentrations and plots these using either relative response factors or linear regression to determine the best fit for the line.

At least 5 standards were used to calibrate the instrument. Relative response factor and linear regression were used for the calibration curves and the analytes were all within limits. System performance check compounds (SPCCs) and Calibration check compounds (CCCs) are all within QC limits. The %RSD and relative response factor(RRF) calculations for phenol were verified for the 04/23/12 calibration curve.

2.1.9 INITIAL AND CONTINUING CALIBRATION VERIFICATION

Initial calibration checks are performed to verify the validity of the calibration curve and continuing calibration checks at the beginning and end of the analytical run and periodically throughout the run to verify that the instrument calibration is still valid.

No discrepancies were noted.

2.1.10 INTERNAL STANDARD RESULTS

Internal standards are dueterated chemicals that do not occur in nature that are add to all samples, standards and QC samples and are used to correct for losses during sample analysis.

No discrepancies were noted.

2.1.11 INSTRUMENT PERFORMANCE CHECKS

GC/MS instrument performance checks are performed to ensure adequate mass resolution, identification, and to some degree, sensitivity. DFTPP must pass specific criteria and all samples must be analyzed with 12 hours of their associated DFTPP.

Two DFTPP were reported with this SDG. All DFTPP met the ion abundance criteria and all samples were analyzed within 12 hours of their respective DFTPP.

2.1.12 GENERAL LABORATORY OBSERVATIONS

The laboratory noted that samples EPAFMC-SD-01, EPAFMC-SD-05 and EPAFMC-SD-06 could not be brought to a final volume of 1ml and samples EPAFMC-SD-02, EPAFMC-SD-03, EPAFMC-SD-05, and EPAFMC-SD-06 were diluted due to high concentrations of target analytes. Target analytes that exceeded the upper calibration range in the initial run are reported from the dilution run.

2.2 SOIL SAMPLES BY METHOD 8270D-SIM

2.2.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on April 23, 2012 and were received on ice within 4°C ± 2°C.

2.2.2 SAMPLE PRESERVATION AND HOLDING TIME

The samples were extracted on May 2, 2012 and analyzed May 2, 2012 through May 9, 2012. SVOC samples were analyzed within holding time criteria. No discrepancies were noted.

2.2.3 BLANK RESULTS

The purpose of laboratory (or field) blank analysis is to determine the existence and magnitude of contamination resulting from laboratory (or field) activities. Laboratory method blank sample (128646MB) was run with this SDG.

No laboratory method blank detects were noted.

2.2.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds. Surrogate spike compounds included 2-Fluorobiphenyl and Terphenyl-d14.

Samples EPAFMC-SD-05 and EPAFMC-SD-06 required large dilutions which resulted in the surrogates being diluted out therefore the surrogates cannot be evaluated. No other discrepancies were noted.

2.2.5 MS/MSD RECOVERY RESULTS

Data for MS/MSD are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

A MS/MSD samples was requested for this SDG on sample EPAFMC-SD-01. The native sample had analyte results so high that the MS and MSD required dilution. The concentration of the native sample was so high in comparison to the spike value that the MS/MSD cannot be effectively evaluated.

2.2.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS were fortified with the full list of SVOCs and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

LCS recoveries were within limits.

2.2.7 FIELD DUPLICATES

Data for field duplicates were collected and analyzed for chemical constituents to measure the cumulative uncertainty (i.e., precision) of the sample collection, splitting, handling, storage, preparation and analysis operations, as well as natural sample heterogeneity that is not eliminated through simple mixing in the field. Field duplicates are two samples prepared by mixing a volume of sample and splitting it into two separate sample containers that are labeled as individual field samples.

Sample EPAFMC-SD-05 had a duplicate collected (EPAFMC-SD-06) for PAH. Both samples had a visible sheen on them and were extracted at a reduced amount and still required large dilutions. No deficiencies were noted.

2.2.8 INITIAL CALIBRATION

A calibration curve is a method for determining the concentration of a substance in an unknown sample by comparing the unknown to a set of standard samples of known concentrations. The calibration curve plots instrument response verses known concentrations and plots these using either relative response factors or linear regression to determine the best fit for the line.

Two calibration curves were used with this SDG. At least 5 standards were used to calibrate the instrument for both calibration curves. Relative response factor were used for the calibration curves and the analytes were all within limits. Calibration check compounds (CCCs) are all within QC limits. The RSD for 2-methylnaphthalene was verified for the 04/10/12 calibration curve and the RSD for fluoranthene was verified for the 05/07/12 calibration curve. No discrepancies were noted.

2.2.9 INITIAL AND CONTINUING CALIBRATION VERIFICATION

Initial calibration checks are performed to verify the validity of the calibration curve and continuing calibration checks are analyzed at the beginning the analytical run to verify that the instrument calibration is still valid.

No discrepancies were noted.

2.2.10 INTERNAL STANDARD RESULTS

Internal standards are dueterated chemicals that do not occur in nature that are add to all samples, standards and QC samples and are used to correct for losses during sample analysis.

No discrepancies were noted.

2.2.11 INSTRUMENT PERFORMANCE CHECKS

GC/MS instrument performance checks are performed to ensure adequate mass resolution, identification, and to some degree, sensitivity. DFTPP must pass specific criteria and all samples must be analyzed with 12 hours of their associated DFTPP.

Six DFTPP were reported with this SDG. All DFTPP met the ion abundance criteria and all samples were analyzed within 12 hours of their respective DFTPP.

2.2.12 GENERAL LABORATORY OBSERVATIONS

The laboratory noted that samples EPAFMC-SD-05 and EPAFMC-SD-06 had an observed sheen present and were extracted at a reduced amount. Samples EPAFMC-SD-01, EPAFMC-SD-02, EPAFMC-SD-03, EPAFMC-SD-04, EPAFMC-SD-05, and EPAFMC-SD-06 were diluted due to high concentrations of target analytes. Target analytes that exceeded the upper calibration range in the initial run are reported from the dilution run.

2.3 SOIL SAMPLES BY METHOD 8082

2.3.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on April 23, 2012 and were received on ice within 4°C ± 2°C.

2.3.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were extracted on April 27, 2012 and analyzed on April 30, 2012. Samples were shipped on ice and were analyzed within holding time criteria. No discrepancies were noted.

2.3.3 BLANK RESULTS

The purpose of laboratory blank analysis is to determine the existence and magnitude of contamination resulting from laboratory activities. A laboratory method blank sample (127811MB) was run with this SDG.

No laboratory method blank detects were noted.

2.3.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds. The surrogate spike compound included Decachlorobiphenyl.

Sample EPAFMC-SD-04 had a surrogate recovery biased high at 164% R. The chromatogram from the reported column shows definite interference with the surrogate. The second column shows no interference with the surrogate and the surrogate recovery is 75%R. Sample EPAFMC-SD-04 had no analytes detected above the MDL therefore no further action is necessary.

2.3.5 MS/MSD RECOVERY RESULTS

Data for MS/MSD are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

No MS/MSD samples were requested for this analysis.

2.3.6 LCS RECOVERY RESULTS

Data for the LCS is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS was fortified and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

The LCS recoveries were all within QC limits.

2.3.7 FIELD DUPLICATES

Data for field duplicates were collected and analyzed for chemical constituents to measure the cumulative uncertainty (i.e., precision) of the sample collection, splitting, handling, storage, preparation and analysis operations, as well as natural sample heterogeneity that is not eliminated through simple mixing in the field. Field duplicates are two samples prepared by mixing a volume of sample and splitting it into two separate sample containers that are labeled as individual field samples.

Sample EPAFMC-SD-05 had a duplicate collected (EPAFMC-SD-06) for PCB analysis. No analytes were detected in either sample.

2.3.8 INITIAL CALIBRATION

A calibration curve is a method for determining the concentration of a substance in an unknown sample by comparing the unknown to a set of standard samples of known concentrations. The calibration curve plots instrument response verses known concentrations and plots these using either relative response factors or linear regression to determine the best fit for the line.

At least five standards including a zero standard were used to calibrate the instrument. Relative response factor RSDs for these calibrations were all within limits. The RSD was verified for the 1260-1 peak. No discrepancies were noted.

2.3.9 INITIAL AND CONTINUING CALIBRATION VERIFICATION

Initial calibration checks are performed to verify the validity of the calibration curve and continuing calibration checks at the beginning and end of the analytical run and periodically throughout the run to verify that the instrument calibration is still valid.

The average for the initial and continuing calibration checks on both columns were with QC limits. CCV10751115 (column STX-CLP1) had 1016-5 with a recovery of 20.3%D, CCV1074823 (column STX-CLP1) had 1016-5 at 25.1%D and 1260-1 at 20.6%D, CCV1074824 (column STX-CLP2) had 1260-1 at 24.8%D, 1260-2 at 20.4%D, and 1260-3 at 23.4%D, and CCV1074826 (column STX-CLP2) had 1260-1 at 24.5%D. The samples were non-detect for all analytes and the chromatograms did not contain peaks that might be aroclors, therefore no further action was required.

3.0 INORGANIC DATA VALIDATION RESULTS

The results of START's inorganic data validation are summarized below by QC audit reviewed. The data qualifiers listed below were applied to sample analytical results where warranted:

- J – The analyte was detected. The reported concentration was considered estimated.
- U – The analyte was not detected.

- UJ – The analyte was not detected. The reporting limit was considered estimated.

After the START project staff received the data packages, they were inventoried for completeness and then reviewed according to matrix-specific protocols and data quality objectives established for the project.

3.1 SOIL SAMPLES BY METHOD 6010 B

3.1.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on April 23, 2012 and were received on ice April 24, 2012. Temperature on sample receipt was 4.9 °C, within QC limits.

3.1.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were prepared on April 25, 2012 and analyzed on April 27, 2012. Samples were analyzed within the holding time criteria. No discrepancies were noted.

3.1.3 BLANK RESULTS

The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory and/or field activities. A laboratory method blank sample for method 6010(127448MB) was run with this SDG.

The method blank had the following analytes detected above the MDL but below the reporting level (RL): Antimony at 0.273 mg/Kg and Iron at 2.51 mg/Kg. All samples analyzed had iron results greater than 10x the level present in the blank therefore no further action was taken. Samples EPAFMC-SD-01, EPAFMC-SD-02, EPAFMC-SD-03, EPAFMC-SD-04, EPAFMC-SD-05 and EPAFMC-SD-06 had results for Antimony that were less than 10x the level present in the blank.

The initial calibration blank (ICB1074198) had selenium and cobalt detected between the MDL and RL. All the samples are non-detect for selenium. Samples EPAFMC-SD-05 and EPAFMC-SD-06 are the only samples in which cobalt is not greater than 10x the level in the blank.

Iron was present between the MDL and RL in several of the CCB's run with SDG. Iron was present in all the samples at greater than 10x the highest level in the CCB therefore no further action was taken. Antimony was present in CCB107216 between the MDL and RL, and selenium was present in CCB1074215.

Therefore antimony was raised to the CRQL and flagged as U (undetected) in samples EPAFMC-SD-01, EPAFMC-SD-02, EPAFMC-SD-03, and EPAFMC-SD-04. Samples EPAFMC-SD-05 and EPAFMC-SD-06 had antimony and cobalt levels that were not greater than 10x the levels in the blank therefore samples EPAFMC-SD-05 and EPAFMC-SD-06 will be flagged as J (estimated) for antimony and cobalt.

3.1.4 LCS RECOVERY RESULTS

The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS is fortified with each analyte of interest and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

The LCS/LCSD recoveries were within QC limits.

3.1.5 MS/MSD RECOVERY RESULTS

The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The MS/MSD accuracy performance is measured by %R.

An MS/MSD was requested on sample EPAFMC-SD-01. Manganese in the native sample was greater than 10x the spike level therefore manganese cannot be evaluated in the MS and MSD. The matrix spike had aluminum biased high at 131%R, iron biased high at 189%R, and zinc biased low at 62.3%R. The matrix spike duplicate had aluminum biased high at 132%R, chromium biased high at 134%R, iron biased high at 182%R. The iron result in the native sample was almost 4x the spike level and this may account for the high recovery seen. The post digestion spike was within QC limits for all analytes; therefore sample EPAFMC-SD-01 will be flagged as J for Aluminum, Iron, Chromium and Zinc.

3.1.6 FIELD DUPLICATES

Data for field duplicates were collected and analyzed for chemical constituents to measure the cumulative uncertainty (i.e., precision) of the sample collection, splitting, handling, storage, preparation and analysis operations, as well as natural sample heterogeneity that is not eliminated through simple mixing in the field. Field duplicates are two samples prepared by mixing a volume of sample and splitting it into two separate sample containers that are labeled as individual field samples.

Sample EPAFMC-SD-05 had a duplicate collected (EPAFMC-SD-06) for metals analysis. No deficiencies were noted.

3.1.7 LABORATORY SAMPLE DUPLICATES

Two sample aliquots of the same sample are taken in the analytical laboratory and analyzed separately with identical procedures. Analyses of the sample and duplicate give a measure of the precision associated with laboratory procedures, but not with sample collection. Analytes that are present at greater than five times the CRQL are evaluated for %RPD.

The laboratory used the LSC/LCSD and MS/MSD on sample EPAFMC-SD-01 as the sample duplicates for this analysis. No discrepancies were noted.

3.1.8 SERIAL DILUTIONS

The serial dilution of samples determines whether or not significant physical or chemical interferences exist due to sample matrix. Serial dilutions on analytes that are greater than 50x the MDL must be within 10% RPD.

A serial dilution was performed on sample EPAFMC-SD-01. No discrepancies were noted.

3.1.9 INITIAL CALIBRATION

A calibration curve is a method for determining the concentration of a substance in an unknown sample by comparing the unknown to a set of standard samples of known concentrations. The calibration curve plots instrument response verses known concentrations and plots these using either relative response factors or linear regression to determine the best fit for the line.

At least three standards including a zero standard were used to calibrate the instrument for all analytes. The coefficient of determination (r2) value is greater than 0.995 for all analytes using weighted linear regression and the y-intercept was below the RL.

3.1.10 INITIAL AND CONTINUING CALIBRATION VERIFICATION

Initial calibration checks are performed to verify the validity of the calibration curve and continuing calibration checks at the beginning and end of the analytical run and periodically throughout the run to verify that the instrument calibration is still valid.

The Initial and continuing calibration checks were with QC limits.

3.1.11 GENERAL LABORATORY OBSERVATIONS

The laboratory noted that samples EPAFMC-SC-01, EPAFMC-SC-02, EPAFMC-SC-03 and EPAFMC-SC-04 had to be diluted for manganese. Therefore, the results from the dilution runs for manganese were reported.

3.2 SOIL SAMPLES BY METHOD 7471

3.2.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on April 23, 2012 and were received on ice within 4°C ± 2°C. No discrepancies were noted.

3.2.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were prepared on April 25, 2012 and analyzed on April 27, 2012. Samples were analyzed within the holding time criteria. No discrepancies were noted.

3.2.3 BLANK RESULTS

The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory and/or field activities. A laboratory method blank sample (127971MB) for method 7471 was run with this SDG.

No laboratory method blank detects were noted. No initial and continuing calibration blank detects were noted.

3.2.4 LCS RECOVERY RESULTS

The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS is fortified with each analyte of interest and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

The LCS/LCSD recoveries were all within acceptable recovery limits.

3.2.5 MS/MSD RECOVERY RESULTS

The spiked sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The MS/MSD accuracy performance is measured by %R.

A MS/MSD was requested on sample EPAFMC-SD-01. Recoveries were within QC limits.

3.2.6 FIELD DUPLICATES

Data for field duplicates were collected and analyzed for chemical constituents to measure the cumulative uncertainty (i.e., precision) of the sample collection, splitting, handling, storage, preparation and analysis operations, as well as natural sample heterogeneity that is not eliminated through simple mixing in the field. Field duplicates are two samples prepared by mixing a volume of sample and splitting it into two separate sample containers that are labeled as individual field samples.

Sample EPAFMC-SD-05 had a duplicate collected (EPAFMC-SD-06) for mercury. No deficiencies were noted.

3.2.7 LABORATORY SAMPLE DUPLICATES

Two sample aliquots of the same sample are taken in the analytical laboratory and analyzed separately with identical procedures. Analyses of the sample and duplicate give a measure of the precision associated with laboratory procedures, but not with sample collection. Analytes that are present at greater than five times the CRQL are evaluated for %RPD.

The laboratory used the LSC/LCSD and MS/MSD on sample EPAFMC-SD-01 as the sample duplicates for this analysis. No discrepancies were noted

3.2.8 SERIAL DILUTIONS

The serial dilution of samples determines whether or not significant physical or chemical interferences exist due to sample matrix. Serial dilutions on analytes that are greater than 50x the MDL must be within 10% RPD.

A serial dilution was performed on sample EPAFMC-SD-01. No discrepancies were noted

3.2.9 INITIAL CALIBRATION

A calibration curve is a method for determining the concentration of a substance in an unknown sample by comparing the unknown to a set of standard samples of known concentrations. The calibration curve plots instrument response verses known concentrations and plots these using either relative response factors or linear regression to determine the best fit for the line.

At least 5 standards including a zero standard were used to calibrate the instrument. The coefficient of determination (r2) value is greater than 0.995 for mercury (.999). The linear regression was checked to for mercury and verified. No discrepancies were noted.

3.2.10 INITIAL AND CONTINUING CALIBRATION VERIFICATION

Initial calibration checks are performed to verify the validity of the calibration curve and continuing calibration checks at the beginning and end of the analytical run and periodically throughout the run to verify that the instrument calibration is still valid.

The Initial and continuing calibration checks were with QC limits.

4.0 WET CHEMISTRY DATA VALIDATION RESULTS

The results of START's inorganic data validation are summarized below by QC audit reviewed. The data qualifiers listed below were applied to sample analytical results where warranted:

- J – The analyte was detected. The reported concentration was considered estimated.
- U – The analyte was not detected.
- UJ – The analyte was not detected. The reporting limit was considered estimated.

After the START project staff received the data packages, they were inventoried for completeness and then reviewed according to matrix-specific protocols and data quality objectives established for the project.

4.1 SOIL SAMPLES BY METHOD 9060

4.1.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. Soil samples were collected on April 23, 2012 and were received on ice within 4°C ± 2°C.

4.1.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were prepared and analyzed April 30, 2012. Samples were analyzed within the holding time criteria. No discrepancies were noted.

4.1.3 BLANK RESULTS

The assessment of blank analysis results is to determine the existence and magnitude of contamination resulting from laboratory and/or field activities. A laboratory method blank sample (9269MB) for method was run with this SDG.

No laboratory method blank detects were noted.

4.1.4 LCS RECOVERY RESULTS

The LCS serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. The LCS is fortified with each analyte of interest and analyzed with each batch of samples. The LCS accuracy performance is measured by %R.

The LCS/LCSD recoveries were within acceptable recovery limits.

4.1.5 FIELD DUPLICATES

Data for field duplicates were collected and analyzed for chemical constituents to measure the cumulative uncertainty (i.e., precision) of the sample collection, splitting, handling, storage, preparation and analysis operations, as well as natural sample heterogeneity that is not eliminated through simple mixing in the field. Field duplicates are two samples prepared by mixing a volume of sample and splitting it into two separate sample containers that are labeled as individual field samples.

Sample EPAFMC-SD-05 had a duplicate collected (EPAFMC-SD-06) for TOC. No deficiencies were noted.

4.1.6 LABORATORY SAMPLE DUPLICATES

Two sample aliquots of the same sample are taken in the analytical laboratory and analyzed separately with identical procedures. Analyses of the sample and duplicate give a measure of the precision associated with laboratory procedures, but not with sample collection. Analytes that are present at greater than five times the CRQL are evaluated for %RPD.

A duplicate analysis was performed on sample EPAFMC-SD-06. No discrepancies were noted

4.1.7 INITIAL CALIBRATION

A calibration curve is a method for determining the concentration of a substance in an unknown sample by comparing the unknown to a set of standard samples of known concentrations. The calibration curve plots instrument response verses known concentrations and plots these using either relative response factors or linear regression to determine the best fit for the line.

At least 5 standards including a zero standard were used to calibrate the instrument. The coefficient of determination (r2) value is greater than 0.995 for TOC (.9993). The linear regression was checked to for TOC and verified. No discrepancies were noted.

4.1.8 INITIAL AND CONTINUING CALIBRATION VERIFICATION

Initial calibration checks are performed to verify the validity of the calibration curve and continuing calibration checks at the beginning and end of the analytical run and periodically throughout the run to verify that the instrument calibration is still valid.

The initial and continuing calibration checks were with QC limits.

5.0 OVERALL ASSESSMENT OF DATA

The analytical results meet the data quality objectives defined by the applicable method and validation guidance documentation. The analytical data is usable and acceptable as reported by the laboratory.

ATTACHMENT

SUMMARY OF VALIDATED ANALYTICAL RESULTS

AND

CHAIN-OF-CUSTODY

Page 1 of 1

Revised

USEPA Region 4 COC (LAB COPY)

DateShipped: 4/23/2012

CarrierName: FedEx

AirbillNo: 875585709753

CHAIN OF CUSTODY RECORD

Site #: 2005148-1392

Project Number: OTIE-Five Mile Creek

Cooler #:

3505835
18

No: EPAFMC 4-23-12

Lab: PEL/SPECTRUM LAB

Lab Contact: KEVIN DUNHAM

Lab Phone: 813-888-9507

4-24-12 MV

Sample #	Media/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
EPAFMC-SD-01	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA + PAHs(14), TAL METALS + Hg(14) 9060	A (Ice), B (Ice) (3)	EPAFMC01	04/23/2012 13:35	-01-0708 ms/msD
EPAFMC-SD-02	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA+PAHS+PCB(14), TAL METALS + Hg(14) 9060	A (Ice), B (Ice) (2)	EPAFMC02	04/23/2012 13:45	-02
EPAFMC-SD-03	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA + PAHs(14), TAL METALS + Hg(14) 9060	A (Ice), B (Ice) (2)	EPAFMC03	04/23/2012 13:55	-03
EPAFMC-SD-04	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA+PAHS+PCB(14), TAL METALS + Hg(14) 9060	A (Ice), B (Ice) (2)	EPAFMC04	04/23/2012 14:10	-04
EPAFMC-SD-05	Sediment/ DOUG FRALEY	Grab	SVOA + PAHs(14), TAL METALS + Hg(14) 9060	A (Ice), B (Ice) (2)	EPAFMC05	04/23/2012 14:20	-05
EPAFMC-SD-06	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA + PAHs(14), TAL METALS + Hg(14) 9060	A (Ice), B (Ice) (2)	EPAFMC05	04/23/2012 14:25	-06 Dup of 05

Sample(s) to be used for Lab QC: EPAFMC-SD-01 Temp 4.9C

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time

4-27-12 940

4-30-12

Page 1 of 1

USEPA Region 4 COC (LAB COPY)

DateShipped: 4/23/2012
CarrierName: FedEx
AirbillNo: 875585709753

CHAIN OF CUSTODY RECORD

Site #: 1392
Project Number: 12-0390
Cooler #:

3505835
NF

No: EPAFMC 4-23-12

Lab: PEL/SPECTRUM LAB
Lab Contact: KEVIN DUNHAM
Lab Phone: 813-888-9507

Sample #	Media/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	For Lab Use Only
EPAFMC-SD-01	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA + PAHs(14), TAL METALS + Hg(14)	A (Ice), B (Ice) (3)	EPAFMC01	04/23/2012 13:35	-01-0708
EPAFMC-SD-02	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA+PAHS+PCB(14), TAL METALS + Hg(14)	A (Ice), B (Ice) (2)	EPAFMC02	04/23/2012 13:45	-02
EPAFMC-SD-03	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA + PAHs(14), TAL METALS + Hg(14)	A (Ice), B (Ice) (2)	EPAFMC03	04/23/2012 13:55	-03
EPAFMC-SD-04	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA+PAHS+PCB(14), TAL METALS + Hg(14)	A (Ice), B (Ice) (2)	EPAFMC04	04/23/2012 14:10	-04
EPAFMC-SD-05	Sediment/ DOUG FRALEY	Grab	SVOA + PAHs(14), TAL METALS + Hg(14)	A (Ice), B (Ice) (2)	EPAFMC05	04/23/2012 14:20	-05
EPAFMC-SD-06	Sediment/ DUSTIN MORIN & RYAN STUBBS	Grab	SVOA + PAHs(14), TAL METALS + Hg(14)	A (Ice), B (Ice) (2)	EPAFMC05	04/23/2012 14:25	-06

3505835

Sample(s) to be used for Lab QC: EPAFMC-SD-01 (MS/MSD location)

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
samples + cooler	Nairimar Berrios	4/23/12 1600								4/24/12	940

300

Note: 14 days Turn Around Time

4-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-01

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501 Lab File ID 83501.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 11 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1530

PercentSolids: 67.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC01 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	839	U	839	3380
108-95-2	Phenol	814	U	814	16700
95-57-8	2-Chlorophenol	864	U	864	3380
108-60-1	2,2'-Oxybis(1-chloropropane)	2750	U	2750	3380
95-48-7	2-Methylphenol	1200	U	1200	3340
67-72-1	Hexachloroethane	626	U	626	3380
621-64-7	N-Nitroso-di-n-propylamine	764	U	764	3380
106-44-5	4-Methylphenol	739	U	739	3380
98-95-3	Nitrobenzene	751	U	751	3380
78-59-1	Isophorone	739	U	739	3380
88-75-5	2-Nitrophenol	902	U	902	3380
105-67-9	2,4-Dimethylphenol	714	UJ U	714	3340
111-91-1	Bis(2-chloroethoxy)methane	714	U	714	3340
120-83-2	2,4-Dichlorophenol	939	U	939	3340
91-20-3	Naphthalene	801	UJ U	801	3380
106-47-8	4-Chloroaniline	789	U	789	3380
91-57-6	2-Methylnaphthalene	726	UJ U	726	3380
87-68-3	Hexachlorobutadiene	726	U	726	3380
59-50-7	4-Chloro-3-methylphenol	701	U	701	3380
77-47-4	Hexachlorocyclopentadiene	501	U	501	8350
88-06-2	2,4,6-Trichlorophenol	851	U	851	3340
95-95-4	2,4,5-Trichlorophenol	927	U	927	3340
91-58-7	2-Chloronaphthalene	835	U	835	3380
88-74-4	2-Nitroaniline	714	U	714	3380
208-96-8	Acenaphthylene	944	J	689	3380
131-11-3	Dimethylphthalate	739	U	739	3380

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-01

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501 Lab File ID 83501.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 11 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1530

PercentSolids: 67.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC01 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	626	U	626	3380
83-32-9	Acenaphthene	928	J	614	3380
99-09-2	3-Nitroaniline	1000	U	1000	3340
51-28-5	2,4-Dinitrophenol	2750 UJ	U	2750	16800
132-64-9	Dibenzofuran	676 UJ	U	676	3380
121-14-2	2,4-Dinitrotoluene	614	U	614	3380
100-02-7	4-Nitrophenol	664	U	664	8350
86-73-7	Fluorene	1230	J	639	3380
7005-72-3	4-Chlorophenyl-phenylether	639	U	639	3380
84-66-2	Diethylphthalate	639	U	639	3380
100-01-6	4-Nitroaniline	1100	U	1100	3340
534-52-1	4,6-Dinitro-2-methylphenol	3330 UJ	U	3330	3380
86-30-6	N-Nitrosodiphenylamine	789	U	789	3340
101-55-3	4-Bromophenyl-phenylether	614	U	614	3380
118-74-1	Hexachlorobenzene	664	U	664	3340
87-86-5	Pentachlorophenol	1660	U	1660	3380
85-01-8	Phenanthrene	6590	J	701	3380
120-12-7	Anthracene	2860	J	751	3380
84-74-2	Di-n-butylphthalate	551	U	551	3380
206-44-0	Fluoranthene	13700	J	601	3380
129-00-0	Pyrene	10600	J	1150	3380
85-68-7	Butylbenzylphthalate	789	U	789	3380
91-94-1	3,3'-Dichlorobenzidine	739	U	739	3380
56-55-3	Benzo(a)anthracene	7390	J	714	3380
218-01-9	Chrysene	7300	J	426	3340
117-81-7	Bis(2-ethylhexyl)phthalate	1040 UJ	U	1040	3380

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-01

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501 Lab File ID 83501.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 11 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1530

PercentSolids: 67.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC01 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	726 UJ	U	726	3380
205-99-2	Benzo(b)fluoranthene	7130	J	789	3380
207-08-9	Benzo(k)fluoranthene	3050	J	714	3380
50-32-8	Benzo(a)pyrene	4520	J	538	3380
193-39-5	Indeno(1,2,3-cd)pyrene	2070	J	651	3380
53-70-3	Dibenzo(a,h)anthracene	818	J	513	3380
191-24-2	Benzo(g,h,i)perylene	2220	J	501	3380
98-86-2	Acetophenone	1250	U	1250	3380
95-94-3	1,2,4,5-Tetrachlorobenzene	588	U	588	3380
86-74-8	Carbazole	676 UJ	U	676	3380
105-60-2	Caprolactam	1750	U	1750	3380
92-52-4	1,1'-Biphenyl	764 UJ	U	764	3380
1912-24-9	Atrazine	989	U	989	3380
100-52-7	Benzaldehyde	563	U	563	3380

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502 Lab File ID 83502.D

Sample wt/vol: 25.3 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2021

PercentSolids: 80.7 decanted : Dilution Factor: 5

Extraction: OTHER Station ID: EPAFMC02 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	328	U	328	1320
108-95-2	Phenol	318	U	318	6530
95-57-8	2-Chlorophenol	338	U	338	1320
108-60-1	2,2'-Oxybis(1-chloropropane)	1080	U	1080	1320
95-48-7	2-Methylphenol	470	U	470	1310
67-72-1	Hexachloroethane	245	U	245	1320
621-64-7	N-Nitroso-di-n-propylamine	299	U	299	1320
106-44-5	4-Methylphenol	289	U	289	1320
98-95-3	Nitrobenzene	294	U	294	1320
78-59-1	Isophorone	289	U	289	1320
88-75-5	2-Nitrophenol	353	U	353	1320
105-67-9	2,4-Dimethylphenol	279	U	279	1310
111-91-1	Bis(2-chloroethoxy)methane	279	U	279	1310
120-83-2	2,4-Dichlorophenol	367	U	367	1310
91-20-3	Naphthalene	2350		313	1320
106-47-8	4-Chloroaniline	308	U	308	1320
91-57-6	2-Methylnaphthalene	1720		284	1320
87-68-3	Hexachlorobutadiene	284	U	284	1320
59-50-7	4-Chloro-3-methylphenol	274	U	274	1320
77-47-4	Hexachlorocyclopentadiene	196	U	196	3270
88-06-2	2,4,6-Trichlorophenol	333	U	333	1310
95-95-4	2,4,5-Trichlorophenol	362	U	362	1310
91-58-7	2-Chloronaphthalene	327	U	327	1320
88-74-4	2-Nitroaniline	279	U	279	1320
208-96-8	Acenaphthylene	2810		269	1320
131-11-3	Dimethylphthalate	289	U	289	1320

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502 Lab File ID 83502.D

Sample wt/vol: 25.3 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2021

PercentSolids: 80.7 decanted : Dilution Factor: 5

Extraction: OTHER Station ID: EPAFMC02 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	245	U	245	1320
83-32-9	Acenaphthene	8020		240	1320
99-09-2	3-Nitroaniline	392	U	392	1310
51-28-5	2,4-Dinitrophenol	1080	U	1080	6560
132-64-9	Dibenzofuran	4920		264	1320
121-14-2	2,4-Dinitrotoluene	240	U	240	1320
100-02-7	4-Nitrophenol	260	U	260	3270
86-73-7	Fluorene	11800		250	1320
7005-72-3	4-Chlorophenyl-phenylether	250	U	250	1320
84-66-2	Diethylphthalate	250	U	250	1320
100-01-6	4-Nitroaniline	431	U	431	1310
534-52-1	4,6-Dinitro-2-methylphenol	1300	U	1300	1320
86-30-6	N-Nitrosodiphenylamine	308	U	308	1310
101-55-3	4-Bromophenyl-phenylether	240	U	240	1320
118-74-1	Hexachlorobenzene	260	U	260	1310
87-86-5	Pentachlorophenol	651	U	651	1320
85-01-8	Phenanthrene	40900	E	274	1320
120-12-7	Anthracene	31100	E	294	1320
84-74-2	Di-n-butylphthalate	216	U	216	1320
206-44-0	Fluoranthene	42200	E	235	1320
129-00-0	Pyrene	28900	E	451	1320
85-68-7	Butylbenzylphthalate	308	U	308	1320
91-94-1	3,3'-Dichlorobenzidine	289	U	289	1320
56-55-3	Benzo(a)anthracene	19600		279	1320
218-01-9	Chrysene	20300		166	1310
117-81-7	Bis(2-ethylhexyl)phthalate	406	U	406	1320

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502 Lab File ID 83502.D

Sample wt/vol: 25.3 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2021

PercentSolids: 80.7 decanted : Dilution Factor: 5

Extraction: OTHER Station ID: EPAFMC02 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	284	U	284	1320
205-99-2	Benzo(b)fluoranthene	22500		308	1320
207-08-9	Benzo(k)fluoranthene	9520		279	1320
50-32-8	Benzo(a)pyrene	14500		211	1320
193-39-5	Indeno(1,2,3-cd)pyrene	4940		255	1320
53-70-3	Dibenzo(a,h)anthracene	2300		201	1320
191-24-2	Benzo(g,h,i)perylene	5060		196	1320
98-86-2	Acetophenone	490	U	490	1320
95-94-3	1,2,4,5-Tetrachlorobenzene	230	U	230	1320
86-74-8	Carbazole	6390		264	1320
105-60-2	Caprolactam	686	U	686	1320
92-52-4	1,1'-Biphenyl	645	J	299	1320
1912-24-9	Atrazine	387	U	387	1320
100-52-7	Benzaldehyde	220	U	220	1320

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502DL1 Lab File ID 83502D25.D

Sample wt/vol: 25.3 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1736

PercentSolids: 80.7 decanted : Dilution Factor: 25

Extraction: OTHER Station ID: EPAFMC02 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	1640	U	1640	6610
108-95-2	Phenol	1590	U	1590	32700
95-57-8	2-Chlorophenol	1690	U	1690	6610
108-60-1	2,2'-Oxybis(1-chloropropane)	5390	U	5390	6610
95-48-7	2-Methylphenol	2350	U	2350	6540
67-72-1	Hexachloroethane	1220	U	1220	6610
621-64-7	N-Nitroso-di-n-propylamine	1490	U	1490	6610
106-44-5	4-Methylphenol	1440	U	1440	6610
98-95-3	Nitrobenzene	1470	U	1470	6610
78-59-1	Isophorone	1440	U	1440	6610
88-75-5	2-Nitrophenol	1760	U	1760	6610
105-67-9	2,4-Dimethylphenol	1400	U	1400	6540
111-91-1	Bis(2-chloroethoxy)methane	1400	U	1400	6540
120-83-2	2,4-Dichlorophenol	1840	U	1840	6540
91-20-3	Naphthalene	2150	J	1570	6610
106-47-8	4-Chloroaniline	1540	U	1540	6610
91-57-6	2-Methylnaphthalene	1460	J	1420	6610
87-68-3	Hexachlorobutadiene	1420	U	1420	6610
59-50-7	4-Chloro-3-methylphenol	1370	U	1370	6610
77-47-4	Hexachlorocyclopentadiene	980	U	980	16300
88-06-2	2,4,6-Trichlorophenol	1660	U	1660	6540
95-95-4	2,4,5-Trichlorophenol	1810	U	1810	6540
91-58-7	2-Chloronaphthalene	1630	U	1630	6610
88-74-4	2-Nitroaniline	1400	U	1400	6610
208-96-8	Acenaphthylene	2660	J	1350	6610
131-11-3	Dimethylphthalate	1440	U	1440	6610

5-30-12

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502DL1 Lab File ID 83502D25.D

Sample wt/vol: 25.3 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1736

PercentSolids: 80.7 decanted : Dilution Factor: 25

Extraction: OTHER Station ID: EPAFMC02 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	1220	U	1220	6610
83-32-9	Acenaphthene	7220		1200	6610
99-09-2	3-Nitroaniline	1960	U	1960	6540
51-28-5	2,4-Dinitrophenol	5390	U	5390	32800
132-64-9	Dibenzofuran	4670	J	1320	6610
121-14-2	2,4-Dinitrotoluene	1200	U	1200	6610
100-02-7	4-Nitrophenol	1300	U	1300	16300
86-73-7	Fluorene	10300		1250	6610
7005-72-3	4-Chlorophenyl-phenylether	1250	U	1250	6610
84-66-2	Diethylphthalate	1250	U	1250	6610
100-01-6	4-Nitroaniline	2160	U	2160	6540
534-52-1	4,6-Dinitro-2-methylphenol	6510	U	6510	6610
86-30-6	N-Nitrosodiphenylamine	1540	U	1540	6540
101-55-3	4-Bromophenyl-phenylether	1200	U	1200	6610
118-74-1	Hexachlorobenzene	1300	U	1300	6540
87-86-5	Pentachlorophenol	3260	U	3260	6610
85-01-8	Phenanthrene	40900		1370	6610
120-12-7	Anthracene	28200		1470	6610
84-74-2	Di-n-butylphthalate	1080	U	1080	6610
206-44-0	Fluoranthene	44700		1180	6610
129-00-0	Pyrene	32800		2250	6610
85-68-7	Butylbenzylphthalate	1540	U	1540	6610
91-94-1	3,3'-Dichlorobenzidine	1440	U	1440	6610
56-55-3	Benzo(a)anthracene	22100		1400	6610
218-01-9	Chrysene	23700		833	6540
117-81-7	Bis(2-ethylhexyl)phthalate	2030	U	2030	6610

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502DL1 Lab File ID 83502D25.D

Sample wt/vol: 25.3 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1736

PercentSolids: 80.7 decanted : Dilution Factor: 25

Extraction: OTHER Station ID: EPAFMC02 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	1420	U	1420	6610
205-99-2	Benzo(b)fluoranthene	20500		1540	6610
207-08-9	Benzo(k)fluoranthene	7620		1400	6610
50-32-8	Benzo(a)pyrene	13400		1050	6610
193-39-5	Indeno(1,2,3-cd)pyrene	5080	J	1270	6610
53-70-3	Dibenzo(a,h)anthracene	2160	J	1000	6610
191-24-2	Benzo(g,h,i)perylene	5270	J	980	6610
98-86-2	Acetophenone	2450	U	2450	6610
95-94-3	1,2,4,5-Tetrachlorobenzene	1150	U	1150	6610
86-74-8	Carbazole	6000	J	1320	6610
105-60-2	Caprolactam	3430	U	3430	6610
92-52-4	1,1'-Biphenyl	1490	U	1490	6610
1912-24-9	Atrazine	1930	U	1930	6610
100-52-7	Benzaldehyde	1100	U	1100	6610

AMS-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-03

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503 Lab File ID 83503.D

Sample wt/vol: 25.05 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1958

PercentSolids: 74.2 decanted : Dilution Factor: 2

Extraction: OTHER Station ID: EPAFMC03 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	144	U	144	581
108-95-2	Phenol	140	U	140	2870
95-57-8	2-Chlorophenol	148	U	148	581
108-60-1	2,2'-Oxybis(1-chloropropane)	473	U	473	581
95-48-7	2-Methylphenol	206	U	206	574
67-72-1	Hexachloroethane	108	U	108	581
621-64-7	N-Nitroso-di-n-propylamine	131	U	131	581
106-44-5	4-Methylphenol	127	U	127	581
98-95-3	Nitrobenzene	129	U	129	581
78-59-1	Isophorone	127	U	127	581
88-75-5	2-Nitrophenol	155	U	155	581
105-67-9	2,4-Dimethylphenol	123	U	123	574
111-91-1	Bis(2-chloroethoxy)methane	123	U	123	574
120-83-2	2,4-Dichlorophenol	161	U	161	574
91-20-3	Naphthalene	301	J	138	581
106-47-8	4-Chloroaniline	136	U	136	581
91-57-6	2-Methylnaphthalene	125	U	125	581
87-68-3	Hexachlorobutadiene	125	U	125	581
59-50-7	4-Chloro-3-methylphenol	120	U	120	581
77-47-4	Hexachlorocyclopentadiene	86.1	U	86.1	1440
88-06-2	2,4,6-Trichlorophenol	146	U	146	574
95-95-4	2,4,5-Trichlorophenol	159	U	159	574
91-58-7	2-Chloronaphthalene	144	U	144	581
88-74-4	2-Nitroaniline	123	U	123	581
208-96-8	Acenaphthylene	671		118	581
131-11-3	Dimethylphthalate	127	U	127	581

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-03

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503 Lab File ID 83503.D

Sample wt/vol: 25.05 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1958

PercentSolids: 74.2 decanted : Dilution Factor: 2

Extraction: OTHER Station ID: EPAFMC03 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	108	U	108	581
83-32-9	Acenaphthene	185	J	105	581
99-09-2	3-Nitroaniline	172	U	172	574
51-28-5	2,4-Dinitrophenol	473	U	473	2880
132-64-9	Dibenzofuran	128	J	116	581
121-14-2	2,4-Dinitrotoluene	105	U	105	581
100-02-7	4-Nitrophenol	114	U	114	1440
86-73-7	Fluorene	352	J	110	581
7005-72-3	4-Chlorophenyl-phenylether	110	U	110	581
84-66-2	Diethylphthalate	110	U	110	581
100-01-6	4-Nitroaniline	189	U	189	574
534-52-1	4,6-Dinitro-2-methylphenol	572	U	572	581
86-30-6	N-Nitrosodiphenylamine	136	U	136	574
101-55-3	4-Bromophenyl-phenylether	105	U	105	581
118-74-1	Hexachlorobenzene	114	U	114	574
87-86-5	Pentachlorophenol	286	U	286	581
85-01-8	Phenanthrene	1930		120	581
120-12-7	Anthracene	1360		129	581
84-74-2	Di-n-butylphthalate	94.7	U	94.7	581
206-44-0	Fluoranthene	7610		103	581
129-00-0	Pyrene	5660		198	581
85-68-7	Butylbenzylphthalate	136	U	136	581
91-94-1	3,3'-Dichlorobenzidine	127	U	127	581
56-55-3	Benzo(a)anthracene	4580		123	581
218-01-9	Chrysene	4620		73.2	574
117-81-7	Bis(2-ethylhexyl)phthalate	179	U	179	581

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-03

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503 Lab File ID 83503.D

Sample wt/vol: 25.05 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1958

PercentSolids: 74.2 decanted : Dilution Factor: 2

Extraction: OTHER Station ID: EPAFMC03 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	125	U	125	581
205-99-2	Benzo(b)fluoranthene	4860		136	581
207-08-9	Benzo(k)fluoranthene	2450		123	581
50-32-8	Benzo(a)pyrene	3370		92.5	581
193-39-5	Indeno(1,2,3-cd)pyrene	1310		112	581
53-70-3	Dibenzo(a,h)anthracene	557	J	88.2	581
191-24-2	Benzo(g,h,i)perylene	1300		86.1	581
98-86-2	Acetophenone	215	U	215	581
95-94-3	1,2,4,5-Tetrachlorobenzene	101	U	101	581
86-74-8	Carbazole	239	J	116	581
105-60-2	Caprolactam	301	U	301	581
92-52-4	1,1'-Biphenyl	131	U	131	581
1912-24-9	Atrazine	170	U	170	581
100-52-7	Benzaldehyde	96.8	U	96.8	581

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-04

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504 Lab File ID 83504.D

Sample wt/vol: 25.23 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1642

PercentSolids: 62 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC04 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	85.7	U	85.7	345
108-95-2	Phenol	83.1	U	83.1	1700
95-57-8	2-Chlorophenol	88.2	U	88.2	345
108-60-1	2,2'-Oxybis(1-chloropropane)	281	U	281	345
95-48-7	2-Methylphenol	123	U	123	341
67-72-1	Hexachloroethane	63.9	U	63.9	345
621-64-7	N-Nitroso-di-n-propylamine	78	U	78	345
106-44-5	4-Methylphenol	75.4	U	75.4	345
98-95-3	Nitrobenzene	76.7	U	76.7	345
78-59-1	Isophorone	75.4	U	75.4	345
88-75-5	2-Nitrophenol	92	U	92	345
105-67-9	2,4-Dimethylphenol	72.9	U	72.9	341
111-91-1	Bis(2-chloroethoxy)methane	72.9	U	72.9	341
120-83-2	2,4-Dichlorophenol	95.9	U	95.9	341
91-20-3	Naphthalene	95.3	J	81.8	345
106-47-8	4-Chloroaniline	80.6	U	80.6	345
91-57-6	2-Methylnaphthalene	74.2	U	74.2	345
87-68-3	Hexachlorobutadiene	74.2	U	74.2	345
59-50-7	4-Chloro-3-methylphenol	71.6	U	71.6	345
77-47-4	Hexachlorocyclopentadiene	51.1	U	51.1	853
88-06-2	2,4,6-Trichlorophenol	86.9	U	86.9	341
95-95-4	2,4,5-Trichlorophenol	94.6	U	94.6	341
91-58-7	2-Chloronaphthalene	85.3	U	85.3	345
88-74-4	2-Nitroaniline	72.9	U	72.9	345
208-96-8	Acenaphthylene	161	J	70.3	345
131-11-3	Dimethylphthalate	75.4	U	75.4	345

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-04

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504 Lab File ID 83504.D

Sample wt/vol: 25.23 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1642

PercentSolids: 62 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC04 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	63.9	U	63.9	345
83-32-9	Acenaphthene	62.6	U	62.6	345
99-09-2	3-Nitroaniline	102	U	102	341
51-28-5	2,4-Dinitrophenol	281	U	281	1710
132-64-9	Dibenzofuran	69	U	69	345
121-14-2	2,4-Dinitrotoluene	62.6	U	62.6	345
100-02-7	4-Nitrophenol	67.8	U	67.8	853
86-73-7	Fluorene	107	J	65.2	345
7005-72-3	4-Chlorophenyl-phenylether	65.2	U	65.2	345
84-66-2	Diethylphthalate	65.2	U	65.2	345
100-01-6	4-Nitroaniline	112	U	112	341
534-52-1	4,6-Dinitro-2-methylphenol	340	U	340	345
86-30-6	N-Nitrosodiphenylamine	80.6	U	80.6	341
101-55-3	4-Bromophenyl-phenylether	62.6	U	62.6	345
118-74-1	Hexachlorobenzene	67.8	U	67.8	341
87-86-5	Pentachlorophenol	170	U	170	345
85-01-8	Phenanthrene	1240		71.6	345
120-12-7	Anthracene	328	J	76.7	345
84-74-2	Di-n-butylphthalate	56.2	U	56.2	345
206-44-0	Fluoranthene	2370		61.4	345
129-00-0	Pyrene	1920		118	345
85-68-7	Butylbenzylphthalate	80.6	U	80.6	345
91-94-1	3,3'-Dichlorobenzidine	75.4	U	75.4	345
56-55-3	Benzo(a)anthracene	986		72.9	345
218-01-9	Chrysene	1000		43.5	341
117-81-7	Bis(2-ethylhexyl)phthalate	106	U	106	345

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-04

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504 Lab File ID 83504.D

Sample wt/vol: 25.23 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1642

PercentSolids: 62 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC04 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	74.2	U	74.2	345
205-99-2	Benzo(b)fluoranthene	1130		80.6	345
207-08-9	Benzo(k)fluoranthene	478		72.9	345
50-32-8	Benzo(a)pyrene	759		55	345
193-39-5	Indeno(1,2,3-cd)pyrene	386		66.5	345
53-70-3	Dibenzo(a,h)anthracene	120	J	52.4	345
191-24-2	Benzo(g,h,i)perylene	467		51.1	345
98-86-2	Acetophenone	128	U	128	345
95-94-3	1,2,4,5-Tetrachlorobenzene	60.1	U	60.1	345
86-74-8	Carbazole	69	U	69	345
105-60-2	Caprolactam	179	U	179	345
92-52-4	1,1'-Biphenyl	78	U	78	345
1912-24-9	Atrazine	101	U	101	345
100-52-7	Benzaldehyde	57.5	U	57.5	345

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505 Lab File ID 83505.D

Sample wt/vol: 25.47 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2045

PercentSolids: 78.2 decanted : Dilution Factor: 50

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	47100	U	47100	190000
108-95-2	Phenol	45700	U	45700	938000
95-57-8	2-Chlorophenol	48500	U	48500	190000
108-60-1	2,2'-Oxybis(1-chloropropane)	155000	U	155000	190000
95-48-7	2-Methylphenol	67500	U	67500	188000
67-72-1	Hexachloroethane	35100	U	35100	190000
621-64-7	N-Nitroso-di-n-propylamine	42900	U	42900	190000
106-44-5	4-Methylphenol	41500	U	41500	190000
98-95-3	Nitrobenzene	42200	U	42200	190000
78-59-1	Isophorone	41500	U	41500	190000
88-75-5	2-Nitrophenol	50600	U	50600	190000
105-67-9	2,4-Dimethylphenol	40100	U	40100	188000
111-91-1	Bis(2-chloroethoxy)methane	40100	U	40100	188000
120-83-2	2,4-Dichlorophenol	52700	U	52700	188000
91-20-3	Naphthalene	7310000	E	45000	190000
106-47-8	4-Chloroaniline	44300	U	44300	190000
91-57-6	2-Methylnaphthalene	2180000		40800	190000
87-68-3	Hexachlorobutadiene	40800	U	40800	190000
59-50-7	4-Chloro-3-methylphenol	39400	U	39400	190000
77-47-4	Hexachlorocyclopentadiene	28100	U	28100	469000
88-06-2	2,4,6-Trichlorophenol	47800	U	47800	188000
95-95-4	2,4,5-Trichlorophenol	52000	U	52000	188000
91-58-7	2-Chloronaphthalene	46900	U	46900	190000
88-74-4	2-Nitroaniline	40100	U	40100	190000
208-96-8	Acenaphthylene	309000		38600	190000
131-11-3	Dimethylphthalate	41500	U	41500	190000

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505 Lab File ID 83505.D

Sample wt/vol: 25.47 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2045

PercentSolids: 78.2 decanted : Dilution Factor: 50

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	35100	U	35100	190000
83-32-9	Acenaphthene	2320000		34400	190000
99-09-2	3-Nitroaniline	56200	U	56200	188000
51-28-5	2,4-Dinitrophenol	155000	U	155000	942000
132-64-9	Dibenzofuran	1610000		38000	190000
121-14-2	2,4-Dinitrotoluene	34400	U	34400	190000
100-02-7	4-Nitrophenol	37200	U	37200	469000
86-73-7	Fluorene	2610000		35800	190000
7005-72-3	4-Chlorophenyl-phenylether	35800	U	35800	190000
84-66-2	Diethylphthalate	35800	U	35800	190000
100-01-6	4-Nitroaniline	61800	U	61800	188000
534-52-1	4,6-Dinitro-2-methylphenol	187000	U	187000	190000
86-30-6	N-Nitrosodiphenylamine	44300	U	44300	188000
101-55-3	4-Bromophenyl-phenylether	34400	U	34400	190000
118-74-1	Hexachlorobenzene	37200	U	37200	188000
87-86-5	Pentachlorophenol	93500	U	93500	190000
85-01-8	Phenanthrene	5960000	E	39400	190000
120-12-7	Anthracene	3680000	E	42200	190000
84-74-2	Di-n-butylphthalate	30900	U	30900	190000
206-44-0	Fluoranthene	4100000	E	33700	190000
129-00-0	Pyrene	2700000		64700	190000
85-68-7	Butylbenzylphthalate	44300	U	44300	190000
91-94-1	3,3'-Dichlorobenzidine	41500	U	41500	190000
56-55-3	Benzo(a)anthracene	1740000		40100	190000
218-01-9	Chrysene	1920000		23900	188000
117-81-7	Bis(2-ethylhexyl)phthalate	58300	U	58300	190000

5/30/12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505 Lab File ID 83505.D

Sample wt/vol: 25.47 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2045

PercentSolids: 78.2 decanted : Dilution Factor: 50

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	40800	U	40800	190000
205-99-2	Benzo(b)fluoranthene	1470000		44300	190000
207-08-9	Benzo(k)fluoranthene	777000		40100	190000
50-32-8	Benzo(a)pyrene	1050000		30200	190000
193-39-5	Indeno(1,2,3-cd)pyrene	367000		36600	190000
53-70-3	Dibenzo(a,h)anthracene	168000	J	28800	190000
191-24-2	Benzo(g,h,i)perylene	369000		28100	190000
98-86-2	Acetophenone	70300	U	70300	190000
95-94-3	1,2,4,5-Tetrachlorobenzene	33000	U	33000	190000
86-74-8	Carbazole	1640000		38000	190000
105-60-2	Caprolactam	98400	U	98400	190000
92-52-4	1,1'-Biphenyl	317000		42900	190000
1912-24-9	Atrazine	55500	U	55500	190000
100-52-7	Benzaldehyde	31600	U	31600	190000

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505DL1 Lab File ID 83505DQ.D

Sample wt/vol: 25.47 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1847

PercentSolids: 78.2 decanted : Dilution Factor: 250

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	235000	U	235000	949000
108-95-2	Phenol	228000	U	228000	4690000
95-57-8	2-Chlorophenol	242000	U	242000	949000
108-60-1	2,2'-Oxybis(1-chloropropane)	773000	U	773000	949000
95-48-7	2-Methylphenol	337000	U	337000	938000
67-72-1	Hexachloroethane	176000	U	176000	949000
621-64-7	N-Nitroso-di-n-propylamine	214000	U	214000	949000
106-44-5	4-Methylphenol	207000	U	207000	949000
98-95-3	Nitrobenzene	211000	U	211000	949000
78-59-1	Isophorone	207000	U	207000	949000
88-75-5	2-Nitrophenol	253000	U	253000	949000
105-67-9	2,4-Dimethylphenol	200000	U	200000	938000
111-91-1	Bis(2-chloroethoxy)methane	200000	U	200000	938000
120-83-2	2,4-Dichlorophenol	264000	U	264000	938000
91-20-3	Naphthalene	11900000		225000	949000
106-47-8	4-Chloroaniline	221000	U	221000	949000
91-57-6	2-Methylnaphthalene	2950000		204000	949000
87-68-3	Hexachlorobutadiene	204000	U	204000	949000
59-50-7	4-Chloro-3-methylphenol	197000	U	197000	949000
77-47-4	Hexachlorocyclopentadiene	140000	U	140000	2340000
88-06-2	2,4,6-Trichlorophenol	239000	U	239000	938000
95-95-4	2,4,5-Trichlorophenol	260000	U	260000	938000
91-58-7	2-Chloronaphthalene	234000	U	234000	949000
88-74-4	2-Nitroaniline	200000	U	200000	949000
208-96-8	Acenaphthylene	193000	U	193000	949000
131-11-3	Dimethylphthalate	207000	U	207000	949000

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505DL1 Lab File ID 83505DQ.D

Sample wt/vol: 25.47 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1847

PercentSolids: 78.2 decanted : Dilution Factor: 250

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	176000	U	176000	949000
83-32-9	Acenaphthene	3020000		172000	949000
99-09-2	3-Nitroaniline	281000	U	281000	938000
51-28-5	2,4-Dinitrophenol	773000	U	773000	4710000
132-64-9	Dibenzofuran	2180000		190000	949000
121-14-2	2,4-Dinitrotoluene	172000	U	172000	949000
100-02-7	4-Nitrophenol	186000	U	186000	2340000
86-73-7	Fluorene	3380000		179000	949000
7005-72-3	4-Chlorophenyl-phenylether	179000	U	179000	949000
84-66-2	Diethylphthalate	179000	U	179000	949000
100-01-6	4-Nitroaniline	309000	U	309000	938000
534-52-1	4,6-Dinitro-2-methylphenol	935000	U	935000	949000
86-30-6	N-Nitrosodiphenylamine	221000	U	221000	938000
101-55-3	4-Bromophenyl-phenylether	172000	U	172000	949000
118-74-1	Hexachlorobenzene	186000	U	186000	938000
87-86-5	Pentachlorophenol	467000	U	467000	949000
85-01-8	Phenanthrene	10200000		197000	949000
120-12-7	Anthracene	5220000		211000	949000
84-74-2	Di-n-butylphthalate	155000	U	155000	949000
206-44-0	Fluoranthene	6260000		169000	949000
129-00-0	Pyrene	4180000		323000	949000
85-68-7	Butylbenzylphthalate	221000	U	221000	949000
91-94-1	3,3'-Dichlorobenzidine	207000	U	207000	949000
56-55-3	Benzo(a)anthracene	2670000		200000	949000
218-01-9	Chrysene	3100000		119000	938000
117-81-7	Bis(2-ethylhexyl)phthalate	292000	U	292000	949000

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505DL1 Lab File ID 83505DQ.D

Sample wt/vol: 25.47 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1847

PercentSolids: 78.2 decanted : Dilution Factor: 250

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	204000	U	204000	949000
205-99-2	Benzo(b)fluoranthene	2050000		221000	949000
207-08-9	Benzo(k)fluoranthene	948000	J	200000	949000
50-32-8	Benzo(a)pyrene	1460000		151000	949000
193-39-5	Indeno(1,2,3-cd)pyrene	578000	J	183000	949000
53-70-3	Dibenzo(a,h)anthracene	269000	J	144000	949000
191-24-2	Benzo(g,h,i)perylene	575000	J	140000	949000
98-86-2	Acetophenone	351000	U	351000	949000
95-94-3	1,2,4,5-Tetrachlorobenzene	165000	U	165000	949000
86-74-8	Carbazole	2280000		190000	949000
105-60-2	Caprolactam	492000	U	492000	949000
92-52-4	1,1'-Biphenyl	450000	J	214000	949000
1912-24-9	Atrazine	278000	U	278000	949000
100-52-7	Benzaldehyde	158000	U	158000	949000

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-06

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506 Lab File ID 83506.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2108

PercentSolids: 66.7 decanted : Dilution Factor: 50

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	54100	U	54100	218000
108-95-2	Phenol	52500	U	52500	1080000
95-57-8	2-Chlorophenol	55700	U	55700	218000
108-60-1	2,2'-Oxybis(1-chloropropane)	178000	U	178000	218000
95-48-7	2-Methylphenol	77500	U	77500	216000
67-72-1	Hexachloroethane	40400	U	40400	218000
621-64-7	N-Nitroso-di-n-propylamine	49300	U	49300	218000
106-44-5	4-Methylphenol	47600	U	47600	218000
98-95-3	Nitrobenzene	48400	U	48400	218000
78-59-1	Isophorone	47600	U	47600	218000
88-75-5	2-Nitrophenol	58100	U	58100	218000
105-67-9	2,4-Dimethylphenol	46000	U	46000	216000
111-91-1	Bis(2-chloroethoxy)methane	46000	U	46000	216000
120-83-2	2,4-Dichlorophenol	60600	U	60600	216000
91-20-3	Naphthalene	7120000	E	51700	218000
106-47-8	4-Chloroaniline	50900	U	50900	218000
91-57-6	2-Methylnaphthalene	2040000		46800	218000
87-68-3	Hexachlorobutadiene	46800	U	46800	218000
59-50-7	4-Chloro-3-methylphenol	45200	U	45200	218000
77-47-4	Hexachlorocyclopentadiene	32300	U	32300	539000
88-06-2	2,4,6-Trichlorophenol	54900	U	54900	216000
95-95-4	2,4,5-Trichlorophenol	59800	U	59800	216000
91-58-7	2-Chloronaphthalene	53900	U	53900	218000
88-74-4	2-Nitroaniline	46000	U	46000	218000
208-96-8	Acenaphthylene	364000		44400	218000
131-11-3	Dimethylphthalate	47600	U	47600	218000

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-06

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506 Lab File ID 83506.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2108

PercentSolids: 66.7 decanted : Dilution Factor: 50

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	40400	U	40400	218000
83-32-9	Acenaphthene	2480000		39600	218000
99-09-2	3-Nitroaniline	64600	U	64600	216000
51-28-5	2,4-Dinitrophenol	178000	U	178000	1080000
132-64-9	Dibenzofuran	1630000		43600	218000
121-14-2	2,4-Dinitrotoluene	39600	U	39600	218000
100-02-7	4-Nitrophenol	42800	U	42800	539000
86-73-7	Fluorene	2690000		41200	218000
7005-72-3	4-Chlorophenyl-phenylether	41200	U	41200	218000
84-66-2	Diethylphthalate	41200	U	41200	218000
100-01-6	4-Nitroaniline	71100	U	71100	216000
534-52-1	4,6-Dinitro-2-methylphenol	215000	U	215000	218000
86-30-6	N-Nitrosodiphenylamine	50900	U	50900	216000
101-55-3	4-Bromophenyl-phenylether	39600	U	39600	218000
118-74-1	Hexachlorobenzene	42800	U	42800	216000
87-86-5	Pentachlorophenol	107000	U	107000	218000
85-01-8	Phenanthrene	6610000	E	45200	218000
120-12-7	Anthracene	3200000		48400	218000
84-74-2	Di-n-butylphthalate	35500	U	35500	218000
206-44-0	Fluoranthene	4570000	E	38800	218000
129-00-0	Pyrene	3030000		74300	218000
85-68-7	Butylbenzylphthalate	50900	U	50900	218000
91-94-1	3,3'-Dichlorobenzidine	47600	U	47600	218000
56-55-3	Benzo(a)anthracene	1950000		46000	218000
218-01-9	Chrysene	1970000		27400	216000
117-81-7	Bis(2-ethylhexyl)phthalate	67000	U	67000	218000

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-06

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506 Lab File ID 83506.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 2108

PercentSolids: 66.7 decanted : Dilution Factor: 50

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	46800	U	46800	218000
205-99-2	Benzo(b)fluoranthene	1800000		50900	218000
207-08-9	Benzo(k)fluoranthene	794000		46000	218000
50-32-8	Benzo(a)pyrene	1230000		34700	218000
193-39-5	Indeno(1,2,3-cd)pyrene	410000		42000	218000
53-70-3	Dibenzo(a,h)anthracene	189000	J	33100	218000
191-24-2	Benzo(g,h,i)perylene	418000		32300	218000
98-86-2	Acetophenone	80800	U	80800	218000
95-94-3	1,2,4,5-Tetrachlorobenzene	38000	U	38000	218000
86-74-8	Carbazole	1370000		43600	218000
105-60-2	Caprolactam	113000	U	113000	218000
92-52-4	1,1'-Biphenyl	330000		49300	218000
1912-24-9	Atrazine	63800	U	63800	218000
100-52-7	Benzaldehyde	36300	U	36300	218000

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-06DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506DL1 Lab File ID 83506DQ.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1823

PercentSolids: 66.7 decanted : Dilution Factor: 250

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	270000	U	270000	1090000
108-95-2	Phenol	262000	U	262000	5390000
95-57-8	2-Chlorophenol	279000	U	279000	1090000
108-60-1	2,2'-Oxybis(1-chloropropane)	888000	U	888000	1090000
95-48-7	2-Methylphenol	388000	U	388000	1080000
67-72-1	Hexachloroethane	202000	U	202000	1090000
621-64-7	N-Nitroso-di-n-propylamine	246000	U	246000	1090000
106-44-5	4-Methylphenol	238000	U	238000	1090000
98-95-3	Nitrobenzene	242000	U	242000	1090000
78-59-1	Isophorone	238000	U	238000	1090000
88-75-5	2-Nitrophenol	291000	U	291000	1090000
105-67-9	2,4-Dimethylphenol	230000	U	230000	1080000
111-91-1	Bis(2-chloroethoxy)methane	230000	U	230000	1080000
120-83-2	2,4-Dichlorophenol	303000	U	303000	1080000
91-20-3	Naphthalene	11700000		258000	1090000
106-47-8	4-Chloroaniline	254000	U	254000	1090000
91-57-6	2-Methylnaphthalene	2950000		234000	1090000
87-68-3	Hexachlorobutadiene	234000	U	234000	1090000
59-50-7	4-Chloro-3-methylphenol	226000	U	226000	1090000
77-47-4	Hexachlorocyclopentadiene	162000	U	162000	2690000
88-06-2	2,4,6-Trichlorophenol	274000	U	274000	1080000
95-95-4	2,4,5-Trichlorophenol	299000	U	299000	1080000
91-58-7	2-Chloronaphthalene	269000	U	269000	1090000
88-74-4	2-Nitroaniline	230000	U	230000	1090000
208-96-8	Acenaphthylene	558000	J	222000	1090000
131-11-3	Dimethylphthalate	238000	U	238000	1090000

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-06DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506DL1 Lab File ID 83506DQ.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1823

PercentSolids: 66.7 decanted : Dilution Factor: 250

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
606-20-2	2,6-Dinitrotoluene	202000	U	202000	1090000
83-32-9	Acenaphthene	3240000		198000	1090000
99-09-2	3-Nitroaniline	323000	U	323000	1080000
51-28-5	2,4-Dinitrophenol	888000	U	888000	5410000
132-64-9	Dibenzofuran	2380000		218000	1090000
121-14-2	2,4-Dinitrotoluene	198000	U	198000	1090000
100-02-7	4-Nitrophenol	214000	U	214000	2690000
86-73-7	Fluorene	3680000		206000	1090000
7005-72-3	4-Chlorophenyl-phenylether	206000	U	206000	1090000
84-66-2	Diethylphthalate	206000	U	206000	1090000
100-01-6	4-Nitroaniline	355000	U	355000	1080000
534-52-1	4,6-Dinitro-2-methylphenol	1070000	U	1070000	1090000
86-30-6	N-Nitrosodiphenylamine	254000	U	254000	1080000
101-55-3	4-Bromophenyl-phenylether	198000	U	198000	1090000
118-74-1	Hexachlorobenzene	214000	U	214000	1080000
87-86-5	Pentachlorophenol	537000	U	537000	1090000
85-01-8	Phenanthrene	11600000		226000	1090000
120-12-7	Anthracene	4750000		242000	1090000
84-74-2	Di-n-butylphthalate	178000	U	178000	1090000
206-44-0	Fluoranthene	7300000		194000	1090000
129-00-0	Pyrene	4950000		371000	1090000
85-68-7	Butylbenzylphthalate	254000	U	254000	1090000
91-94-1	3,3'-Dichlorobenzidine	238000	U	238000	1090000
56-55-3	Benzo(a)anthracene	3210000		230000	1090000
218-01-9	Chrysene	3190000		137000	1080000
117-81-7	Bis(2-ethylhexyl)phthalate	335000	U	335000	1090000

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-06DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506DL1 Lab File ID 83506DQ.D

Sample wt/vol: 25.99 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 14 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1823

PercentSolids: 66.7 decanted : Dilution Factor: 250

Extraction: OTHER Station ID: EPAFMC05 Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
117-84-0	Di-n-octylphthalate	234000	U	234000	1090000
205-99-2	Benzo(b)fluoranthene	2520000		254000	1090000
207-08-9	Benzo(k)fluoranthene	1200000		230000	1090000
50-32-8	Benzo(a)pyrene	1770000		174000	1090000
193-39-5	Indeno(1,2,3-cd)pyrene	609000	J	210000	1090000
53-70-3	Dibenzo(a,h)anthracene	297000	J	166000	1090000
191-24-2	Benzo(g,h,i)perylene	618000	J	162000	1090000
98-86-2	Acetophenone	404000	U	404000	1090000
95-94-3	1,2,4,5-Tetrachlorobenzene	190000	U	190000	1090000
86-74-8	Carbazole	2070000		218000	1090000
105-60-2	Caprolactam	565000	U	565000	1090000
92-52-4	1,1'-Biphenyl	501000	J	246000	1090000
1912-24-9	Atrazine	319000	U	319000	1090000
100-52-7	Benzaldehyde	182000	U	182000	1090000

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 127239MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-1

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 127239MB Lab File ID: 9188MB.D

Sample wt/vol: 20.11 Units: G Date Received: 04/25/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1219

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
111-44-4	Bis(2-chloroethyl)ether	66.6	U	66.6	268
108-95-2	Phenol	64.6	U	64.6	1330
95-57-8	2-Chlorophenol	68.6	U	68.6	268
108-60-1	2,2'-Oxybis(1-chloropropane)	219	U	219	268
95-48-7	2-Methylphenol	95.5	U	95.5	266
67-72-1	Hexachloroethane	49.7	U	49.7	268
621-64-7	N-Nitroso-di-n-propylamine	60.7	U	60.7	268
106-44-5	4-Methylphenol	58.7	U	58.7	268
98-95-3	Nitrobenzene	59.7	U	59.7	268
78-59-1	Isophorone	58.7	U	58.7	268
88-75-5	2-Nitrophenol	71.6	U	71.6	268
105-67-9	2,4-Dimethylphenol	56.7	U	56.7	266
111-91-1	Bis(2-chloroethoxy)methane	56.7	U	56.7	266
120-83-2	2,4-Dichlorophenol	74.6	U	74.6	266
91-20-3	Naphthalene	63.6	U	63.6	268
106-47-8	4-Chloroaniline	62.6	U	62.6	268
91-57-6	2-Methylnaphthalene	57.7	U	57.7	268
87-68-3	Hexachlorobutadiene	57.7	U	57.7	268
59-50-7	4-Chloro-3-methylphenol	55.7	U	55.7	268
77-47-4	Hexachlorocyclopentadiene	39.8	U	39.8	663
88-06-2	2,4,6-Trichlorophenol	67.6	U	67.6	266
95-95-4	2,4,5-Trichlorophenol	73.6	U	73.6	266
91-58-7	2-Chloronaphthalene	66.3	U	66.3	268
88-74-4	2-Nitroaniline	56.7	U	56.7	268
208-96-8	Acenaphthylene	54.7	U	54.7	268
131-11-3	Dimethylphthalate	58.7	U	58.7	268
606-20-2	2,6-Dinitrotoluene	49.7	U	49.7	268

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 127239MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-1

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 127239MB Lab File ID: 9188MB.D

Sample wt/vol: 20.11 Units: G Date Received: 04/25/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1219

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
83-32-9	Acenaphthene	48.7	U	48.7	268
99-09-2	3-Nitroaniline	79.6	U	79.6	266
51-28-5	2,4-Dinitrophenol	219	U	219	1330
132-64-9	Dibenzofuran	53.7	U	53.7	268
121-14-2	2,4-Dinitrotoluene	48.7	U	48.7	268
100-02-7	4-Nitrophenol	52.7	U	52.7	663
86-73-7	Fluorene	50.7	U	50.7	268
7005-72-3	4-Chlorophenyl-phenylether	50.7	U	50.7	268
84-66-2	Diethylphthalate	50.7	U	50.7	268
100-01-6	4-Nitroaniline	87.5	U	87.5	266
534-52-1	4,6-Dinitro-2-methylphenol	264	U	264	268
86-30-6	N-Nitrosodiphenylamine	62.6	U	62.6	266
101-55-3	4-Bromophenyl-phenylether	48.7	U	48.7	268
118-74-1	Hexachlorobenzene	52.7	U	52.7	266
87-86-5	Pentachlorophenol	132	U	132	268
85-01-8	Phenanthrene	55.7	U	55.7	268
120-12-7	Anthracene	59.7	U	59.7	268
84-74-2	Di-n-butylphthalate	43.8	U	43.8	268
206-44-0	Fluoranthene	47.7	U	47.7	268
129-00-0	Pyrene	91.5	U	91.5	268
85-68-7	Butylbenzylphthalate	62.6	U	62.6	268
91-94-1	3,3'-Dichlorobenzidine	58.7	U	58.7	268
56-55-3	Benzo(a)anthracene	56.7	U	56.7	268
218-01-9	Chrysene	33.8	U	33.8	266
117-81-7	Bis(2-ethylhexyl)phthalate	82.5	U	82.5	268
117-84-0	Di-n-octylphthalate	57.7	U	57.7	268
205-99-2	Benzo(b)fluoranthene	62.6	U	62.6	268

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 127239MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-1

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 127239MB Lab File ID: 9188MB.D

Sample wt/vol: 20.11 Units: G Date Received: 04/25/12

Concentrated Extract Volume: 1 Date Extracted: 04/25/12

Level:(low/med) LOW Date Analyzed: 04/26/12 Time: 1219

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
207-08-9	Benzo(k)fluoranthene	56.7	U	56.7	268
50-32-8	Benzo(a)pyrene	42.8	U	42.8	268
193-39-5	Indeno(1,2,3-cd)pyrene	51.7	U	51.7	268
53-70-3	Dibenzo(a,h)anthracene	40.8	U	40.8	268
191-24-2	Benzo(g,h,i)perylene	39.8	U	39.8	268
98-86-2	Acetophenone	99.4	U	99.4	268
95-94-3	1,2,4,5-Tetrachlorobenzene	46.7	U	46.7	268
86-74-8	Carbazole	53.7	U	53.7	268
105-60-2	Caprolactam	139	U	139	268
92-52-4	1,1'-Biphenyl	60.7	U	60.7	268
1912-24-9	Atrazine	78.6	U	78.6	268
100-52-7	Benzaldehyde	44.8	U	44.8	268

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502 Lab File ID 835-2R.D

Sample wt/vol: 33.03 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 10 Date Extracted: 04/27/12

Level:(low/med) LOW Date Analyzed: 04/30/12 Time: 1046

PercentSolids: 80.7 decanted : Dilution Factor: 1

Extraction: SONC Station ID: EPAFMC02 Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	16	U	16	37
11096-82-5	Aroclor-1260	8.7	U	8.7	37
11104-28-2	Aroclor-1221	15	U	15	37
11141-16-5	Aroclor-1232	25	U	25	37
53469-21-9	Aroclor-1242	14	U	14	37
12672-29-6	Aroclor-1248	14	U	14	37
11097-69-1	Aroclor-1254	12	U	12	37

Results reported on Primary Column, if RPD >40% results flagged accordingly.

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-04

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504 Lab File ID 835-4R.D

Sample wt/vol: 33.04 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 10 Date Extracted: 04/27/12

Level:(low/med) LOW Date Analyzed: 04/30/12 Time: 1101

PercentSolids: 62 decanted : Dilution Factor: 1

Extraction: SONC Station ID: EPAFMC04 Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	21	U	21	48
11096-82-5	Aroclor-1260	11	U	11	48
11104-28-2	Aroclor-1221	19	U	19	48
11141-16-5	Aroclor-1232	32	U	32	48
53469-21-9	Aroclor-1242	18	U	18	48
12672-29-6	Aroclor-1248	18	U	18	48
11097-69-1	Aroclor-1254	15	U	15	48

Results reported on Primary Column, if RPD >40% results flagged accordingly.

5-30-12

PCB ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 127811MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-1

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 127811MB Lab File ID: 9229MB.D

Sample wt/vol: 33.15 Units: G Date Received: 04/27/12

Concentrated Extract Volume: 10 Date Extracted: 04/27/12

Level:(low/med) LOW Date Analyzed: 04/27/12 Time: 1919

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: SONC Station ID: Method: 8082

GPC Cleanup : (Y/N) N pH:

Column(1): STX-CLP1 ID: 0.32 (mm) Column(2): STX-CLP2 ID: 0.32 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
12674-11-2	Aroclor-1016	13	U	13	30
11096-82-5	Aroclor-1260	7	U	7	30
11104-28-2	Aroclor-1221	12	U	12	30
11141-16-5	Aroclor-1232	20	U	20	30
53469-21-9	Aroclor-1242	11	U	11	30
12672-29-6	Aroclor-1248	11	U	11	30
11097-69-1	Aroclor-1254	9.4	U	9.4	30

Results reported on Primary Column, if RPD >40% results flagged accordingly.

5-30-12

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-01

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501 Lab File ID 83501.D

Sample wt/vol: 25.24 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/03/12 Time: 1706

PercentSolids: 67.6 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC01 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	124		1.6	3.9
91-57-6	2-Methylnaphthalene	422		1.6	3.9
83-32-9	Acenaphthene	1170	E	1.6	3.9
208-96-8	Acenaphthylene	1090	E	1.6	3.9
120-12-7	Anthracene	8560	E	1.6	3.9
56-55-3	Benzo(a)anthracene	6800	E	1.6	3.9
50-32-8	Benzo(a)pyrene	4760	E	2.1	3.9
205-99-2	Benzo(b)fluoranthene	5820	E	2.2	3.9
191-24-2	Benzo(g,h,i)perylene	1580	E	3.6	3.9
207-08-9	Benzo(k)fluoranthene	1500	E	2.5	3.9
218-01-9	Chrysene	3670	E	1.5	3.9
53-70-3	Dibenzo(a,h)anthracene	926	E	3	3.9
206-44-0	Fluoranthene	8490	E	1.6	3.9
86-73-7	Fluorene	2390	E	1.6	3.9
193-39-5	Indeno(1,2,3-cd)pyrene	1810	E	3.5	3.9
91-20-3	Naphthalene	728	E	1.6	3.9
85-01-8	Phenanthrene	7350	E	1.6	3.9
129-00-0	Pyrene	4200	E	1.6	3.9

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-01DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501DL1 Lab File ID 83501D200.D

Sample wt/vol: 25.24 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/08/12 Time: 1333

PercentSolids: 67.6 decanted : Dilution Factor: 200

Extraction: OTHER Station ID: EPAFMC01 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	312	U	312	781
91-57-6	2-Methylnaphthalene	721	J	312	781
83-32-9	Acenaphthene	9140		312	781
208-96-8	Acenaphthylene	13200		312	781
120-12-7	Anthracene	21200		312	781
56-55-3	Benzo(a)anthracene	16000		328	781
50-32-8	Benzo(a)pyrene	10300		422	781
205-99-2	Benzo(b)fluoranthene	12700		445	781
191-24-2	Benzo(g,h,i)perylene	6920		727	781
207-08-9	Benzo(k)fluoranthene	4680		492	781
218-01-9	Chrysene	15900		305	781
53-70-3	Dibenzo(a,h)anthracene	2230		610	781
206-44-0	Fluoranthene	26800		312	781
86-73-7	Fluorene	5600		312	781
193-39-5	Indeno(1,2,3-cd)pyrene	4630		703	781
91-20-3	Naphthalene	1260		328	781
85-01-8	Phenanthrene	20400		312	781
129-00-0	Pyrene	17600		312	781

5-30-12

1

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502 Lab File ID 83502.D

Sample wt/vol: 25.73 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/03/12 Time: 1731

PercentSolids: 80.7 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC02 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	129		1.3	3.2
91-57-6	2-Methylnaphthalene	378		1.3	3.2
83-32-9	Acenaphthene	734	E	1.3	3.2
208-96-8	Acenaphthylene	1330	E	1.3	3.2
120-12-7	Anthracene	4420	E	1.3	3.2
56-55-3	Benzo(a)anthracene	9070	E	1.3	3.2
50-32-8	Benzo(a)pyrene	4800	E	1.7	3.2
205-99-2	Benzo(b)fluoranthene	4980	E	1.8	3.2
191-24-2	Benzo(g,h,i)perylene	1640	E	3	3.2
207-08-9	Benzo(k)fluoranthene	1830	E	2	3.2
218-01-9	Chrysene	4370	E	1.2	3.2
53-70-3	Dibenzo(a,h)anthracene	894	E	2.5	3.2
206-44-0	Fluoranthene	8190	E	1.3	3.2
86-73-7	Fluorene	1260	E	1.3	3.2
193-39-5	Indeno(1,2,3-cd)pyrene	1920	E	2.9	3.2
91-20-3	Naphthalene	1540	E	1.3	3.2
85-01-8	Phenanthrene	5780	E	1.3	3.2
129-00-0	Pyrene	5560	E	1.3	3.2

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-02DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502DL1 Lab File ID 83502D200.D

Sample wt/vol: 25.73 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/08/12 Time: 1808

PercentSolids: 80.7 decanted : Dilution Factor: 200

Extraction: OTHER Station ID: EPAFMC02 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	256	U	256	641
91-57-6	2-Methylnaphthalene	462	J	256	641
83-32-9	Acenaphthene	1370		256	641
208-96-8	Acenaphthylene	2030		256	641
120-12-7	Anthracene	6510		256	641
56-55-3	Benzo(a)anthracene	15800		270	641
50-32-8	Benzo(a)pyrene	10800		347	641
205-99-2	Benzo(b)fluoranthene	14900		366	641
191-24-2	Benzo(g,h,i)perylene	4970		597	641
207-08-9	Benzo(k)fluoranthene	15800		404	641
218-01-9	Chrysene	13300		250	641
53-70-3	Dibenzo(a,h)anthracene	1920		501	641
206-44-0	Fluoranthene	28300		256	641
86-73-7	Fluorene	2060		256	641
193-39-5	Indeno(1,2,3-cd)pyrene	4970		578	641
91-20-3	Naphthalene	2490		270	641
85-01-8	Phenanthrene	11900		256	641
129-00-0	Pyrene	18700		256	641

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-03

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503 Lab File ID 83503.D

Sample wt/vol: 25.26 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/03/12 Time: 1845

PercentSolids: 74.2 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC03 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	43.2		1.4	3.6
91-57-6	2-Methylnaphthalene	111		1.4	3.6
83-32-9	Acenaphthene	602	E	1.4	3.6
208-96-8	Acenaphthylene	761	E	1.4	3.6
120-12-7	Anthracene	2900	E	1.4	3.6
56-55-3	Benzo(a)anthracene	5760	E	1.5	3.6
50-32-8	Benzo(a)pyrene	2990	E	1.9	3.6
205-99-2	Benzo(b)fluoranthene	3810	E	2	3.6
191-24-2	Benzo(g,h,i)perylene	898	E	3.3	3.6
207-08-9	Benzo(k)fluoranthene	932	E	2.2	3.6
218-01-9	Chrysene	2840	E	1.4	3.6
53-70-3	Dibenzo(a,h)anthracene	530		2.8	3.6
206-44-0	Fluoranthene	5980	E	1.4	3.6
86-73-7	Fluorene	916	E	1.4	3.6
193-39-5	Indeno(1,2,3-cd)pyrene	1040	E	3.2	3.6
91-20-3	Naphthalene	274		1.5	3.6
85-01-8	Phenanthrene	3970	E	1.4	3.6
129-00-0	Pyrene	4090	E	1.4	3.6

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-03DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503DL1 Lab File ID 83503D50.D

Sample wt/vol: 25.26 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/08/12 Time: 1832

PercentSolids: 74.2 decanted : Dilution Factor: 50

Extraction: OTHER Station ID: EPAFMC03 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	71	U	71	178
91-57-6	2-Methylnaphthalene	132	J	71	178
83-32-9	Acenaphthene	999		71	178
208-96-8	Acenaphthylene	1020		71	178
120-12-7	Anthracene	4550		71	178
56-55-3	Benzo(a)anthracene	7290		74.7	178
50-32-8	Benzo(a)pyrene	5040		96	178
205-99-2	Benzo(b)fluoranthene	6910		101	178
191-24-2	Benzo(g,h,i)perylene	2250		165	178
207-08-9	Benzo(k)fluoranthene	2250		112	178
218-01-9	Chrysene	5990		69.4	178
53-70-3	Dibenzo(a,h)anthracene	1020		139	178
206-44-0	Fluoranthene	12200		71	178
86-73-7	Fluorene	1390		71	178
193-39-5	Indeno(1,2,3-cd)pyrene	2260		160	178
91-20-3	Naphthalene	397		74.7	178
85-01-8	Phenanthrene	6320		71	178
129-00-0	Pyrene	7850		71	178

5-30-12

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-04

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504 Lab File ID 83504.D

Sample wt/vol: 25.06 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/08/12 Time: 1133

PercentSolids: 62 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: EPAFMC04 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	22.8		1.7	4.3
91-57-6	2-Methylnaphthalene	45		1.7	4.3
83-32-9	Acenaphthene	33.9		1.7	4.3
208-96-8	Acenaphthylene	53.6		1.7	4.3
120-12-7	Anthracene	150		1.7	4.3
56-55-3	Benzo(a)anthracene	443		1.8	4.3
50-32-8	Benzo(a)pyrene	378		2.3	4.3
205-99-2	Benzo(b)fluoranthene	561		2.4	4.3
191-24-2	Benzo(g,h,i)perylene	218		4	4.3
207-08-9	Benzo(k)fluoranthene	163		2.7	4.3
218-01-9	Chrysene	449		1.7	4.3
53-70-3	Dibenzo(a,h)anthracene	81.2		3.3	4.3
206-44-0	Fluoranthene	677	E	1.7	4.3
86-73-7	Fluorene	40.6		1.7	4.3
193-39-5	Indeno(1,2,3-cd)pyrene	198		3.9	4.3
91-20-3	Naphthalene	121		1.8	4.3
85-01-8	Phenanthrene	256		1.7	4.3
129-00-0	Pyrene	504		1.7	4.3

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-04DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504DL1 Lab File ID 83504D5.D

Sample wt/vol: 25.06 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/08/12 Time: 1856

PercentSolids: 62 decanted : Dilution Factor: 5

Extraction: OTHER Station ID: EPAFMC04 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	27		8.6	21.4
91-57-6	2-Methylnaphthalene	48.6		8.6	21.4
83-32-9	Acenaphthene	41.6		8.6	21.4
208-96-8	Acenaphthylene	65.3		8.6	21.4
120-12-7	Anthracene	177		8.6	21.4
56-55-3	Benzo(a)anthracene	550		9	21.4
50-32-8	Benzo(a)pyrene	452		11.6	21.4
205-99-2	Benzo(b)fluoranthene	662		12.2	21.4
191-24-2	Benzo(g,h,i)perylene	255		20	21.4
207-08-9	Benzo(k)fluoranthene	207		13.5	21.4
218-01-9	Chrysene	505		8.4	21.4
53-70-3	Dibenzo(a,h)anthracene	92.4		16.7	21.4
206-44-0	Fluoranthene	827		8.6	21.4
86-73-7	Fluorene	48.1		8.6	21.4
193-39-5	Indeno(1,2,3-cd)pyrene	237		19.3	21.4
91-20-3	Naphthalene	141		9	21.4
85-01-8	Phenanthrene	306		8.6	21.4
129-00-0	Pyrene	620		8.6	21.4

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505 Lab File ID 83505D200.D

Sample wt/vol: 5.67 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/08/12 Time: 1309

PercentSolids: 78.2 decanted : Dilution Factor: 200

Extraction: OTHER Station ID: EPAFMC05 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	772000	E	1200	3000
91-57-6	2-Methylnaphthalene	1980000	E	1200	3000
83-32-9	Acenaphthene	1650000	E	1200	3000
208-96-8	Acenaphthylene	352000		1200	3000
120-12-7	Anthracene	4360000	E	1200	3000
56-55-3	Benzo(a)anthracene	1800000	E	1260	3000
50-32-8	Benzo(a)pyrene	997000	E	1620	3000
205-99-2	Benzo(b)fluoranthene	1360000	E	1710	3000
191-24-2	Benzo(g,h,i)perylene	366000		2800	3000
207-08-9	Benzo(k)fluoranthene	472000	E	1890	3000
218-01-9	Chrysene	1720000	E	1170	3000
53-70-3	Dibenzo(a,h)anthracene	186000		2340	3000
206-44-0	Fluoranthene	3660000	E	1200	3000
86-73-7	Fluorene	2050000	E	1200	3000
193-39-5	Indeno(1,2,3-cd)pyrene	381000		2710	3000
91-20-3	Naphthalene	6760000	E	1260	3000
85-01-8	Phenanthrene	6220000	E	1200	3000
129-00-0	Pyrene	2140000	E	1200	3000

5-30-12

SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505DL1 Lab File ID 83505D50K.D

Sample wt/vol: 5.67 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/09/12 Time: 1442

PercentSolids: 78.2 decanted : Dilution Factor: 50000

Extraction: OTHER Station ID: EPAFMC05 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	880000		300000	751000
91-57-6	2-Methylnaphthalene	1760000		300000	751000
83-32-9	Acenaphthene	2010000		300000	751000
208-96-8	Acenaphthylene	1550000		300000	751000
120-12-7	Anthracene	4930000		300000	751000
56-55-3	Benzo(a)anthracene	1840000		316000	751000
50-32-8	Benzo(a)pyrene	1170000		406000	751000
205-99-2	Benzo(b)fluoranthene	1330000		428000	751000
191-24-2	Benzo(g,h,i)perylene	699000	U	699000	751000
207-08-9	Benzo(k)fluoranthene	612000	J	474000	751000
218-01-9	Chrysene	1900000		293000	751000
53-70-3	Dibenzo(a,h)anthracene	586000	U	586000	751000
206-44-0	Fluoranthene	3970000		300000	751000
86-73-7	Fluorene	2450000		300000	751000
193-39-5	Indeno(1,2,3-cd)pyrene	676000	U	676000	751000
91-20-3	Naphthalene	6750000		316000	751000
85-01-8	Phenanthrene	6190000		300000	751000
129-00-0	Pyrene	2330000		300000	751000

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-06

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506 Lab File ID 83506D200.D

Sample wt/vol: 5.19 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/08/12 Time: 1245

PercentSolids: 66.7 decanted : Dilution Factor: 200

Extraction: OTHER Station ID: EPAFMC05 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	1030000	E	1540	3850
91-57-6	2-Methylnaphthalene	2590000	E	1540	3850
83-32-9	Acenaphthene	2250000	E	1540	3850
208-96-8	Acenaphthylene	612000	E	1540	3850
120-12-7	Anthracene	5160000	E	1540	3850
56-55-3	Benzo(a)anthracene	2560000	E	1620	3850
50-32-8	Benzo(a)pyrene	1340000	E	2080	3850
205-99-2	Benzo(b)fluoranthene	1850000	E	2200	3850
191-24-2	Benzo(g,h,i)perylene	519000		3580	3850
207-08-9	Benzo(k)fluoranthene	604000	E	2430	3850
218-01-9	Chrysene	2220000	E	1500	3850
53-70-3	Dibenzo(a,h)anthracene	257000		3000	3850
206-44-0	Fluoranthene	5060000	E	1540	3850
86-73-7	Fluorene	2740000	E	1540	3850
193-39-5	Indeno(1,2,3-cd)pyrene	526000		3470	3850
91-20-3	Naphthalene	8520000	E	1620	3850
85-01-8	Phenanthrene	8350000	E	1540	3850
129-00-0	Pyrene	2950000	E	1540	3850

5-30-12

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-06DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 200514

Lab Code : PEL Case No. SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506DL1 Lab File ID 83506D50K.D

Sample wt/vol: 5.19 Units: G Date Received: 04/24/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/09/12 Time: 1507

PercentSolids: 66.7 decanted : Dilution Factor: 50000

Extraction: OTHER Station ID: EPAFMC05 Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	1310000		384000	962000
91-57-6	2-Methylnaphthalene	2440000		384000	962000
83-32-9	Acenaphthene	2760000		384000	962000
208-96-8	Acenaphthylene	1020000		384000	962000
120-12-7	Anthracene	5790000		384000	962000
56-55-3	Benzo(a)anthracene	2450000		404000	962000
50-32-8	Benzo(a)pyrene	1590000		520000	962000
205-99-2	Benzo(b)fluoranthene	1780000		549000	962000
191-24-2	Benzo(g,h,i)perylene	896000	U	896000	962000
207-08-9	Benzo(k)fluoranthene	874000	J	607000	962000
218-01-9	Chrysene	2580000		376000	962000
53-70-3	Dibenzo(a,h)anthracene	751000	U	751000	962000
206-44-0	Fluoranthene	5590000		384000	962000
86-73-7	Fluorene	3240000		384000	962000
193-39-5	Indeno(1,2,3-cd)pyrene	867000	U	867000	962000
91-20-3	Naphthalene	8960000		404000	962000
85-01-8	Phenanthrene	8820000		384000	962000
129-00-0	Pyrene	3260000		384000	962000

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SEMI-VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 128646MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-1

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 128646MB Lab File ID: 9282MB.D

Sample wt/vol: 20.34 Units: G Date Received: 05/02/12

Concentrated Extract Volume: 1 Date Extracted: 05/02/12

Level:(low/med) LOW Date Analyzed: 05/02/12 Time: 1025

PercentSolids: 100 decanted : Dilution Factor: 1

Extraction: OTHER Station ID: Method: 8270 SIM

GPC Cleanup : (Y/N) N pH:

Column(1): HPMS-5 ID: 0.25 (mm)

CONCENTRATION UNITS: UG/KG

CAS NO.	*ANALYTE*	*RESULT*	*Q*	*MDL*	*RL*
90-12-0	1-Methylnaphthalene	1.3	U	1.3	3.3
91-57-6	2-Methylnaphthalene	1.3	U	1.3	3.3
83-32-9	Acenaphthene	1.3	U	1.3	3.3
208-96-8	Acenaphthylene	1.3	U	1.3	3.3
120-12-7	Anthracene	1.3	U	1.3	3.3
56-55-3	Benzo(a)anthracene	1.4	U	1.4	3.3
50-32-8	Benzo(a)pyrene	1.8	U	1.8	3.3
205-99-2	Benzo(b)fluoranthene	1.9	U	1.9	3.3
191-24-2	Benzo(g,h,i)perylene	3	U	3	3.3
207-08-9	Benzo(k)fluoranthene	2.1	U	2.1	3.3
218-01-9	Chrysene	1.3	U	1.3	3.3
53-70-3	Dibenzo(a,h)anthracene	2.6	U	2.6	3.3
206-44-0	Fluoranthene	1.3	U	1.3	3.3
86-73-7	Fluorene	1.3	U	1.3	3.3
193-39-5	Indeno(1,2,3-cd)pyrene	2.9	U	2.9	3.3
91-20-3	Naphthalene	1.4	U	1.4	3.3
85-01-8	Phenanthrene	1.3	U	1.3	3.3
129-00-0	Pyrene	1.3	U	1.3	3.3

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-01

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 67.6 Station ID: EPAFMC01

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7429-90-5	Aluminum	5740	J	N	P		2.33	12.3
7440-36-0	Antimony	~~0.715~~ 1.23	UJ		P		0.294	1.23
7440-38-2	Arsenic	10.1			P		0.613	1.23
7440-39-3	Barium	48.2			P		0.196	0.613
7440-41-7	Beryllium	0.503	J		P		0.196	0.613
7440-43-9	Cadmium	0.0613	U		P		0.0613	0.613
7440-70-2	Calcium	14300			P		4.05	12.3
7440-47-3	Chromium	32.6	J	N	P		0.196	0.613
7440-48-4	Cobalt	7.08			P		0.0613	0.613
7440-50-8	Copper	14			P		0.196	0.613
7439-89-6	Iron	21900	J	N	P		0.736	6.13
7439-92-1	Lead	18.8			P		0.417	0.981
7439-95-4	Magnesium	3590			P		3.56	12.3
7439-97-6	Mercury	0.067			CV		0.00487	0.0263
7440-02-0	Nickel	9.16			P		0.196	0.613
7440-09-7	Potassium	466			P		6.13	61.3
7782-49-2	Selenium	0.491	U		P		0.491	2.45
7440-22-4	Silver	0.196	U		P		0.196	0.613
7440-23-5	Sodium	98			P		12.3	36.8
7440-28-0	Thallium	0.417	U		P		0.417	1.23
7440-62-2	Vanadium	28.5			P		0.196	0.613

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1910

6-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-01

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 67.6 Station ID: EPAFMC01

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-66-6	Zinc	147	J	N	P		0.405	1.23

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-01DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501DL1

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 67.6 Station ID: EPAFMC01

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-96-5	Manganese	633			P		0.392	1.23

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-02

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 80.7 Station ID: EPAFMC02

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7429-90-5	Aluminum	5920			P		2.26	11.9
7440-36-0	Antimony	~~0.828~~ 1.19	U J		P		0.285	1.19
7440-38-2	Arsenic	14.1			P		0.593	1.19
7440-39-3	Barium	86.8			P		0.19	0.593
7440-41-7	Beryllium	0.711			P		0.19	0.593
7440-43-9	Cadmium	0.0593	U		P		0.0593	0.593
7440-70-2	Calcium	18800			P		3.92	11.9
7440-47-3	Chromium	37.7			P		0.19	0.593
7440-48-4	Cobalt	8.12			P		0.0593	0.593
7440-50-8	Copper	18.1			P		0.19	0.593
7439-89-6	Iron	22600			P		0.712	5.93
7439-92-1	Lead	32.4			P		0.404	0.95
7439-95-4	Magnesium	5130			P		3.44	11.9
7439-97-6	Mercury	0.0564			CV		0.00437	0.0236
7440-02-0	Nickel	14.3			P		0.19	0.593
7440-09-7	Potassium	562			P		5.93	59.3
7782-49-2	Selenium	0.475	U		P		0.475	2.37
7440-22-4	Silver	0.19	U		P		0.19	0.593
7440-23-5	Sodium	104			P		11.9	35.6
7440-28-0	Thallium	0.404	U		P		0.404	1.19
7440-62-2	Vanadium	27.3			P		0.19	0.593

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-02

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 80.7 Station ID: EPAFMC02

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-66-6	Zinc	180			P		0.392	1.19

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-02DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502DL1

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 80.7 Station ID: EPAFMC02

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-96-5	Manganese	1580			P		0.95	2.97

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-03

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 74.2 Station ID: EPAFMC03

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7429-90-5	Aluminum	4400			P		2.17	11.4
7440-36-0	Antimony	~~0.357~~ 1.14	UX		P		0.274	1.14
7440-38-2	Arsenic	8.44			P		0.572	1.14
7440-39-3	Barium	48.8			P		0.183	0.572
7440-41-7	Beryllium	0.455	J		P		0.183	0.572
7440-43-9	Cadmium	0.0572	U		P		0.0572	0.572
7440-70-2	Calcium	14000			P		3.78	11.4
7440-47-3	Chromium	28.8			P		0.183	0.572
7440-48-4	Cobalt	5.27			P		0.0572	0.572
7440-50-8	Copper	7.72			P		0.183	0.572
7439-89-6	Iron	17600			P		0.686	5.72
7439-92-1	Lead	18.7			P		0.389	0.915
7439-95-4	Magnesium	4150			P		3.32	11.4
7439-97-6	Mercury	0.042			CV		0.00276	0.0149
7440-02-0	Nickel	7.81			P		0.183	0.572
7440-09-7	Potassium	352			P		5.72	57.2
7782-49-2	Selenium	0.458	U		P		0.458	2.29
7440-22-4	Silver	0.183	U		P		0.183	0.572
7440-23-5	Sodium	98.7			P		11.4	34.3
7440-28-0	Thallium	0.521	J		P		0.389	1.14
7440-62-2	Vanadium	24.6			P		0.183	0.572

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-03

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 74.2 Station ID: EPAFMC03

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-66-6	Zinc	148			P		0.378	1.14

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-03DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503DL1

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 74.2 Station ID: EPAFMC03

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-96-5	Manganese	605			P		0.366	1.14

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-04

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 62 Station ID: EPAFMC04

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7429-90-5	Aluminum	9290			P		2.56	13.5
7440-36-0	Antimony	~~0.976~~ 1.35	UJ		P		0.324	1.35
7440-38-2	Arsenic	11.9			P		0.674	1.35
7440-39-3	Barium	80.1			P		0.216	0.674
7440-41-7	Beryllium	0.642	J		P		0.216	0.674
7440-43-9	Cadmium	0.0674	U		P		0.0674	0.674
7440-70-2	Calcium	14500			P		4.45	13.5
7440-47-3	Chromium	26.9			P		0.216	0.674
7440-48-4	Cobalt	14.4			P		0.0674	0.674
7440-50-8	Copper	26.2			P		0.216	0.674
7439-89-6	Iron	33100			P		0.809	6.74
7439-92-1	Lead	29.1			P		0.458	1.08
7439-95-4	Magnesium	6040			P		3.91	13.5
7439-97-6	Mercury	0.0747			CV		0.00374	0.0202
7440-02-0	Nickel	18.4			P		0.216	0.674
7440-09-7	Potassium	868			P		6.74	67.4
7782-49-2	Selenium	0.539	U		P		0.539	2.7
7440-22-4	Silver	0.216	U		P		0.216	0.674
7440-23-5	Sodium	59			P		13.5	40.4
7440-28-0	Thallium	0.588	J		P		0.458	1.35
7440-62-2	Vanadium	40.7			P		0.216	0.674

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-04

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 62 Station ID: EPAFMC04

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-66-6	Zinc	162			P		0.445	1.35

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-04DL1

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504DL1

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 62 Station ID: EPAFMC04

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-96-5	Manganese	838			P		1.08	3.37

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.: EPAFMC-SD-05

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 78.2 Station ID: EPAFMC05

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7429-90-5	Aluminum	3770			P		1.71	9.02
7440-36-0	Antimony	1	J		P		0.216	0.902
7440-38-2	Arsenic	6.59			P		0.451	0.902
7440-39-3	Barium	107			P		0.144	0.451
7440-41-7	Beryllium	0.296	J		P		0.144	0.451
7440-43-9	Cadmium	1.67			P		0.0451	0.451
7440-70-2	Calcium	9780			P		2.98	9.02
7440-47-3	Chromium	17.6			P		0.144	0.451
7440-48-4	Cobalt	4.03	J		P		0.0451	0.451
7440-50-8	Copper	52.3			P		0.144	0.451
7439-89-6	Iron	13300			P		0.541	4.51
7439-92-1	Lead	129			P		0.307	0.721
7439-95-4	Magnesium	2130			P		2.62	9.02
7439-96-5	Manganese	225			P		0.144	0.451
7439-97-6	Mercury	0.442			CV		0.00342	0.0185
7440-02-0	Nickel	11.3			P		0.144	0.451
7440-09-7	Potassium	315			P		4.51	45.1
7782-49-2	Selenium	0.361	U		P		0.361	1.8
7440-22-4	Silver	0.258	J		P		0.144	0.451
7440-23-5	Sodium	61.3			P		9.02	27
7440-28-0	Thallium	0.307	U		P		0.307	0.902

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-05

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 78.2 Station ID: EPAFMC05

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-62-2	Vanadium	9.2			P		0.144	0.451
7440-66-6	Zinc	392			P		0.298	0.902

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-06

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 66.7 Station ID: EPAFMC05

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7429-90-5	Aluminum	2700			P		2.14	11.2
7440-36-0	Antimony	1.21	J		P		0.27	1.12
7440-38-2	Arsenic	10.5			P		0.563	1.12
7440-39-3	Barium	73.2			P		0.18	0.563
7440-41-7	Beryllium	0.256	J		P		0.18	0.563
7440-43-9	Cadmium	2.16			P		0.0563	0.563
7440-70-2	Calcium	9890			P		3.71	11.2
7440-47-3	Chromium	19.7			P		0.18	0.563
7440-48-4	Cobalt	4.18	J		P		0.0563	0.563
7440-50-8	Copper	62.5			P		0.18	0.563
7439-89-6	Iron	14800			P		0.675	5.63
7439-92-1	Lead	135			P		0.383	0.9
7439-95-4	Magnesium	2240			P		3.26	11.2
7439-96-5	Manganese	350			P		0.18	0.563
7439-97-6	Mercury	0.327			CV		0.00332	0.0179
7440-02-0	Nickel	9.35			P		0.18	0.563
7440-09-7	Potassium	271			P		5.63	56.3
7782-49-2	Selenium	0.45	U		P		0.45	2.25
7440-22-4	Silver	0.18	U		P		0.18	0.563
7440-23-5	Sodium	61.5			P		11.2	33.8
7440-28-0	Thallium	0.486	J		P		0.383	1.12

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

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110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-06

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 66.7 Station ID: EPAFMC05

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-62-2	Vanadium	10.7			P		0.18	0.563
7440-66-6	Zinc	427			P		0.371	1.12

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

127448MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 127448MB

Level:(low/med) LOW Date Received: 4/25/2012

PercentSolids: 100 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7429-90-5	Aluminum	1.84	U		P		1.84	9.71
7440-36-0	Antimony	0.273	J		P		0.233	0.971
7440-38-2	Arsenic	0.485	U		P		0.485	0.971
7440-39-3	Barium	0.155	U		P		0.155	0.485
7440-41-7	Beryllium	0.155	U		P		0.155	0.485
7440-43-9	Cadmium	0.0485	U		P		0.0485	0.485
7440-70-2	Calcium	3.2	U		P		3.2	9.71
7440-47-3	Chromium	0.155	U		P		0.155	0.485
7440-48-4	Cobalt	0.0485	U		P		0.0485	0.485
7440-50-8	Copper	0.155	U		P		0.155	0.485
7439-89-6	Iron	2.51	J		P		0.582	4.85
7439-92-1	Lead	0.33	U		P		0.33	0.777
7439-95-4	Magnesium	2.82	U		P		2.82	9.71
7439-96-5	Manganese	0.155	U		P		0.155	0.485
7440-02-0	Nickel	0.155	U		P		0.155	0.485
7440-09-7	Potassium	4.85	U		P		4.85	48.5
7782-49-2	Selenium	0.388	U		P		0.388	1.94
7440-22-4	Silver	0.155	U		P		0.155	0.485
7440-23-5	Sodium	9.71	U		P		9.71	29.1
7440-28-0	Thallium	0.33	U		P		0.33	0.971
7440-62-2	Vanadium	0.155	U		P		0.155	0.485

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

127448MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 127448MB

Level:(low/med) LOW Date Received: 4/25/2012

PercentSolids: 100 Station ID:

CONCENTRATION UNITS: *MG/KG*

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7440-66-6	Zinc	0.32	U		P		0.32	0.971

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

127971MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 127971MB

Level:(low/med) LOW Date Received: 4/25/2012

PercentSolids: 100 Station ID:

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
7439-97-6	Mercury	0.00361	U		CV		0.00361	0.0195

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

110512 1910

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-01

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583501

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 67.6 Station ID: EPAFMC01

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1012_5	TOC	267000			TC		74.1	638

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

110512 1911

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-02

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583502

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 80.7 Station ID: EPAFMC02

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1012_5	TOC	26300			TC		45.8	395

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1911

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-03

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583503

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 74.2 Station ID: EPAFMC03

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1012_5	TOC	45400			TC		59.6	513

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1911

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-04

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583504

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 62 Station ID: EPAFMC04

CONCENTRATION UNITS: *MG/KG*

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1012_5	TOC	184000			TC		73.3	631

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

110512 1911

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-05

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583505

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 78.2 Station ID: EPAFMC05

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1012_5	TOC	409000			TC		104	897

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1911

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.

EPAFMC-SD-06

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 350583506

Level:(low/med) LOW Date Received: 4/24/2012

PercentSolids: 66.7 Station ID: EPAFMC05

CONCENTRATION UNITS: MG/KG

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1012_5	TOC	509000			TC		136	1170

Color Before: _____ Clarity Before: _____ Texture :_____

Color After : _____ Clarity After: _____ Artifacts:_____

Comments:

110512 1911

5-30-12

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INORGANIC ANALYSIS DATA SHEET

EPA Sample No.: 128373MB

Lab Name: Spectrum Analytical, Inc. Contract: OTIE-Five Mile Creek / 2005148-

Lab Code : PEL Case No.: SAS No: SDG No.: 3505835

Matrix: SOIL Lab Sample ID: 128373MB

Level:(low/med) LOW Date Received: 4/30/2012

PercentSolids: 100 Station ID:

CONCENTRATION UNITS: *MG/KG*

CAS NO.	ANALYTE	Concentration	C	Q	M		MDL	RL
1012_5	TOC	54.6	U		TC		54.6	470

Color Before: _____ Clarity Before: _____ Texture : _____

Color After : _____ Clarity After: _____ Artifacts: _____

Comments:

110512 1911

4/30-12