

Premier Environmental Services

DATA VALIDATION SUMMARY REPORT
OF THE
LAWRENCE AVIATION SUPERFUND SITE
PORT JEFFERSON, NY

ORGANIC AND INORGANIC ANALYSES
IN AQUEOUS SAMPLES

TEST AMERICA LABORATORIES, INC.
SOUTH BURLINGTON, VT

SDG NUMBER: 200-1636-1

January, 2011

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DATA VALIDATION FOR: Volatile Organic Compounds (VOC's)

SITE: Lawrence Aviation Superfund Site

CONTRACT LAB: Test America Laboratories, Inc.
South Burlington, VT

PROJECT NO.: 200-1636-1

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: January, 2011

MATRIX: Aqueous

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review (EPA-540-R-08-01, June 2008). All data are considered valid and acceptable except those analytes which have been deemed unusable "R" (unreliable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Table 1 of this report includes a cross reference between the field sample ID and laboratory sample ID used to perform data validation. Definitions of the data qualifiers that may be used in this report are located in Appendix A of this report. Qualified data result pages are located in Appendix B of this report. Copies of the Chain of Custody (COC) documents are located in Appendix C of this report.

This sample set included the analysis of five (5) aqueous samples and one (1) Trip Blank sample. The COC documents indicated that eight (8) aqueous samples were shipped to the laboratory, however it was noted that only five (5) aqueous samples were received for these analyses. The samples were collected September 18, 2010 and September 19, 2010. The samples were shipped to Test America Laboratories located in South Burlington, VT. They were received on September 21, 2010 for the analyses requested on the COC documentation. In addition a Trip Blank sample was not noted on the COC documents but was received for Volatile Organic analyses. This sample was collected September 17, 2010. The samples in this data set were analyzed for Volatile Organic Analytes (VOA) in accordance with USEPA CLP Method SOM01.2 trace level analyses for the aqueous samples in this data set.

ORGANIC DATA ASSESSMENT

1. OVERVIEW:

Samples associated with this data set were analyzed for Volatile Organic Analytes (VOA) as noted by the COC documentation that accompanied the sample set to the laboratory. All analyses were performed in accordance with USEPA CLP Method SOM01.2 for Trace Level Water Analyses. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report 200-1636 consists of the analysis of five (5) aqueous samples and one (1) Trip Blank sample. The Chain of Custody documents listed eight (8) field sample ID's. Five (5) of these samples and the Trip Blank sample were analyzed. These samples are summarized in Table 1 of this report. Each of these samples was analyzed for Volatile Organic Analytes.

2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The USEPA CLP method specifies Technical Holding times for aqueous and solid and soil samples. The Technical Holding Time is based on collection date. The holding time for a properly preserved aqueous sample that is cooled and pH preserved to 2 or below is fourteen (14) days from sample collection.

The samples in laboratory report 200-1636 were collected September 17-19, 2010. The samples were received at the laboratory on September 21, 2010. All aqueous sample analyses associated with this data set were completed by September 23, 2010. All sample analyses were performed within the technical holding times cited in this method.

ORGANIC DATA ASSESSMENT

3. SURROGATES:

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with either thirteen (13) or fourteen (14) Deuterated Monitoring Compounds (DMC's). These DMC's are added to each sample prior to sample purging. The method recommended Deuterated Monitoring Surrogate Compounds include:

Vinyl Chloride-d3	Chloroethane-d5
1,1-Dichloroethene-d2	2-Butanone-d5
Chloroform-d	1,2-Dichloroethane-d4
Benzene-d6	1,2-Dichloropropane-d6
Toluene-d8	trans-1,3-Dichloropropene-d4
2-Hexanone-d5	1,4-Dioxane-d8**
1,1,2,2-Tetrachloroethane-d2	1,2-Dichlorobenzene-d4

** only reported in the low/medium non-aqueous Volatile Organic Analyses.

The laboratory reported CLP method specified recovery limits that are cited for the aqueous samples reported in this data set. 1,4-Dioxane-d8 is not added as a Deuterated Monitoring Compound (DMC) in the Trace Volatile Organic Analyses associated with this data set.

The recovery of each Deuterated Monitoring Compound (DMC) met QC criteria in each of the aqueous field samples associated with this data set with the exception of Vinyl Chloride-d3 (0%), 1,1-Dichloroethene-d2 (31%) and trans 1,3-Dichloropropene-d4 (0%) in sample MW-2. The percent recovery of each surrogate was below QC limits. A review of the target analytes associated with these surrogate compounds was reviewed. The target analyte associated with Vinyl Chloride-d3 was non-detect. In accordance with the validation guidelines this analyte has been qualified "R" unusable. The percent recovery of 1,1-Dichloroethene-d2 was 31%. Non-detect compounds are qualified "UJ" and positive detects have been qualified "J" estimated. The recovery of trans-1,3-Dichloropropene-d4 was 0%. The target analytes associated with trans-1,3-Dichloropropene-d4 were non-detect. In accordance with the validation guidelines these analytes have been qualified "R" unusable.

Qualified data result pages are located in Appendix B of this report.

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

Site Specific MS/MSD analysis was not reported with the samples in this data set.

ORGANIC DATA ASSESSMENT

5. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Samples were only qualified with those QC samples associated with the particular blank.

This method requires the preparation and analysis of a laboratory storage blank. This laboratory storage blank is kept with the site samples and analyzed with the site samples.

A) Method Blank contamination

Two (2) method blank samples are associated with the Trace Level Volatile Organic analyses (aqueous samples) in this data set. Each of these method blank samples was free from contamination of target analytes with the exception of Acetone and 1,2,3-Trichlorobenzene. The method blank samples contained Tentatively Identified Compounds (TIC's). The TIC at retention time 6.93 has been qualified "J" estimated and "X" to indicate a contaminant this is related to the Deuterated Monitoring Compound (DMC) and column bleed. This unknown Tentatively Identified Compound was detected in each of the aqueous samples associated with this data set. This unknown compound TIC has been negated and qualified "U". TIC's were also detected at retention times 1.68, 6.93, 7.88 and 10.72. When detected in associated field samples these TIC's have been negated.

Qualified data result pages are located in Appendix B of this report.

The aqueous storage blank sample associated with the soils in this data set is identified as VHBLK01. This storage blank sample is free from contamination of target analytes with the exception of Acetone at a concentration of 2.1 JB ug/l. Acetone has been attributed to method blank samples and therefore has been negated and qualified "U" in the VHBLK sample. This storage blank sample also contained four (4) TIC's that have been attributed to method blank contamination. These TIC's have been negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

ORGANIC DATA ASSESSMENT

5. BLANK CONTAMINATION (cont'd):

B) Field or Equipment Rinse Blank (ERB) contamination

A Field Blank sample is not associated with this data set.

C) Trip Blank contamination

The Trip Blank sample (TB – 220-1636-6) was analyzed with this data set. The Trip Blank sample was free from contamination of all target analytes with the exception of Acetone (2.0 JB ug/l) and Methylene Chloride (9.5 ug/l), Trichloroethene (0.063 J ug/l). Acetone has been associated with the method blank sample and has been negated and qualified “U”. Methylene Chloride was not detected in any of the samples in this data set therefore no action was taken. The concentration of Trichloroethene was substantially higher in each of the associated field blank samples than that detected in the Trip Blank sample. Trichloroethene has not been negated in any of the associated field samples in this data set. In addition four (4) Tentatively Identified Compounds TIC's) were in this sample. This unknown TIC at retention time 6.93 has been qualified “J” estimated and “X” to indicate a contaminant this is related column bleed. These four (4) unknown compounds were all detected in the associated method blank sample. These unknown compounds have been negated and qualified “U” when detected in each of the field samples associated with this data set.

Qualified data result pages are located in Appendix B of this report.

6. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance. USEPA CLP method states the concentration levels of target analytes that must be analyzed and reported for Initial Calibration of the GC/MS.

A) RESPONSE FACTOR

Trace Volatile Organic Analysis - The response factor measures the instrument's response to specific chemical compounds. USEPA CLP criteria of the cited method requires that the response factor of all target analytes listed in Table 3 and the DMC's must be greater than or equal to 0.010. All other target analytes must have an RRF greater than or equal to 0.050 in both initial and continuing calibration analyses. Target analytes are qualified if the minimum RRF criteria are not in either the initial calibration analysis or the opening and closing continuing calibration standard analysis. Positive results are qualified “J”. Non-detect results are qualified if the minimum RRF <0.050 (or 0.010 for specifics) are qualified “R”, unusable

The laboratory performed an aqueous (Trace Volatile Organic Analysis) initial calibration on September 21, 2010 (Inst. J.i). The laboratory summarized the RRF data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The RRF of all target compounds met QC criteria in this initial calibration curve analysis.

The aqueous samples in this data set were analyzed in two (2) continuing calibration sequences. The opening and closing CCV standards are reported with each continuing calibration sequence. The RRF criteria for each of the opening and closing CCV standards met the QC criteria specified in the cited data validation guidelines.

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION (cont'd):

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Trace Volatile Organic Analyses - Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. US EPA data validation criteria states that the percent RSD must be less than or equal to 40% for the volatile compounds and surrogate compounds listed in Table 3 and there associated Deuterated Monitoring compounds. All other %RSD must be less than or equal to 30% in the initial calibration curve analysis.

The %D in the opening CCV standard must be <40% for the compounds listed in Table 3 of the method. All other volatile organic compounds have a criteria <50% in the closing continuing calibration standard. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable.

The laboratory performed an aqueous (Trace Volatile Organic Analysis) initial calibration on September 21, 2010 (Inst. J.i). The laboratory summarized the %RSD data on the CLP Form 6A. The laboratory included all raw data and instrument summary forms in the data report for review. The %RSD of all target compounds met QC criteria in this initial calibration curve analysis.

The aqueous samples in this data set were analyzed within two (2) continuing calibration sequences. The opening and closing CCV standards are reported on each day of analysis. The %Difference criteria for each of the opening and closing CCV standard met the QC criteria specified in the cited data validation guidelines.

7. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB).

The tune criteria listed in the data report met or exceeded that required by the method. All tuning criteria associated with these sample analyses were met.

ORGANIC DATA ASSESSMENT

8. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ± 30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non-detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard area count evaluation criteria are applied to all field and QC samples.

All samples were spiked with the internal standards Chlorobenzene-d5, 1,4-Difluorobenzene and 1,4-Dichlorobenzene-d4 prior to analysis. The area counts and retention time of each internal standard met QC criteria in all field samples and QC samples associated with this data set.

9. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound. The laboratory reported each sample to the Contract Required Quantitation Limit (CRQL) listed in the cited method.

Five (5) aqueous samples and one (1) Trip Blank sample are associated with this data set. The samples were analyzed using USEPA CLP Method SOM01.2. Tentatively Identified Compounds (TIC's) were reported when detected with this data set.

Each of the aqueous samples in this data set were initially analyzed without dilution and reported to the base reporting limit. Samples were diluted and reanalyzed when the concentration of a target analyte exceeded the concentration of calibration range.

Sample ISCO-MW1 was initially analyzed without dilution. The concentration of Trichloroethene exceeded the calibration range of the GC/MS. The sample was reanalyzed using a 1:4.6 dilution to report the concentration of Trichloroethene (70 ug/l) detected at this sample point.

Sample ISCO-MW3 was initially analyzed using a 1:3.3 sample dilution. The concentration of Trichloroethene exceeded the calibration range of the GC/MS. The sample was reanalyzed using a 1:36.7 dilution to report the concentration of Trichloroethene (550 ug/l) detected at this sample point.

Sample ISCO-MW4 was initially analyzed using a 1:4 sample dilution. The concentration of Trichloroethene exceeded the calibration range of the GC/MS. The sample was reanalyzed using a 1:40 dilution to report the concentration of Trichloroethene (690 ug/l) detected at this sample point.

Sample ISCO-MW5 was initially analyzed using a 1:1.2 sample dilution. The concentration of Trichloroethene exceeded the calibration range of the GC/MS. The sample was reanalyzed using a 1:13.3 dilution to report the concentration of Trichloroethene (200 ug/l) detected at this sample point.

ORGANIC DATA ASSESSMENT

10. FIELD DUPLICATE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall precision. Field duplicate results are expected to have more variability than laboratory duplicate samples. Field duplicate samples are not associated with this data set.

11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Analytical/method QC criteria was met for these analyses except where explained in the laboratory case narrative and the detailed in this validation report. The data reported by the laboratory agrees with the raw data provided in the final report. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package. All QC anomalies associated with this data set have been explained in the above sections of this data validation report.

All sample results are reported to the method detection limit except where detailed above. Reporting limits and positive results are adjusted based on the sample volume/weight utilized for each extraction procedure. All data provided for this data set is acceptable for use, with noted data qualifiers.

Appendix B of this report contains copies of qualified data result pages.

DATA VALIDATION FOR: Target Analyte List of Metals (TAL)
SITE: Lawrence Aviation Superfund Site
CONTRACT LAB: Test America Laboratories
South Burlington, VT
SDG NO.: 200-1636-1
REVIEWER: Renee Cohen
DATE REVIEW COMPLETED: January, 2011
MATRIX: Aqueous

The Chain of Custody (COC) documentation associated with this data set listed eight (8) aqueous samples. These samples were collected September 18, 2010 and September 19, 2010 and received at Test America Laboratories located in South Burlington, VT on September 21, 2010.

The data evaluation was performed according to the guidelines noted in the "National Functional Guidelines for Inorganic Data Review", February 1999 and the USEPA Region II SOP for the Review of Inorganic Data (HW-2, Rev. 13 (10/06)).

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

Table 1 of this report contains a cross reference between the Field Sample ID's and the Laboratory Sample ID's. Appendix A of this report contains a summary of the data qualifiers that may be used in the report. Appendix B contains the qualified data result pages. Appendix C contains the Chain of Custody (COC) documents associated with this data set.

The samples in this data set were analyzed for TAL metals. These samples were also analyzed for Volatile Organic Analytes (VOA) and miscellaneous wet chemistry analytes. The data review associated with these analyses is located in stand alone data reports that are enclosed with this complete report.

1. OVERVIEW

Eight (8) aqueous samples were collected September 18-19, 2010 and received at Test America Laboratories located in South Burlington, VT on September 21, 2010. Upon receipt it was noted that five (5) aqueous samples and one (1) Trip Blank sample were provided for review. The samples are reported in laboratory report 200-1636-1. Table 1 of this report lists each of the field sample and laboratory sample ID's. The samples were analyzed for the parameters listed on the COC documents. A full deliverable report was required to report the sample results. Five (5) aqueous samples in this data set were prepared and analyzed for the TAL Metal list of analytes.

2. HOLDING TIME

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Metals with the exception of Mercury, is required to be digested and analyzed within 180 days of Verified Time of Sample Receipt (VTSR). Mercury samples are to be digested and analyzed within 26 days of VTSR.

The aqueous samples were prepared and analyzed for the Target Analyte Metals (TAL). The ICP Metals were prepared in one (1) batch on September 23, 2010. The digestates were analyzed in one (1) sequence on September 25, 2010. The samples were prepared for Mercury analysis on September 23, 2010 and analyzed in one (1) sequence on September 24, 2010.

All sample digestion and analyses associated with this data set were performed within the method holding time.

3. CALIBRATION ANALYSIS

Inductively Coupled Plasma (ICP) was utilized for these analyses. The ICP was calibrated using the calibration standards required by the manufacturer. An initial calibration verification (ICV) standard is then analyzed to verify instrument calibration. One (1) continuing calibration standard was analyzed after each ten (10) field samples. One (1) analytical sequence is associated with this data set. All target analytes were analyzed and reported. The laboratory reported provided raw data of each sequence for review. All ICV and CCV standards associated with this data set met QC criteria in each of these analytical sequences.

The Mercury analyses were performed in one (1) analytical sequence. The sample associated with this data set was analyzed on September 24, 2010. The laboratory reported provided raw data for this sequence to review. Review of the raw data to the results reported on the summary forms was made. All raw data matched that reported on the summary forms. All QC criteria were met in the data associated with this data set.

4. ICP CRDL STANDARD

The CRDL standard is used for the verification of instrument linearity near the CRDL. The CRDL standard control limits are 70%-130% recovery. If the CRDL standard falls outside of the control limits, associated data less than or equal to the 10X the CRDL are qualified estimated (J or UJ) or rejected (R) depending on the recovery of the CRDL standard and the concentration of the analyte in the sample. When the CRDL standard exceeds the control limit, indicating a high bias samples are qualified estimated (J or UJ).

The laboratory analyzed three (3) CRDL standards with the ICP analytical sequence associated with this data set. The recovery of all target analytes with the exception of Lead met QC criteria in the ICP analytical sequence. Lead exceeded QC criteria in CRI #2 and CRI #3. The samples in this data set are associated with CRI#2. Lead was detected at a low level in each of the samples in this data set at a concentration between the laboratory MDL and the laboratory Reporting Limit (RL) with the exception of sample ISCO-MW5. Lead was not detected at this sample point. Lead when has been qualified "J/UJ" estimated in each of the samples in this data set.

Qualified data result pages are located in Appendix B of this report.

5. ICP INTERFERENCE CHECK STANDARD

The Interference Check Standard (ICS) is used to verify the laboratory interelement and background correction factors of the ICP. Two solutions comprise the ICS A and ICS AB. Solution A consists of the interferent metals while solution AB is the group of target analytes and the interferent metals. An ICS analysis consists of analyzing both solutions consecutively for all wavelengths used for each analyte reported by ICP. The ICP ICS standards are to be analyzed at the beginning and end of each analytical run. The results are to fall within control limits of +/-20% of the true value.

The laboratory analyzed three (3) ICSA and three (3) ICSAB standards with this ICP analytical sequence. These QC samples are used to verify the laboratories interelement and background correction factors of the ICP. The recovery of all target analytes met QC criteria in the analytical sequence associated with this data set.

6. MATRIX SPIKE (MS) ANALYSIS

The spike sample analysis provides information about the effect of the sample matrix upon the digestion and measurement methodology. The spike control limits are 75%-125% when the sample concentration is less than four (4) times the spike added. If the matrix spike recoveries fall in the range of 30%-74%, the sample results are may be biased low and are qualified as estimated (J or UJ). If the matrix spike recoveries fall in the range of 126%-200%, sample results may be biased high. Positive results are qualified estimated (J). If the spike recovery is greater than 125% and the reported sample results are less than the IDL the data point is acceptable for use. If the matrix spike recovery is greater than 200%, the associated sample data are unusable and are rejected (R). If matrix spike results are less than 30%, the associated non-detect results are qualified unusable and rejected (R), and the results reported above the IDL are qualified estimated (J).

Site specific MS analysis was not prepared or analyzed with these ICP Metal or CVAA Mercury analyses.

7. POST DIGESTION SPIKE ANALYSIS

The post digestion spike sample analysis provides additional information about the effect of the sample matrix upon the digestion and measurement methodology. The post digestion spike is performed for each analyte that the pre-digestion spike recovery falls outside the 75-125% control limit.

Post digestion spike analysis was not reported with this data set.

8. DUPLICATE SAMPLE ANALYSIS

The laboratory duplicate sample analysis is used to evaluate the laboratory precision of the method for each analyte. If the duplicate sample analysis results for a particular analyte fall outside the control windows of 20% RPD or +/-CRDL, whichever is appropriate depending upon the concentration of the sample, the associated sample results are qualified "J" estimated.

Laboratory duplicate analysis was not reported with this data set.

9. ICP SERIAL DILUTION

The serial dilution analysis indicates whether significant physical or chemical interference's exist due to the sample matrix. If the concentration of any analyte in the original sample is greater than 50 times the instrument detection limit (IDL), an analysis of a 5-fold dilution samples must yield results which have a percent difference (%D) of less than or equal to 10 with the original sample results. If the %D of the serial dilution exceeds the 10% (and is not greater than 100%) for a particular analyte, all the associated sample results are qualified estimated (J).

Serial dilution analysis was performed on sample ISCO- MW1 (200-1636-1). The %Difference of all detected target analytes met QC criteria in the serial dilution analysis.

10. BLANKS

Blank analyses are assessed to determine the existence and magnitude of contamination problems. The criteria for the evaluation of blanks applies to all blanks, including but not limited to reagent blanks, method blanks and field blanks. The responsibility for action in the case of an unsuitable blank result depends upon the circumstances and the origin of the blank itself. If the problem with any blank exists, then all associated data must be carefully evaluated to determine whether there is inherent variability in the data for that case, or the problem is an isolated occurrence not affecting other data.

The laboratory provided a summary report form for the method blank associated the sample preparation batch. The ICP preparation blank was free from contamination of all target analytes above the reporting limit. Low concentration of Iron (11.0 ug/l), Lead (3.6 ug/l), Antimony (4.8 ug/l) and Zinc (0.52 ug/l) were detected and reported with a "J" qualifier. A review of the concentrations in the associated samples indicates that the Lead concentration in each of the samples was comparable to that in the method blank sample and all Lead results have been qualified "UJ" estimated.. Results of Iron, Antimony and Zinc have been negated "U" in each of these samples when the concentration was qualified "J" by the laboratory and reported with a concentration less than the reporting limit. Zinc was detected above the reporting limit in samples ISCO-MW2 and ISCO-MW-3. Zinc in these samples has not been negated or qualified based on the concentration of Zinc detected at these sample points.

The preparation blank associated with the Mercury sample analysis was free from contamination.

The laboratory provided summary forms to report the ICB and CCB analyses. All QC criteria were met in the ICB/CCB analyses associated with this data set.

Qualified data result pages are located in Appendix B of this report.

11. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine of data should be qualified or rejected.

The ICP LCS sample was fortified with all target analytes. Recovery limits of 80%-120% were applied to each target analyte. The recovery of all target analytes met QC criteria in the LCS sample.

One (1) Mercury LCS sample was prepared and reported with this data set. Recovery limits of 85%-115% were applied to this QC sample. The recovery of Mercury in the Laboratory Control Sample associated with this data set met QC criteria.

12. FIELD DUPLICATE SAMPLE ANALYSIS

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Analytes reported above the reporting limit are listed below. Data was not qualified based on the RPD of field duplicate sample analyses.

Field duplicate samples were not analyzed with this data set.

13. INSTRUMENT QC DATA

The laboratory provided the required annual and semiannual ICP Instrument QC summary report forms in this data report. This information was not reviewed by this data validator. All annual and semiannual QC studies were performed by the laboratory.

14. COMPOUND IDENTIFICATION

Five (5) aqueous samples were analyzed for TAL Metals. The sample was analyzed in accordance with the required method (ILM05.4). The samples data was reported in the units ug/l (ppb).

15. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

This data set included the reporting of five (5) aqueous samples. The samples were analyzed for the TAL metals list. A copy of the Chain of Custody is located in Appendix C of this report. The sample results are reported in accordance with the cited method.

The TAL metals reported in this data set are acceptable for use with the noted data qualifiers. All data qualifiers are explained in the above text.

Qualified data result pages are located in Appendix B of this report.

Data Validation Report

DATA VALIDATION FOR: Miscellaneous Wet Chemistry

SITE: Lawrence Aviation Superfund Site

CONTRACT LAB: Test America Laboratories
South Burlington, VT

SDG: 200-1636-1

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: January, 2011

MATRIX: Aqueous

The Chain of Custody (COC) documentation associated with this data set listed eight (8) aqueous samples. The samples were collected on September 18, 2010 and September 19, 2010. The samples were shipped to Test America Laboratories located in South Burlington, VT. The samples were then subcontracted to the Test America Laboratories location in Savannah , GA for these analyses.

The data evaluation was performed in accordance with the QAPP that was developed for this site as well as method recommended QC practices. Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

Table 1 of this report contains a cross reference between the Field Sample ID's and the Laboratory Sample ID's. Appendix A of this report contains a summary of the data qualifiers that may be used in the report. Appendix B contains the qualified data result pages. Appendix C contains the Chain of Custody (COC) documents associated with this data set.

The samples in this data set were analyzed for Miscellaneous Wet Chemistry parameters that were specified on the COC documents that accompanied the samples to the laboratory. This data review is associated with these Miscellaneous Wet Chemistry Analyses.

1. OVERVIEW

Eight (8) aqueous samples were collected September 18-19, 2010 and received at Test America Laboratories located in South Burlington, VT on September 21, 2010. A Trip Blank sample was analyzed for Volatile Organic Analytes however it was not listed on the COC documents that accompanied the samples to the laboratory. The laboratory reported sample data for five (5) The Wet Chemistry analytes that were listed on the COC documentation were subcontracted to the Test America Laboratory located in Savannah GA.

Table 1 of this report is a summary of the field sample ID and laboratory sample ID. The samples in this data set were analyzed for the parameters listed on the COC documents. A full data deliverable was generated to report these analyses.

These samples were analyzed for Chloride (EPA Method 300.0), Fluoride (EPA Method 300.0), Sulfate (EPA Method 300.0), Total Dissolved Solids (SM2540C), Total Suspended Solids (SM2540D), Alkalinity (SM2320B) and Total Organic Carbon (SM5310B).

2. HOLDING TIME

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. The miscellaneous wet chemistry analytes have specific holding times cited in the approved method.

The samples in this data set were prepared and analyzed for the cited analyses within the method specified holding times.

3. CALIBRATION ANALYSIS

The laboratory summarized the initial and continuing calibration data associated with each of the wet chemistry analytes where applicable. All initial and continuing calibration standard analyses associated with this data set met QC criteria.

4. MATRIX SPIKE (MS) ANALYSIS

Multiple samples were utilized for the matrix spike analyses for each of these parameters. Acceptable recovery of the MS is +/- 25% of the True Value. Sample ISCO-MWI was utilized for the site specific matrix spike analysis of the Anions (Chloride, Sulfate, and Fluoride). The percent recovery of each analyte in the MS sample met QC criteria.

5. DUPLICATE SAMPLE ANALYSIS

The laboratory duplicate sample analysis is used to evaluate the laboratory precision of the method for each analyte. If the duplicate sample analysis results for a particular analyte fall outside the control windows of 20% RPD or +/- CRDL, whichever is appropriate depending upon the concentration of the sample, the associated sample results are qualified "J" estimated. Sample ISCO MW-1 was prepared and analyzed in duplicate for Alkalinity and Total Organic Carbon. The RPD of these duplicate analyses met QC criteria.

6. BLANKS

Blank analyses are assessed to determine the existence and magnitude of contamination problems. The criteria for the evaluation of blanks applies to all blanks, including but not limited to reagent blanks, method blanks and field blanks. The responsibility for action in the case of an unsuitable blank result depends upon the circumstances and the origin of the blank itself. If the problem with any blank exists, then all associated data must be carefully evaluated to determine whether there is inherent variability in the data for that case, or the problem is an isolated occurrence not affecting other data.

The laboratory prepared and analyzed a method blank/preparation blank with each batch of samples for all of the Wet Chemistry analytes. Each of the method blank and/or preparation blank samples associated with this data set was free from contamination of the target analyte above the reporting limit.

7. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine if data should be qualified or rejected.

The laboratory reported LCS and/or LCSD recovery for each of the analyses reported with this data set. The recovery of each LCS and/or LCSD met QC criteria.

8. COMPOUND IDENTIFICATION

All samples results are reported in accordance with the cited methods. Each of the samples in this data set were prepared and analyzed without dilution with the exception of the Ion Chromatography analyses (300.0). The Chloride and Sulfate analyses were analyzed using a dilution (1:5) due to the color and appearance of the sample. Reporting limits have been elevated to reflect the sample dilution utilized for these analyses.

9. FIELD DUPLICATE DATA RESULTS:

Field duplicate samples are taken and analyzed as an indication of overall precision. These measure both field and laboratory precision; therefore, the results may have more variability than lab duplicate samples. Soil samples are also expected to have a greater variance due to the difficulties associated with collecting exact duplicate soil samples. Data was not qualified based on the results of the field duplicate sample data.

Field duplicate samples were not analyzed in this data set.

10. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The inorganic analyses associated with this data set included the reporting of five (5) aqueous samples. The samples were analyzed for Miscellaneous Wet Chemistry analytes as noted on the COC documents that accompanied the data set. A copy of the Chain of Custody is located in Appendix C of this report. The sample results are reported in accordance with the cited methods.

The Miscellaneous Wet Chemistry data results are acceptable for use without data qualification.

TABLE 1

FIELD SAMPLE ID

LABORATORY ID

ISCO-MW-1

200-1636-1

ISCO-MW-2

200-1636-2

ISCO-MW-3

200-1636-3

ISCO-MW-4

200-1636-4

ISCO-MW-5

200-1636-5

TB

200-1636-6

VHBLK01

200-1636-7

APPENDIX A

DATA QUALIFIER DEFINITIONS

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.”

NJ - The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

K – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL – The analyte was not detected, and the reported quantitation limit is probably higher than reported.

APPENDIX B

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW1

Lab Sample ID: 200-1636-1

Date Sampled: 09/18/2010 1115

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 1.0
 Date Analyzed: 09/23/2010 1658
 Date Prepared: 09/23/2010 1658

Analysis Batch: 200-7052

Instrument ID: J.i
 Lab File ID: jbmd05.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	0.50	U	0.50
Chloromethane	0.50	U	0.50
Vinyl chloride	0.50	U	0.50
Bromomethane	0.50	U	0.50
Chloroethane	0.50	U	0.50
Trichlorofluoromethane	0.50	U	0.50
1,1-Dichloroethene	0.50	U	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50
Acetone	2.3	J B U	5.0
Carbon disulfide	0.50	U	0.50
Methyl acetate	0.50	U	0.50
Methylene chloride	0.50	U	0.50
trans-1,2-Dichloroethene	0.50	U	0.50
Methyl tert-butyl ether	1.6		0.50
1,1-Dichloroethane	0.50	U	0.50
cis-1,2-Dichloroethene	0.46	J	0.50
2-Butanone	5.0	U	5.0
Bromochloromethane	0.50	U	0.50
Chloroform	0.47	J	0.50
1,1,1-Trichloroethane	0.11	J	0.50
Cyclohexane	0.50	U	0.50
Carbon tetrachloride	0.50	U	0.50
Benzene	0.50	U	0.50
1,2-Dichloroethane	0.50	U	0.50
Trichloroethene	76	E	0.50
Methylcyclohexane	0.50	U	0.50
1,2-Dichloropropane	0.50	U	0.50
Bromodichloromethane	0.50	U	0.50
cis-1,3-Dichloropropene	0.50	U	0.50
4-Methyl-2-pentanone	5.0	U	5.0
Toluene	0.10	J	0.50
trans-1,3-Dichloropropene	0.50	U	0.50
1,1,2-Trichloroethane	0.50	U	0.50
Tetrachloroethene	0.97		0.50
2-Hexanone	5.0	U	5.0
Dibromochloromethane	0.50	U	0.50
1,2-Dibromoethane	0.50	U	0.50
Chlorobenzene	0.50	U	0.50
Ethylbenzene	0.50	U	0.50
o-Xylene	0.50	U	0.50
m,p-Xylene	0.060	J	0.50
Styrene	0.50	U	0.50
Bromoform	0.50	U	0.50
Isopropylbenzene	0.50	U	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.50
1,3-Dichlorobenzene	0.50	U	0.50

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW1

Lab Sample ID: 200-1636-1

Date Sampled: 09/18/2010 1115

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-7052	Instrument ID: J.i
Preparation:	SOM01.2/VOA_PR		Lab File ID: jbmd05.d
Dilution:	1.0		Initial Weight/Volume: 25 mL
Date Analyzed:	09/23/2010 1658		Final Weight/Volume: 25 mL
Date Prepared:	09/23/2010 1658		

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	0.50	U	0.50
1,2-Dichlorobenzene	0.50	U	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.50
1,2,4-Trichlorobenzene	0.50	U	0.50
1,2,3-Trichlorobenzene	0.031	JB U	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	101		65 - 131
Chloroethane-d5	102		71 - 131
1,1-Dichloroethene-d2	79		55 - 104
2-Butanone-d5	101		49 - 155
Chloroform-d	101		78 - 121
1,2-Dichloroethane-d4	103		78 - 129
Benzene-d6	105		77 - 124
1,2-Dichloropropane-d6	93		79 - 124
Toluene-d8	103		77 - 121
trans-1,3-Dichloropropene-d4	100		73 - 121
2-Hexanone-d5	99		28 - 135
1,1,2,2-Tetrachloroethane-d2	101		73 - 125
1,2-Dichlorobenzene-d4	107		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW1

Lab Sample ID: 200-1636-1

Date Sampled: 09/18/2010 1115

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 1.0
 Date Analyzed: 09/23/2010 1658
 Date Prepared: 09/23/2010 1658

Analysis Batch: 200-7052

Instrument ID: J.i
 Lab File ID: jbmd05.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Tentatively Identified Compounds Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.68	0.83	B J
	Unknown	6.93	2.7	B X J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	1.4	B J N
	Unknown siloxane derivative	10.72	1.4	B J (RT)

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW1

Lab Sample ID: 200-1636-1
Client Matrix: Water

Date Sampled: 09/18/2010 1115
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-6993	Instrument ID: Ji
Preparation:	SOM01.2/VOA_PR		Lab File ID: jbmc13.d
Dilution:	4.6		Initial Weight/Volume: 25 mL
Date Analyzed:	09/23/2010 1159	Run Type: DL	Final Weight/Volume: 25 mL
Date Prepared:	09/23/2010 1159		

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	2.3	U	2.3
Chloromethane	2.3	U	2.3
Vinyl chloride	2.3	U	2.3
Bromomethane	2.3	U	2.3
Chloroethane	2.3	U	2.3
Trichlorofluoromethane	2.3	U	2.3
1,1-Dichloroethene	2.3	U	2.3
1,1,2-Trichloro-1,2,2-trifluoroethane	2.3	U	2.3
Acetone	12	J D B U	23
Carbon disulfide	2.3	U	2.3
Methyl acetate	2.3	U	2.3
Methylene chloride	2.3	U	2.3
trans-1,2-Dichloroethene	2.3	U	2.3
Methyl tert-butyl ether	1.7	J D	2.3
1,1-Dichloroethane	2.3	U	2.3
cis-1,2-Dichloroethene	0.51	J D	2.3
2-Butanone	23	U	23
Bromochloromethane	2.3	U	2.3
Chloroform	0.50	J D	2.3
1,1,1-Trichloroethane	2.3	U	2.3
Cyclohexane	2.3	U	2.3
Carbon tetrachloride	2.3	U	2.3
Benzene	2.3	U	2.3
1,2-Dichloroethane	2.3	U	2.3
Trichloroethene	70	D	2.3
Methylcyclohexane	2.3	U	2.3
1,2-Dichloropropane	2.3	U	2.3
Bromodichloromethane	2.3	U	2.3
cis-1,3-Dichloropropene	2.3	U	2.3
4-Methyl-2-pentanone	23	U	23
Toluene	0.15	J D	2.3
trans-1,3-Dichloropropene	2.3	U	2.3
1,1,2-Trichloroethane	2.3	U	2.3
Tetrachloroethene	0.86	J D	2.3
2-Hexanone	23	U	23
Dibromochloromethane	2.3	U	2.3
1,2-Dibromoethane	2.3	U	2.3
Chlorobenzene	2.3	U	2.3
Ethylbenzene	2.3	U	2.3
o-Xylene	2.3	U	2.3
m,p-Xylene	2.3	U	2.3
Styrene	2.3	U	2.3
Bromoform	2.3	U	2.3
Isopropylbenzene	2.3	U	2.3
1,1,2,2-Tetrachloroethane	2.3	U	2.3
1,3-Dichlorobenzene	2.3	U	2.3

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW1

Lab Sample ID: 200-1636-1

Date Sampled: 09/18/2010 1115

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-6993	Instrument ID:	Ji
Preparation:	SOM01.2/VOA_PR		Lab File ID:	jbmc13.d
Dilution:	4.6		Initial Weight/Volume:	25 mL
Date Analyzed:	09/23/2010 1159	Run Type: DL	Final Weight/Volume:	25 mL
Date Prepared:	09/23/2010 1159			

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	2.3	U	2.3
1,2-Dichlorobenzene	2.3	U	2.3
1,2-Dibromo-3-chloropropane	2.3	U	2.3
1,2,4-Trichlorobenzene	2.3	U	2.3
1,2,3-Trichlorobenzene	2.3	U	2.3

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	98		65 - 131
Chloroethane-d5	101		71 - 131
1,1-Dichloroethene-d2	76		55 - 104
2-Butanone-d5	102		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	106		78 - 129
Benzene-d6	105		77 - 124
1,2-Dichloropropane-d6	91		79 - 124
Toluene-d8	100		77 - 121
trans-1,3-Dichloropropene-d4	102		73 - 121
2-Hexanone-d5	99		28 - 135
1,1,2,2-Tetrachloroethane-d2	103		73 - 125
1,2-Dichlorobenzene-d4	105		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW1

Lab Sample ID: 200-1636-1

Date Sampled: 09/18/2010 1115

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 4.6
 Date Analyzed: 09/23/2010 1159
 Date Prepared: 09/23/2010 1159

Analysis Batch: 200-6993

Run Type: DL

Instrument ID: J.i
 Lab File ID: jbmc13.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Tentatively Identified Compounds

Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
420-56-4	Trimethylsilyl fluoride	1.68	2.4	D J N
	Unknown	6.93	12	B X D J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	4.8	B D J N
	Unknown siloxane derivative	10.72	3.8	B D J

PC

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW2

Lab Sample ID: 200-1636-2

Date Sampled: 09/18/2010 1250

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 1.0
 Date Analyzed: 09/23/2010 1227
 Date Prepared: 09/23/2010 1227

Analysis Batch: 200-6993

Instrument ID: J.i
 Lab File ID: jbmcl4.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	0.50	U	0.50
Chloromethane	0.50	U	0.50
Vinyl chloride	0.50 R	U	0.50
Bromomethane	0.50	U	0.50
Chloroethane	0.50	U	0.50
Trichlorofluoromethane	0.50	U	0.50
1,1-Dichloroethene	0.50 UJ	U	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50
Acetone	10	B U	5.0
Carbon disulfide	1.1		0.50
Methyl acetate	0.50	U	0.50
Methylene chloride	0.50	U	0.50
trans-1,2-Dichloroethene	0.50 UJ	U	0.50
Methyl tert-butyl ether	1.1		0.50
1,1-Dichloroethane	0.50	U	0.50
cis-1,2-Dichloroethene	0.50 UJ	U	0.50
2-Butanone	5.0	U	5.0
Bromochloromethane	0.50	U	0.50
Chloroform	0.45	J	0.50
1,1,1-Trichloroethane	0.11	J	0.50
Cyclohexane	0.50	U	0.50
Carbon tetrachloride	0.50	U	0.50
Benzene	0.50	U	0.50
1,2-Dichloroethane	0.50	U	0.50
Trichloroethene	0.50	U	0.50
Methylcyclohexane	0.50	U	0.50
1,2-Dichloropropane	0.50	U	0.50
Bromodichloromethane	0.50	U	0.50
cis-1,3-Dichloropropene	0.50 R	U	0.50
4-Methyl-2-pentanone	5.0	U	5.0
Toluene	0.050	J	0.50
trans-1,3-Dichloropropene	0.50 RR	U	0.50
1,1,2-Trichloroethane	0.50 RR	U	0.50
Tetrachloroethene	1.5		0.50
2-Hexanone	5.0	U	5.0
Dibromochloromethane	0.50	U	0.50
1,2-Dibromoethane	0.50	U	0.50
Chlorobenzene	0.50	U	0.50
Ethylbenzene	0.50	U	0.50
o-Xylene	0.50	U	0.50
m,p-Xylene	0.50	U	0.50
Styrene	0.50	U	0.50
Bromoform	0.50	U	0.50
Isopropylbenzene	0.50	U	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.50
1,3-Dichlorobenzene	0.50	U	0.50

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW2

Lab Sample ID: 200-1636-2

Date Sampled: 09/18/2010 1250

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-6993	Instrument ID:	J.i
Preparation:	SOM01.2/VOA_PR		Lab File ID:	jbmc14.d
Dilution:	1.0		Initial Weight/Volume:	25 mL
Date Analyzed:	09/23/2010 1227		Final Weight/Volume:	25 mL
Date Prepared:	09/23/2010 1227			

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	0.50	U	0.50
1,2-Dichlorobenzene	0.50	U	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.50
1,2,4-Trichlorobenzene	0.50	U	0.50
1,2,3-Trichlorobenzene	0.50	U	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	0	.	65 - 131
Chloroethane-d5	100		71 - 131
1,1-Dichloroethene-d2	31	.	55 - 104
2-Butanone-d5	107		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	106		78 - 129
Benzene-d6	106		77 - 124
1,2-Dichloropropane-d6	94		79 - 124
Toluene-d8	101		77 - 121
trans-1,3-Dichloropropene-d4	0	.	73 - 121
2-Hexanone-d5	103		28 - 135
1,1,2,2-Tetrachloroethane-d2	104		73 - 125
1,2-Dichlorobenzene-d4	106		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW2

Lab Sample ID: 200-1636-2

Date Sampled: 09/18/2010 1250

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 1.0
 Date Analyzed: 09/23/2010 1227
 Date Prepared: 09/23/2010 1227

Analysis Batch: 200-6993

Instrument ID: J.i
 Lab File ID: jbmc14.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Tentatively Identified Compounds Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.43	0.74	J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.89	0.66	B J N
124-19-6	Nonanal	13.04	0.68	J N (22)

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW3

Lab Sample ID: 200-1636-3
Client Matrix: Water

Date Sampled: 09/18/2010 1630
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR
Dilution: 3.3
Date Analyzed: 09/23/2010 1754
Date Prepared: 09/23/2010 1754

Analysis Batch: 200-7052

Instrument ID: J.i
Lab File ID: jbmd07.d
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	1.6	U	1.6
Chloromethane	1.6	U	1.6
Vinyl chloride	1.6	U	1.6
Bromomethane	1.6	U	1.6
Chloroethane	1.6	U	1.6
Trichlorofluoromethane	1.6	U	1.6
1,1-Dichloroethene	1.6	U	1.6
1,1,2-Trichloro-1,2,2-trifluoroethane	1.6	U	1.6
Acetone	8.9	J B U	16
Carbon disulfide	1.6	U	1.6
Methyl acetate	1.6	U	1.6
Methylene chloride	1.6	U	1.6
trans-1,2-Dichloroethene	1.6	U	1.6
Methyl tert-butyl ether	0.29	J	1.6
1,1-Dichloroethane	1.6	U	1.6
cis-1,2-Dichloroethene	0.85	J	1.6
2-Butanone	16	U	16
Bromochloromethane	1.6	U	1.6
Chloroform	1.6	U	1.6
1,1,1-Trichloroethane	1.6	U	1.6
Cyclohexane	1.6	U	1.6
Carbon tetrachloride	1.6	U	1.6
Benzene	1.6	U	1.6
1,2-Dichloroethane	1.6	U	1.6
Trichloroethene	590	E	1.6
Methylcyclohexane	1.6	U	1.6
1,2-Dichloropropane	1.6	U	1.6
Bromodichloromethane	1.6	U	1.6
cis-1,3-Dichloropropene	1.6	U	1.6
4-Methyl-2-pentanone	16	U	16
Toluene	0.13	J	1.6
trans-1,3-Dichloropropene	1.6	U	1.6
1,1,2-Trichloroethane	1.6	U	1.6
Tetrachloroethene	4.7	U	1.6
2-Hexanone	16	U	16
Dibromochloromethane	1.6	U	1.6
1,2-Dibromoethane	1.6	U	1.6
Chlorobenzene	1.6	U	1.6
Ethylbenzene	1.6	U	1.6
o-Xylene	1.6	U	1.6
m,p-Xylene	1.6	U	1.6
Styrene	1.6	U	1.6
Bromoform	1.6	U	1.6
Isopropylbenzene	1.6	U	1.6
1,1,2,2-Tetrachloroethane	1.6	U	1.6
1,3-Dichlorobenzene	1.6	U	1.6

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW3

Lab Sample ID: 200-1636-3

Date Sampled: 09/18/2010 1630

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-7052	Instrument ID: J.i
Preparation:	SOM01.2/VOA_PR		Lab File ID: jbmd07.d
Dilution:	3.3		Initial Weight/Volume: 25 mL
Date Analyzed:	09/23/2010 1754		Final Weight/Volume: 25 mL
Date Prepared:	09/23/2010 1754		

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	1.6	U	1.6
1,2-Dichlorobenzene	1.6	U	1.6
1,2-Dibromo-3-chloropropane	1.6	U	1.6
1,2,4-Trichlorobenzene	1.6	U	1.6
1,2,3-Trichlorobenzene	1.6	U	1.6

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	102		65 - 131
Chloroethane-d5	103		71 - 131
1,1-Dichloroethene-d2	79		55 - 104
2-Butanone-d5	106		49 - 155
Chloroform-d	102		78 - 121
1,2-Dichloroethane-d4	106		78 - 129
Benzene-d6	108		77 - 124
1,2-Dichloropropane-d6	96		79 - 124
Toluene-d8	105		77 - 121
trans-1,3-Dichloropropene-d4	103		73 - 121
2-Hexanone-d5	101		28 - 135
1,1,2,2-Tetrachloroethane-d2	104		73 - 125
1,2-Dichlorobenzene-d4	110		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW3

Lab Sample ID: 200-1636-3

Date Sampled: 09/18/2010 1630

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 3.3
 Date Analyzed: 09/23/2010 1754
 Date Prepared: 09/23/2010 1754

Analysis Batch: 200-7052

Instrument ID: J.i
 Lab File ID: jbmd07.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Tentatively Identified Compounds Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.68	14	B J
	Unknown	6.93	9.3	B X J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	3.6	B J N
	Unknown siloxane derivative	10.72	3.0	B J

pc

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW3

Lab Sample ID: 200-1636-3

Date Sampled: 09/18/2010 1630

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 36.7
 Date Analyzed: 09/23/2010 1255
 Date Prepared: 09/23/2010 1255

Analysis Batch: 200-6993
 Run Type: DL

Instrument ID: J.i
 Lab File ID: jbmc15.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	18	U	18
Chloromethane	18	U	18
Vinyl chloride	18	U	18
Bromomethane	18	U	18
Chloroethane	18	U	18
Trichlorofluoromethane	18	U	18
1,1-Dichloroethene	18	U	18
1,1,2-Trichloro-1,2,2-trifluoroethane	18	U	18
Acetone	240	D B U	180
Carbon disulfide	18	U	18
Methyl acetate	18	U	18
Methylene chloride	18	U	18
trans-1,2-Dichloroethene	18	U	18
Methyl tert-butyl ether	18	U	18
1,1-Dichloroethane	18	U	18
cis-1,2-Dichloroethene	18	U	18
2-Butanone	180	U	180
Bromochloromethane	18	U	18
Chloroform	18	U	18
1,1,1-Trichloroethane	18	U	18
Cyclohexane	18	U	18
Carbon tetrachloride	18	U	18
Benzene	18	U	18
1,2-Dichloroethane	18	U	18
Trichloroethene	550	D	18
Methylcyclohexane	18	U	18
1,2-Dichloropropane	18	U	18
Bromodichloromethane	18	U	18
cis-1,3-Dichloropropene	18	U	18
4-Methyl-2-pentanone	180	U	180
Toluene	18	U	18
trans-1,3-Dichloropropene	18	U	18
1,1,2-Trichloroethane	18	U	18
Tetrachloroethene	4.2	J D	18
2-Hexanone	180	U	180
Dibromochloromethane	18	U	18
1,2-Dibromoethane	18	U	18
Chlorobenzene	18	U	18
Ethylbenzene	18	U	18
o-Xylene	18	U	18
m,p-Xylene	18	U	18
Styrene	18	U	18
Bromoform	18	U	18
Isopropylbenzene	18	U	18
1,1,2,2-Tetrachloroethane	18	U	18
1,3-Dichlorobenzene	18	U	18

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW3

Lab Sample ID: 200-1636-3
Client Matrix: Water

Date Sampled: 09/18/2010 1630
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-6993	Instrument ID:	J.i
Preparation:	SOM01.2/VOA_PR		Lab File ID:	jbmc15.d
Dilution:	36.7		Initial Weight/Volume:	25 mL
Date Analyzed:	09/23/2010 1255	Run Type: DL	Final Weight/Volume:	25 mL
Date Prepared:	09/23/2010 1255			

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	18	U	18
1,2-Dichlorobenzene	18	U	18
1,2-Dibromo-3-chloropropane	18	U	18
1,2,4-Trichlorobenzene	18	U	18
1,2,3-Trichlorobenzene	18	U	18

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	101		65 - 131
Chloroethane-d5	102		71 - 131
1,1-Dichloroethene-d2	78		55 - 104
2-Butanone-d5	106		49 - 155
Chloroform-d	104		78 - 121
1,2-Dichloroethane-d4	109		78 - 129
Benzene-d6	106		77 - 124
1,2-Dichloropropane-d6	97		79 - 124
Toluene-d8	104		77 - 121
trans-1,3-Dichloropropene-d4	103		73 - 121
2-Hexanone-d5	102		28 - 135
1,1,2,2-Tetrachloroethane-d2	103		73 - 125
1,2-Dichlorobenzene-d4	108		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW3

Lab Sample ID: 200-1636-3
Client Matrix: Water

Date Sampled: 09/18/2010 1630
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr Analysis Batch: 200-6993 Instrument ID: J.i
Preparation: SOM01.2/VOA_PR Lab File ID: jbmc15.d
Dilution: 36.7 Initial Weight/Volume: 25 mL
Date Analyzed: 09/23/2010 1255 Run Type: DL Final Weight/Volume: 25 mL
Date Prepared: 09/23/2010 1255

Tentatively Identified Compounds Number TIC's Found: 2

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	6.93	100	B X D J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	21	B D J N

RC

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW4

Date Sampled: 09/19/2010 1210

Lab Sample ID: 200-1636-4

Date Received: 09/21/2010 1005

Client Matrix: Water

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 4.0
 Date Analyzed: 09/23/2010 1849
 Date Prepared: 09/23/2010 1849

Analysis Batch: 200-7052

Instrument ID: J.i
 Lab File ID: jbmd09.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	2.0	U	2.0
Chloromethane	2.0	U	2.0
Vinyl chloride	2.0	U	2.0
Bromomethane	2.0	U	2.0
Chloroethane	2.0	U	2.0
Trichlorofluoromethane	2.0	U	2.0
1,1-Dichloroethene	2.0	U	2.0
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	20
Acetone	11	J-B U	2.0
Carbon disulfide	2.0	U	2.0
Methyl acetate	2.0	U	2.0
Methylene chloride	2.0	U	2.0
trans-1,2-Dichloroethene	2.0	U	2.0
Methyl tert-butyl ether	0.54	J	2.0
1,1-Dichloroethane	2.0	U	2.0
cis-1,2-Dichloroethene	0.83	J	20
2-Butanone	20	U	2.0
Bromochloromethane	2.0	U	2.0
Chloroform	2.0	U	2.0
1,1,1-Trichloroethane	2.0	U	2.0
Cyclohexane	2.0	U	2.0
Carbon tetrachloride	2.0	U	2.0
Benzene	2.0	U	2.0
1,2-Dichloroethane	2.0	U	2.0
Trichloroethene	730	E	2.0
Methylcyclohexane	2.0	U	2.0
1,2-Dichloropropane	2.0	U	2.0
Bromodichloromethane	2.0	U	2.0
cis-1,3-Dichloropropene	2.0	U	20
4-Methyl-2-pentanone	20	U	2.0
Toluene	2.0	U	2.0
trans-1,3-Dichloropropene	2.0	U	2.0
1,1,2-Trichloroethane	2.0	U	2.0
Tetrachloroethene	8.7	U	20
2-Hexanone	20	U	2.0
Dibromochloromethane	2.0	U	2.0
1,2-Dibromoethane	2.0	U	2.0
Chlorobenzene	2.0	U	2.0
Ethylbenzene	2.0	U	2.0
o-Xylene	2.0	U	2.0
m,p-Xylene	2.0	U	2.0
Styrene	2.0	U	2.0
Bromoform	2.0	U	2.0
Isopropylbenzene	2.0	U	2.0
1,1,2,2-Tetrachloroethane	2.0	U	2.0
1,3-Dichlorobenzene	2.0	U	2.0

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW4

Lab Sample ID: 200-1636-4

Date Sampled: 09/19/2010 1210

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 4.0
 Date Analyzed: 09/23/2010 1849
 Date Prepared: 09/23/2010 1849

Analysis Batch: 200-7052

Instrument ID: J.i
 Lab File ID: jbmd09.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	2.0	U	2.0
1,2-Dichlorobenzene	2.0	U	2.0
1,2-Dibromo-3-chloropropane	2.0	U	2.0
1,2,4-Trichlorobenzene	2.0	U	2.0
1,2,3-Trichlorobenzene	2.0	U	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	97		65 - 131
Chloroethane-d5	105		71 - 131
1,1-Dichloroethene-d2	79		55 - 104
2-Butanone-d5	105		49 - 155
Chloroform-d	103		78 - 121
1,2-Dichloroethane-d4	109		78 - 129
Benzene-d6	108		77 - 124
1,2-Dichloropropane-d6	97		79 - 124
Toluene-d8	106		77 - 121
trans-1,3-Dichloropropene-d4	99		73 - 121
2-Hexanone-d5	104		28 - 135
1,1,2,2-Tetrachloroethane-d2	109		73 - 125
1,2-Dichlorobenzene-d4	111		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW4

Lab Sample ID: 200-1636-4
Client Matrix: Water

Date Sampled: 09/19/2010 1210
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR
Dilution: 4.0
Date Analyzed: 09/23/2010 1849
Date Prepared: 09/23/2010 1849

Analysis Batch: 200-7052

Instrument ID: J.i
Lab File ID: jbmd09.d
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Tentatively Identified Compounds Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.68	8.6	B J
	Unknown	6.93	11	B X J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	4.6	B J N
	Unknown siloxane derivative	10.73	4.1	B J (PC)

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW4

Lab Sample ID: 200-1636-4

Date Sampled: 09/19/2010 1210

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr	Analysis Batch: 200-6993	Instrument ID: J.i
Preparation: SOM01.2/VOA_PR		Lab File ID: jbmc16.d
Dilution: 40		Initial Weight/Volume: 25 mL
Date Analyzed: 09/23/2010 1323	Run Type: DL	Final Weight/Volume: 25 mL
Date Prepared: 09/23/2010 1323		

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	20	U	20
Chloromethane	20	U	20
Vinyl chloride	20	U	20
Bromomethane	20	U	20
Chloroethane	20	U	20
Trichlorofluoromethane	20	U	20
1,1-Dichloroethene	20	U	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20	U	20
Acetone	130	J D B U	200
Carbon disulfide	20	U	20
Methyl acetate	20	U	20
Methylene chloride	20	U	20
trans-1,2-Dichloroethene	20	U	20
Methyl tert-butyl ether	20	U	20
1,1-Dichloroethane	20	U	20
cis-1,2-Dichloroethene	20	U	20
2-Butanone	200	U	200
Bromochloromethane	20	U	20
Chloroform	20	U	20
1,1,1-Trichloroethane	20	U	20
Cyclohexane	20	U	20
Carbon tetrachloride	20	U	20
Benzene	20	U	20
1,2-Dichloroethane	20	U	20
Trichloroethene	690	D	20
Methylcyclohexane	20	U	20
1,2-Dichloropropane	20	U	20
Bromodichloromethane	20	U	20
cis-1,3-Dichloropropene	20	U	20
4-Methyl-2-pentanone	200	U	200
Toluene	20	U	20
trans-1,3-Dichloropropene	20	U	20
1,1,2-Trichloroethane	20	U	20
Tetrachloroethene	9.3	J D	20
2-Hexanone	200	U	200
Dibromochloromethane	20	U	20
1,2-Dibromoethane	20	U	20
Chlorobenzene	20	U	20
Ethylbenzene	20	U	20
o-Xylene	20	U	20
m,p-Xylene	20	U	20
Styrene	20	U	20
Bromoform	20	U	20
Isopropylbenzene	20	U	20
1,1,2,2-Tetrachloroethane	20	U	20
1,3-Dichlorobenzene	20	U	20

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW4

Lab Sample ID: 200-1636-4

Client Matrix: Water

Date Sampled: 09/19/2010 1210

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 40
 Date Analyzed: 09/23/2010 1323
 Date Prepared: 09/23/2010 1323

Analysis Batch: 200-6993

Run Type: DL

Instrument ID: J.i
 Lab File ID: jbmc16.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	20	U	20
1,2-Dichlorobenzene	20	U	20
1,2-Dibromo-3-chloropropane	20	U	20
1,2,4-Trichlorobenzene	20	U	20
1,2,3-Trichlorobenzene	20	U	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	97		65 - 131
Chloroethane-d5	99		71 - 131
1,1-Dichloroethene-d2	76		55 - 104
2-Butanone-d5	105		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	104		78 - 129
Benzene-d6	103		77 - 124
1,2-Dichloropropane-d6	93		79 - 124
Toluene-d8	100		77 - 121
trans-1,3-Dichloropropene-d4	98		73 - 121
2-Hexanone-d5	99		28 - 135
1,1,2,2-Tetrachloroethane-d2	105		73 - 125
1,2-Dichlorobenzene-d4	104		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW4

Lab Sample ID: 200-1636-4
Client Matrix: Water

Date Sampled: 09/19/2010 1210
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR
Dilution: 40
Date Analyzed: 09/23/2010 1323
Date Prepared: 09/23/2010 1323

Analysis Batch: 200-6993

Run Type: DL

Instrument ID: J.i
Lab File ID: jbm16.d
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Tentatively Identified Compounds

Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.68	22	D J
	Unknown	6.93	110	B X D J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	24	B D J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW5

Lab Sample ID: 200-1636-5

Date Sampled: 09/19/2010 1000

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 1.2
 Date Analyzed: 09/23/2010 1945
 Date Prepared: 09/23/2010 1945

Analysis Batch: 200-7052

Instrument ID: Ji
 Lab File ID: jbmd11.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	0.60	U	0.60
Chloromethane	0.60	U	0.60
Vinyl chloride	0.60	U	0.60
Bromomethane	0.60	U	0.60
Chloroethane	0.60	U	0.60
Trichlorofluoromethane	0.60	U	0.60
1,1-Dichloroethene	0.60	U	0.60
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	U	0.60
Acetone	2.8	J B U	6.0
Carbon disulfide	0.60	U	0.60
Methyl acetate	0.60	U	0.60
Methylene chloride	0.60	U	0.60
trans-1,2-Dichloroethene	0.60	U	0.60
Methyl tert-butyl ether	0.82		0.60
1,1-Dichloroethane	0.60	U	0.60
cis-1,2-Dichloroethene	0.83		0.60
2-Butanone	6.0	U	6.0
Bromochloromethane	0.60	U	0.60
Chloroform	0.41	J	0.60
1,1,1-Trichloroethane	0.14	J	0.60
Cyclohexane	0.60	U	0.60
Carbon tetrachloride	0.60	U	0.60
Benzene	0.60	U	0.60
1,2-Dichloroethane	0.60	U	0.60
Trichloroethene	220	E	0.60
Methylcyclohexane	0.60	U	0.60
1,2-Dichloropropane	0.60	U	0.60
Bromodichloromethane	0.60	U	0.60
cis-1,3-Dichloropropene	0.60	U	0.60
4-Methyl-2-pentanone	6.0	U	6.0
Toluene	0.083	J	0.60
trans-1,3-Dichloropropene	0.60	U	0.60
1,1,2-Trichloroethane	0.60	U	0.60
Tetrachloroethene	2.7		0.60
2-Hexanone	6.0	U	6.0
Dibromochloromethane	0.60	U	0.60
1,2-Dibromoethane	0.60	U	0.60
Chlorobenzene	0.60	U	0.60
Ethylbenzene	0.60	U	0.60
o-Xylene	0.60	U	0.60
m,p-Xylene	0.068	J	0.60
Styrene	0.60	U	0.60
Bromoform	0.60	U	0.60
Isopropylbenzene	0.60	U	0.60
1,1,2,2-Tetrachloroethane	0.60	U	0.60
1,3-Dichlorobenzene	0.60	U	0.60

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW5

Lab Sample ID: 200-1636-5

Client Matrix: Water

Date Sampled: 09/19/2010 1000

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-7052	Instrument ID:	Ji
Preparation:	SOM01.2/VOA_PR		Lab File ID:	jbmd11.d
Dilution:	1.2		Initial Weight/Volume:	25 mL
Date Analyzed:	09/23/2010 1945		Final Weight/Volume:	25 mL
Date Prepared:	09/23/2010 1945			

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	0.60	U	0.60
1,2-Dichlorobenzene	0.60	U	0.60
1,2-Dibromo-3-chloropropane	0.60	U	0.60
1,2,4-Trichlorobenzene	0.60	U	0.60
1,2,3-Trichlorobenzene	0.60	U	0.60

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	104		65 - 131
Chloroethane-d5	103		71 - 131
1,1-Dichloroethene-d2	80		55 - 104
2-Butanone-d5	107		49 - 155
Chloroform-d	103		78 - 121
1,2-Dichloroethane-d4	110		78 - 129
Benzene-d6	106		77 - 124
1,2-Dichloropropane-d6	98		79 - 124
Toluene-d8	106		77 - 121
trans-1,3-Dichloropropene-d4	105		73 - 121
2-Hexanone-d5	102		28 - 135
1,1,2,2-Tetrachloroethane-d2	107		73 - 125
1,2-Dichlorobenzene-d4	110		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW5

Lab Sample ID: 200-1636-5
Client Matrix: Water

Date Sampled: 09/19/2010 1000
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR
Dilution: 1.2
Date Analyzed: 09/23/2010 1945
Date Prepared: 09/23/2010 1945

Analysis Batch: 200-7052

Instrument ID: J.i
Lab File ID: jbm11.d
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Tentatively Identified Compounds

Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.68	2.0	B J
	Unknown	6.93	3.4	B X J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	1.1	B J N
	Unknown siloxane derivative	10.72	1.1	B J (PC)

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW5

Lab Sample ID: 200-1636-5

Date Sampled: 09/19/2010 1000

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-6993	Instrument ID:	J.i
Preparation:	SOM01.2/VOA_PR			Lab File ID:	jbmc17.d
Dilution:	13.3			Initial Weight/Volume:	25 mL
Date Analyzed:	09/23/2010 1352	Run Type:	DL	Final Weight/Volume:	25 mL
Date Prepared:	09/23/2010 1352				

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	6.6	U	6.6
Chloromethane	6.6	U	6.6
Vinyl chloride	6.6	U	6.6
Bromomethane	6.6	U	6.6
Chloroethane	6.6	U	6.6
Trichlorofluoromethane	6.6	U	6.6
1,1-Dichloroethene	6.6	U	6.6
1,1,2-Trichloro-1,2,2-trifluoroethane	6.6	U	6.6
Acetone	39	J D B U	66
Carbon disulfide	6.6	U	6.6
Methyl acetate	6.6	U	6.6
Methylene chloride	6.6	U	6.6
trans-1,2-Dichloroethene	6.6	U	6.6
Methyl tert-butyl ether	0.83	J D	6.6
1,1-Dichloroethane	6.6	U	6.6
cis-1,2-Dichloroethene	0.83	J D	6.6
2-Butanone	6.6	U	6.6
Bromochloromethane	6.6	U	6.6
Chloroform	6.6	U	6.6
1,1,1-Trichloroethane	6.6	U	6.6
Cyclohexane	6.6	U	6.6
Carbon tetrachloride	6.6	U	6.6
Benzene	6.6	U	6.6
1,2-Dichloroethane	6.6	U	6.6
Trichloroethene	200	D	6.6
Methylcyclohexane	6.6	U	6.6
1,2-Dichloropropane	6.6	U	6.6
Bromodichloromethane	6.6	U	6.6
cis-1,3-Dichloropropene	6.6	U	6.6
4-Methyl-2-pentanone	6.6	U	6.6
Toluene	6.6	U	6.6
trans-1,3-Dichloropropene	6.6	U	6.6
1,1,2-Trichloroethane	6.6	U	6.6
Tetrachloroethene	2.7	J D	6.6
2-Hexanone	6.6	U	6.6
Dibromochloromethane	6.6	U	6.6
1,2-Dibromoethane	6.6	U	6.6
Chlorobenzene	6.6	U	6.6
Ethylbenzene	6.6	U	6.6
o-Xylene	6.6	U	6.6
m,p-Xylene	6.6	U	6.6
Styrene	6.6	U	6.6
Bromoform	6.6	U	6.6
Isopropylbenzene	6.6	U	6.6
1,1,2,2-Tetrachloroethane	6.6	U	6.6
1,3-Dichlorobenzene	6.6	U	6.6

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW5

Lab Sample ID: 200-1636-5

Date Sampled: 09/19/2010 1000

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-6993	Instrument ID:	J.i
Preparation:	SOM01.2/VOA_PR		Lab File ID:	jbmc17.d
Dilution:	13.3		Initial Weight/Volume:	25 mL
Date Analyzed:	09/23/2010 1352	Run Type: DL	Final Weight/Volume:	25 mL
Date Prepared:	09/23/2010 1352			

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	6.6	U	6.6
1,2-Dichlorobenzene	6.6	U	6.6
1,2-Dibromo-3-chloropropane	6.6	U	6.6
1,2,4-Trichlorobenzene	6.6	U	6.6
1,2,3-Trichlorobenzene	6.6	U	6.6

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	100		65 - 131
Chloroethane-d5	101		71 - 131
1,1-Dichloroethene-d2	79		55 - 104
2-Butanone-d5	99		49 - 155
Chloroform-d	102		78 - 121
1,2-Dichloroethane-d4	108		78 - 129
Benzene-d6	107		77 - 124
1,2-Dichloropropane-d6	94		79 - 124
Toluene-d8	103		77 - 121
trans-1,3-Dichloropropene-d4	101		73 - 121
2-Hexanone-d5	100		28 - 135
1,1,2,2-Tetrachloroethane-d2	103		73 - 125
1,2-Dichlorobenzene-d4	107		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW5

Lab Sample ID: 200-1636-5

Date Sampled: 09/19/2010 1000

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 13.3
 Date Analyzed: 09/23/2010 1352
 Date Prepared: 09/23/2010 1352

Analysis Batch: 200-6993
 Run Type: DL

Instrument ID: J.i
 Lab File ID: jbm17.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Tentatively Identified Compounds Number TIC's Found: 2

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	6.93	36	B X D J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	8.8	B D J N PC

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: TB

Lab Sample ID: 200-1636-6

Date Sampled: 09/17/2010 0000

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 1.0
 Date Analyzed: 09/23/2010 2041
 Date Prepared: 09/23/2010 2041

Analysis Batch: 200-7052

Instrument ID: J.i
 Lab File ID: jbmd13.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	0.50	U	0.50
Chloromethane	0.50	U	0.50
Vinyl chloride	0.50	U	0.50
Bromomethane	0.50	U	0.50
Chloroethane	0.50	U	0.50
Trichlorofluoromethane	0.50	U	0.50
1,1-Dichloroethene	0.50	U	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50
Acetone	2.0	J-B U	5.0
Carbon disulfide	0.50	U	0.50
Methyl acetate	0.50	U	0.50
Methylene chloride	9.5	U	0.50
trans-1,2-Dichloroethene	0.50	U	0.50
Methyl tert-butyl ether	0.50	U	0.50
1,1-Dichloroethane	0.50	U	0.50
cis-1,2-Dichloroethene	0.50	U	0.50
2-Butanone	5.0	U	5.0
Bromochloromethane	0.50	U	0.50
Chloroform	0.50	U	0.50
1,1,1-Trichloroethane	0.50	U	0.50
Cyclohexane	0.50	U	0.50
Carbon tetrachloride	0.50	U	0.50
Benzene	0.50	U	0.50
1,2-Dichloroethane	0.50	U	0.50
Trichloroethene	0.063	J	0.50
Methylcyclohexane	0.50	U	0.50
1,2-Dichloropropane	0.50	U	0.50
Bromodichloromethane	0.50	U	0.50
cis-1,3-Dichloropropene	0.50	U	0.50
4-Methyl-2-pentanone	5.0	U	5.0
Toluene	0.50	U	0.50
trans-1,3-Dichloropropene	0.50	U	0.50
1,1,2-Trichloroethane	0.50	U	0.50
Tetrachloroethene	0.50	U	0.50
2-Hexanone	5.0	U	5.0
Dibromochloromethane	0.50	U	0.50
1,2-Dibromoethane	0.50	U	0.50
Chlorobenzene	0.50	U	0.50
Ethylbenzene	0.50	U	0.50
o-Xylene	0.50	U	0.50
m,p-Xylene	0.50	U	0.50
Styrene	0.50	U	0.50
Bromoform	0.50	U	0.50
Isopropylbenzene	0.50	U	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.50
1,3-Dichlorobenzene	0.50	U	0.50

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: TB

Lab Sample ID: 200-1636-6
Client Matrix: Water

Date Sampled: 09/17/2010 0000
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-7052	Instrument ID:	J.i
Preparation:	SOM01.2/VOA_PR		Lab File ID:	jbmd13.d
Dilution:	1.0		Initial Weight/Volume:	25 mL
Date Analyzed:	09/23/2010 2041		Final Weight/Volume:	25 mL
Date Prepared:	09/23/2010 2041			

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	0.50	U	0.50
1,2-Dichlorobenzene	0.50	U	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.50
1,2,4-Trichlorobenzene	0.50	U	0.50
1,2,3-Trichlorobenzene	0.50	U	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	99		65 - 131
Chloroethane-d5	100		71 - 131
1,1-Dichloroethene-d2	78		55 - 104
2-Butanone-d5	104		49 - 155
Chloroform-d	103		78 - 121
1,2-Dichloroethane-d4	108		78 - 129
Benzene-d6	104		77 - 124
1,2-Dichloropropane-d6	91		79 - 124
Toluene-d8	102		77 - 121
trans-1,3-Dichloropropene-d4	101		73 - 121
2-Hexanone-d5	102		28 - 135
1,1,2,2-Tetrachloroethane-d2	102		73 - 125
1,2-Dichlorobenzene-d4	111		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: TB

Lab Sample ID: 200-1636-6
Client Matrix: Water

Date Sampled: 09/17/2010 0000
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
Preparation: SOM01.2/VOA_PR
Dilution: 1.0
Date Analyzed: 09/23/2010 2041
Date Prepared: 09/23/2010 2041

Analysis Batch: 200-7052

Instrument ID: J.i
Lab File ID: jbmd13.d
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Tentatively Identified Compounds Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.68	0.69	B J
	Unknown	6.93	2.7	B X J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.89	1.4	B J N
	Unknown siloxane derivative	10.73	0.70	B J <i>(see)</i>

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: VHBLK01

Lab Sample ID: 200-1636-7

Client Matrix: Water

Date Sampled: 09/22/2010 0855

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 1.0
 Date Analyzed: 09/23/2010 2109
 Date Prepared: 09/23/2010 2109

Analysis Batch: 200-7052

Instrument ID: J.i
 Lab File ID: jbmd14.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Analyte	Result (ug/L)	Qualifier	RL
Dichlorodifluoromethane	0.50	U	0.50
Chloromethane	0.50	U	0.50
Vinyl chloride	0.50	U	0.50
Bromomethane	0.50	U	0.50
Chloroethane	0.50	U	0.50
Trichlorofluoromethane	0.50	U	0.50
1,1-Dichloroethene	0.50	U	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50
Acetone	2.1	J B U	5.0
Carbon disulfide	0.50	U	0.50
Methyl acetate	0.50	U	0.50
Methylene chloride	0.50	U	0.50
trans-1,2-Dichloroethene	0.50	U	0.50
Methyl tert-butyl ether	0.50	U	0.50
1,1-Dichloroethane	0.50	U	0.50
cis-1,2-Dichloroethene	0.50	U	0.50
2-Butanone	5.0	U	5.0
Bromochloromethane	0.50	U	0.50
Chloroform	0.50	U	0.50
1,1,1-Trichloroethane	0.50	U	0.50
Cyclohexane	0.50	U	0.50
Carbon tetrachloride	0.50	U	0.50
Benzene	0.50	U	0.50
1,2-Dichloroethane	0.50	U	0.50
Trichloroethene	0.50	U	0.50
Methylcyclohexane	0.50	U	0.50
1,2-Dichloropropane	0.50	U	0.50
Bromodichloromethane	0.50	U	0.50
cis-1,3-Dichloropropene	0.50	U	0.50
4-Methyl-2-pentanone	5.0	U	5.0
Toluene	0.50	U	0.50
trans-1,3-Dichloropropene	0.50	U	0.50
1,1,2-Trichloroethane	0.50	U	0.50
Tetrachloroethene	0.50	U	0.50
2-Hexanone	5.0	U	5.0
Dibromochloromethane	0.50	U	0.50
1,2-Dibromoethane	0.50	U	0.50
Chlorobenzene	0.50	U	0.50
Ethylbenzene	0.50	U	0.50
o-Xylene	0.50	U	0.50
m,p-Xylene	0.50	U	0.50
Styrene	0.50	U	0.50
Bromoform	0.50	U	0.50
Isopropylbenzene	0.50	U	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.50
1,3-Dichlorobenzene	0.50	U	0.50

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: VHBLK01

Lab Sample ID: 200-1636-7
Client Matrix: Water

Date Sampled: 09/22/2010 0855
Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method:	SOM01.2/VOA_Tr	Analysis Batch: 200-7052	Instrument ID:	J.i
Preparation:	SOM01.2/VOA_PR		Lab File ID:	jbmd14.d
Dilution:	1.0		Initial Weight/Volume:	25 mL
Date Analyzed:	09/23/2010 2109		Final Weight/Volume:	25 mL
Date Prepared:	09/23/2010 2109			

Analyte	Result (ug/L)	Qualifier	RL
1,4-Dichlorobenzene	0.50	U	0.50
1,2-Dichlorobenzene	0.50	U	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.50
1,2,4-Trichlorobenzene	0.50	U	0.50
1,2,3-Trichlorobenzene	0.50	U	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	97		65 - 131
Chloroethane-d5	99		71 - 131
1,1-Dichloroethene-d2	79		55 - 104
2-Butanone-d5	107		49 - 155
Chloroform-d	104		78 - 121
1,2-Dichloroethane-d4	109		78 - 129
Benzene-d6	106		77 - 124
1,2-Dichloropropane-d6	92		79 - 124
Toluene-d8	102		77 - 121
trans-1,3-Dichloropropene-d4	101		73 - 121
2-Hexanone-d5	101		28 - 135
1,1,1,2-Tetrachloroethane-d2	104		73 - 125
1,2-Dichlorobenzene-d4	110		80 - 131

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: VHBLK01

Lab Sample ID: 200-1636-7

Date Sampled: 09/22/2010 0855

Client Matrix: Water

Date Received: 09/21/2010 1005

SOM01.2/VOA_Tr Trace Water

Method: SOM01.2/VOA_Tr
 Preparation: SOM01.2/VOA_PR
 Dilution: 1.0
 Date Analyzed: 09/23/2010 2109
 Date Prepared: 09/23/2010 2109

Analysis Batch: 200-7052

Instrument ID: J.i
 Lab File ID: jbmd14.d
 Initial Weight/Volume: 25 mL
 Final Weight/Volume: 25 mL

Tentatively Identified Compounds Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.68	0.61	B J
	Unknown	6.93	2.7	B X J
541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	0.85	B J N
	Unknown siloxane derivative	10.72	0.63	B J

(20)

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW1

Lab Sample ID: 200-1636-1

Date Sampled: 09/18/2010 1115

Client Matrix: Water

Date Received: 09/21/2010 1005

ILM05.4/HG Cold Vapor Mercury Analysis

Method:	ILM05.4/HG	Analysis Batch: 200-6995	Instrument ID:	MEPCV3 II
Preparation:	ILM05.4/HG_CW1	Prep Batch: 200-6896	Lab File ID:	092410BB.PRN
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	09/24/2010 1526		Final Weight/Volume:	50 mL
Date Prepared:	09/23/2010 1155			

Analyte	Result (ug/L)	Qualifier	MDLE	RL
Mercury	0.99		0.052	0.20

ILM05.4/ICP Inductively Coupled Plasma - Atomic Emission Spectroscopy

Method:	ILM05.4/ICP	Analysis Batch: 200-7028	Instrument ID:	METICP7
Preparation:	ILM05.4_HW1	Prep Batch: 200-6872	Lab File ID:	092510-02.ttx
Dilution:	1.0		Initial Weight/Volume:	100 mL
Date Analyzed:	09/25/2010 1311		Final Weight/Volume:	100 mL
Date Prepared:	09/23/2010 0852			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10.0	U	1.0	10.0
Aluminum	1060		50.8	200
Arsenic	10.0	U	6.4	10.0
Barium	34.2	J	8.5	200
Beryllium	0.34	J	0.27	5.0
Calcium	21700		168	5000
Cadmium	5.0	U	0.72	5.0
Cobalt	50.0	U	0.90	50.0
Chromium	11.1		0.92	10.0
Copper	25.0	U	3.3	25.0
Iron	76.3	U J	9.2	100
Potassium	6440		201	5000
Magnesium	10100		66.6	5000
Manganese	16.3		0.29	15.0
Sodium	28400		73.8	5000
Nickel	32.8	J	1.9	40.0
Lead	5.5	U J	3.4	10.0
Antimony	60.0	U	4.7	60.0
Selenium	35.0	U	4.3	35.0
Thallium	25.0	U	1.8	25.0
Zinc	26.2	U J	0.51	60.0
Vanadium	50.0	U	1.6	50.0

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW2

Lab Sample ID: 200-1636-2

Date Sampled: 09/18/2010 1250

Client Matrix: Water

Date Received: 09/21/2010 1005

ILM05.4/HG Cold Vapor Mercury Analysis

Method:	ILM05.4/HG	Analysis Batch: 200-6995	Instrument ID:	MEPCV3 II
Preparation:	ILM05.4/HG_CW1	Prep Batch: 200-6896	Lab File ID:	092410BB.PRN
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	09/24/2010 1534		Final Weight/Volume:	50 mL
Date Prepared:	09/23/2010 1155			

Analyte	Result (ug/L)	Qualifier	MDLE	RL
Mercury	0.20	U	0.052	0.20

ILM05.4/ICP Inductively Coupled Plasma - Atomic Emission Spectroscopy

Method:	ILM05.4/ICP	Analysis Batch: 200-7028	Instrument ID:	METICP7
Preparation:	ILM05.4_HW1	Prep Batch: 200-6872	Lab File ID:	092510-02.ttx
Dilution:	1.0		Initial Weight/Volume:	100 mL
Date Analyzed:	09/25/2010 1319		Final Weight/Volume:	100 mL
Date Prepared:	09/23/2010 0852			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10.0	U	1.0	10.0
Aluminum	9290		50.8	200
Arsenic	10.0	U	6.4	10.0
Barium	36.9	J	8.5	200
Beryllium	2.0	J	0.27	5.0
Calcium	19000		168	5000
Cadmium	5.0	U	0.72	5.0
Cobalt	50.0	U	0.90	50.0
Chromium	200		0.92	10.0
Copper	3.7	J	3.3	25.0
Iron	319		9.2	100
Potassium	28700		201	5000
Magnesium	8750		66.6	5000
Manganese	7010		0.29	15.0
Sodium	44600		73.8	5000
Nickel	182		1.9	40.0
Lead	7.8	U J	3.4	10.0
Antimony	60.0	U	4.7	60.0
Selenium	35.0	U	4.3	35.0
Thallium	25.0	U	1.8	25.0
Zinc	25.2	U J	0.51	60.0
Vanadium	2.1	J	1.6	50.0

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW3

Lab Sample ID: 200-1636-3
Client Matrix: Water

Date Sampled: 09/18/2010 1630
Date Received: 09/21/2010 1005

ILM05.4/HG Cold Vapor Mercury Analysis

Method:	ILM05.4/HG	Analysis Batch: 200-6995	Instrument ID:	MEPCV3 II
Preparation:	ILM05.4/HG_CW1	Prep Batch: 200-6896	Lab File ID:	092410BB.PRN
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	09/24/2010 1536		Final Weight/Volume:	50 mL
Date Prepared:	09/23/2010 1155			

Analyte	Result (ug/L)	Qualifier	MDLE	RL
Mercury	0.20	U	0.052	0.20

ILM05.4/ICP Inductively Coupled Plasma - Atomic Emission Spectroscopy

Method:	ILM05.4/ICP	Analysis Batch: 200-7028	Instrument ID:	METICP7
Preparation:	ILM05.4_HW1	Prep Batch: 200-6872	Lab File ID:	092510-02.ttx
Dilution:	1.0		Initial Weight/Volume:	100 mL
Date Analyzed:	09/25/2010 1323		Final Weight/Volume:	100 mL
Date Prepared:	09/23/2010 0852			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10.0	U	1.0	10.0
Aluminum	13500		50.8	200
Arsenic	10.0	U	6.4	10.0
Barium	113	J	8.5	200
Beryllium	2.0	J	0.27	5.0
Calcium	18100		168	5000
Cadmium	5.0	U	0.72	5.0
Cobalt	50.0	U	0.90	50.0
Chromium	24.1		0.92	10.0
Copper	5.7	J	3.3	25.0
Iron	764		9.2	100
Potassium	10700		201	5000
Magnesium	9210		66.6	5000
Manganese	42.8		0.29	15.0
Sodium	20200		73.8	5000
Nickel	312		1.9	40.0
Lead	4.3 <i>Z</i>	<i>UJ J</i>	3.4	10.0
Antimony	60.0	U	4.7	60.0
Selenium	35.0	U	4.3	35.0
Thallium	25.0	U	1.8	25.0
Zinc	17.3	<i>U J</i>	0.51	60.0
Vanadium	2.2	J	1.6	50.0

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1

Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW4

Lab Sample ID: 200-1636-4

Date Sampled: 09/19/2010 1210

Client Matrix: Water

Date Received: 09/21/2010 1005

ILM05.4/HG Cold Vapor Mercury Analysis

Method:	ILM05.4/HG	Analysis Batch: 200-6995	Instrument ID:	MEPCV3 II
Preparation:	ILM05.4/HG_CW1	Prep Batch: 200-6896	Lab File ID:	092410BB.PRN
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	09/24/2010 1538		Final Weight/Volume:	50 mL
Date Prepared:	09/23/2010 1158			

Analyte	Result (ug/L)	Qualifier	MDLE	RL
Mercury	0.20	U	0.052	0.20

ILM05.4/ICP Inductively Coupled Plasma - Atomic Emission Spectroscopy

Method:	ILM05.4/ICP	Analysis Batch: 200-7028	Instrument ID:	METICP7
Preparation:	ILM05.4_HW1	Prep Batch: 200-6872	Lab File ID:	092510-02.ttx
Dilution:	1.0		Initial Weight/Volume:	100 mL
Date Analyzed:	09/25/2010 1327		Final Weight/Volume:	100 mL
Date Prepared:	09/23/2010 0852			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10.0	U	1.0	10.0
Aluminum	8740		50.8	200
Arsenic	10.0	U	6.4	10.0
Barium	67.6	J	8.5	200
Beryllium	1.5	J	0.27	5.0
Calcium	14500		168	5000
Cadmium	5.0	U	0.72	5.0
Cobalt	1.5	J	0.90	50.0
Chromium	64.6		0.92	10.0
Copper	25.0	U	3.3	25.0
Iron	90.1	U J	9.2	100
Potassium	28900		201	5000
Magnesium	6050		66.6	5000
Manganese	1780		0.29	15.0
Sodium	30600		73.8	5000
Nickel	196		1.9	40.0
Lead	6.1	U J	3.4	10.0
Antimony	60.0	U	4.7	60.0
Selenium	35.0	U	4.3	35.0
Thallium	25.0	U	1.8	25.0
Zinc	30.1	U J	0.51	60.0
Vanadium	1.8	J	1.6	50.0

Analytical Data

Client: Panther Technologies

Job Number: 200-1636-1
Sdg Number: 200-1636-1

Client Sample ID: ISCO-MW5

Lab Sample ID: 200-1636-5
Client Matrix: Water

Date Sampled: 09/19/2010 1000
Date Received: 09/21/2010 1005

ILM05.4/HG Cold Vapor Mercury Analysis

Method: ILM05.4/HG Analysis Batch: 200-6995 Instrument ID: MEPCV3 II
Preparation: ILM05.4/HG_CW1 Prep Batch: 200-6896 Lab File ID: 092410BB.PRN
Dilution: 1.0 Initial Weight/Volume: 50 mL
Date Analyzed: 09/24/2010 1540 Final Weight/Volume: 50 mL
Date Prepared: 09/23/2010 1158

Analyte	Result (ug/L)	Qualifier	MDLE	RL
Mercury	0.20	U	0.052	0.20

ILM05.4/ICP Inductively Coupled Plasma - Atomic Emission Spectroscopy

Method: ILM05.4/ICP Analysis Batch: 200-7028 Instrument ID: METICP7
Preparation: ILM05.4_HW1 Prep Batch: 200-6872 Lab File ID: 092510-02.ttx
Dilution: 1.0 Initial Weight/Volume: 100 mL
Date Analyzed: 09/25/2010 1331 Final Weight/Volume: 100 mL
Date Prepared: 09/23/2010 0852

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	10.0	U	1.0	10.0
Aluminum	813		50.8	200
Arsenic	10.0	U	6.4	10.0
Barium	39.4	J	8.5	200
Beryllium	5.0	U	0.27	5.0
Calcium	20400		168	5000
Cadmium	5.0	U	0.72	5.0
Cobalt	50.0	U	0.90	50.0
Chromium	46.7		0.92	10.0
Copper	25.0	U	3.3	25.0
Iron	22.7	U	9.2	100
Potassium	7020		201	5000
Magnesium	11200		66.6	5000
Manganese	25.5		0.29	15.0
Sodium	44000		73.8	5000
Nickel	23.3	J	1.9	40.0
Lead	10.0	U	3.4	10.0
Antimony	60.0	U	4.7	60.0
Selenium	35.0	U	4.3	35.0
Thallium	25.0	U	1.8	25.0
Zinc	16.1	U	0.51	60.0
Vanadium	50.0	U	1.6	50.0

APPENDIX C

CHAIN OF CUSTODY / ANALYSIS REQUEST

THE LEADER IN ENVIRONMENTAL TESTING

Page 1 of 4

Name (for report and invoice) KEVIN DYSON		Samplers Name (Printed) TODD VAIL		Site/Project Identification LAWRENCE AVIATION			
Company PANTHER TECHNOLOGIES		P.O.#		State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other:			
Address 220 RT. 70 EAST Suite B		Analysis Turnaround Time Standard <input checked="" type="checkbox"/>		ANALYSIS REQUESTS (ENTER "X" BELOW TO INDICATE REQUEST) SOMO 12-MI-TR <input checked="" type="checkbox"/> REUTENE SOU <input checked="" type="checkbox"/> 2-MOS. F. IMPROV <input checked="" type="checkbox"/> 4-MOS. F. IMPROV <input checked="" type="checkbox"/> 5-MOS. F. IMPROV <input checked="" type="checkbox"/> TEL. ORG. (N.J.) <input checked="" type="checkbox"/> 1900-2-30-D (NJ) <input checked="" type="checkbox"/> 23228 <input checked="" type="checkbox"/> ALKALINITY <input checked="" type="checkbox"/> 2-MOS. F. IMPROV <input checked="" type="checkbox"/> 4-MOS. F. IMPROV <input checked="" type="checkbox"/> 5-MOS. F. IMPROV <input checked="" type="checkbox"/> 2540-D TSS <input checked="" type="checkbox"/> 2540-D TSS <input checked="" type="checkbox"/> 2540-D TSS <input checked="" type="checkbox"/> 2540-D TSS <input checked="" type="checkbox"/>			
City MEDFORD State N.J.		Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>					
Phone 609 714 2420 Fax 609 714 2495				LAB USE ONLY			
Sample Identification		Date	Time	Matrix	No. of Cont.	Project No:	
ISCO-MW-1		9-18-10	11:15	GW	3	Job No:	
ISCO-MW-1		9-18-10	11:15	GW	1	Sample Numbers	
ISCO-MW-1		9-18-10	11:15	GW	1		
ISCO-MW-1		9-18-10	11:15	GW	1		
ISCO-MW-1		9-18-10	11:15	GW	1	Sample not taken	
ISCO-MW-1		9-18-10	11:15	GW	1		
ISCO-MW-6		9-18-10	11:15	GW	1		
ISCO-MW-2		9-18-10	12:50	GW	3		
ISCO-MW-7		9-18-10	12:50	GW	1		
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH 6 = Other _____, 7 = Other _____				Soil: _____ Water: _____			

Special Instructions

Relinquished by Todd Vail	Company Panther Tech.	Date / Time 9/19	Received by <i>[Signature]</i>	Company TA	Water Metals Filtered (Yes/No)? 200-11636
Relinquished by <i>[Signature]</i>	Company TA	Date / Time 9/20/10 NY	Received by Beth G Daugherty	Company TA	9/20/10 9:30 Am
Relinquished by <i>[Signature]</i>	Company TA	Date / Time 9/21/10 16:50	Received by <i>[Signature]</i>	Company TA	9/22/10 09:37
Relinquished by 1)	Company	Date / Time	Received by 5:23" Lys	Company	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 570) **Temp 5.2**

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10/06/2010

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 2 of 4

Name (for report and invoice) <u>KEVIN DYSCIN</u>		Samplers Name (Printed) <u>TODD VAIL</u>		Site/Project Identification <u>LAWRENCE AVIATION</u>		
Company <u>PANTHER TECHNOLOGIES</u>		F.O.#		State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other:		
Address <u>220 RT. 70 EAST Suite B</u>		Analyte Turnaround Time Standard <input checked="" type="checkbox"/>		LAB USE ONLY Project No:		
City <u>MEDFORD</u> State <u>NJ</u>		Rush Charges Authorized For: 2 Week: <input type="checkbox"/> 1 Week: <input type="checkbox"/> Other: <input type="checkbox"/>		Job No:		
Phone <u>609 714 2420</u> Fax <u>609 714 2495</u>		ANALYSIS REQUESTS (ENTER * BELOW TO INDICATE HOUR #1)		Sample Numbers		
Sample Identification		Date	Time	Matrix	No. of Cont.	
<u>ISCO-MW-1</u>	<u>9-18-10</u>	<u>11:15</u>	<u>GW</u>	<u>3</u>	<input checked="" type="checkbox"/>	
<u>ISCO-MW-1</u>	<u>9-18-10</u>	<u>11:15</u>	<u>GW</u>	<u>1</u>	<input checked="" type="checkbox"/>	
<u>ISCO-MW-1</u>	<u>9-18-10</u>	<u>11:15</u>	<u>GW</u>	<u>1</u>	<input checked="" type="checkbox"/>	
<u>ISCO-MW-1</u>	<u>9-18-10</u>	<u>11:15</u>	<u>GW</u>	<u>1</u>	<input checked="" type="checkbox"/>	
<u>ISCO-MW-1</u>	<u>9-18-10</u>	<u>11:15</u>	<u>GW</u>	<u>1</u>	<input checked="" type="checkbox"/>	
<u>ISCO-MW-1</u>	<u>9-18-10</u>	<u>11:15</u>	<u>GW</u>	<u>1</u>	<input checked="" type="checkbox"/>	<u>Sample not taken</u>
<u>ISCO-MW-1</u>	<u>9-18-10</u>	<u>11:15</u>	<u>GW</u>	<u>1</u>	<input checked="" type="checkbox"/>	
<u>ISCO-MW-6</u>	<u>9-18-10</u>	<u>11:15</u>	<u>GW</u>	<u>1</u>	<input checked="" type="checkbox"/>	
<u>ISCO-MW-2</u>	<u>9-18-10</u>	<u>12:50</u>	<u>GW</u>	<u>3</u>	<input checked="" type="checkbox"/>	
<u>ISCO-MW-7</u>	<u>9-18-10</u>	<u>12:50</u>	<u>GW</u>	<u>1</u>	<input checked="" type="checkbox"/>	
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH		Soil:				
6 = Other _____ 7 = Other _____		Water:				

Special Instructions

Relinquished by <u>Todd Vail</u>	Company <u>Panther Tech.</u>	Date / Time <u>9/19</u>	Received by <u>[Signature]</u>	Company <u>[Signature]</u>	Water Metals Filtered (Yes/No)? <u>200-1636</u>
Relinquished by <u>[Signature]</u>	Company <u>TA/Chlor</u>	Date / Time <u>9/20/10 174</u>	Received by <u>Breting Daughtry</u>	Company <u>THSav</u>	<u>9/22/10 c 0937</u>
Relinquished by <u>[Signature]</u>	Company <u>TA</u>	Date / Time <u>09/21/10 1650</u>	Received by <u>[Signature]</u>	Company <u>TA</u>	<u>4/21/10 1005</u>
Relinquished by <u>[Signature]</u>	Company	Date / Time	Received by <u>[Signature]</u>	Company	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 570) Temp 3.2

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10/06/2010

CHAIN OF CUSTODY / ANALYSIS REQUEST

THE LEADER IN ENVIRONMENTAL TESTING

Page 3 of 4

Name (for report and invoice) KEVIN D. J. SON		Samplers Name (Printed) TODD VAIL		Site/Project Identification LAWRENCE AVIATION		
Company PANTHER TECH		P.O. #.		State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other:		
Address 220 Rt. 70 East Suite B		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program:		
City MEDFORD State N.J.		LAB USE ONLY Project No:		Job No:		
Phone 609 714 2420 Fax 609 714 2495		LAB USE ONLY Sample Numbers		LAB USE ONLY Sample Numbers		
Sample Identification	Date	Time	Matrix	No. of Cont.	ANALYSIS REQUESTED (ENTER X OR U) INDICATE REQUEST	LAB USE ONLY
ISCO MW-3	9-18-10	16:30	GW	3	✓	
ISCO MW-3	9-18-10	16:30	GW	1	✓	
ISCO MW-7	9-18-10	16:30	GW	1	✓	
ISCO MW-5	9-19-10	10:00	GW	3	✓	
ISCO MW-5	9-19-10	10:00	GW	1	✓	
ISCO MW-5	9-19-10	10:00	GW	1	✓	
ISCO MW-5	9-19-10	10:00	GW	1	✓	
ISCO MW-5	9-19-10	10:00	GW	1	✓	
ISCO MW-5	9-19-10	10:00	GW	1	✓	
ISCO MW-10	9-19-10	10:00	GW	1	✓	

Preservation Used: 1 = ICE, 2 = HCl, 3 = H₂SO₄, 4 = HNO₃, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil: _____ Water: _____

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200-11636

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by Todd Vail	Company Panther Tech	Date / Time 9/19 1:13:00	Received by [Signature]	Company
Relinquished by [Signature]	Company TAC/SON	Date / Time 9/20/10 1:45	Received by [Signature]	Company
Relinquished by [Signature]	Company TA	Date / Time 9/21/10 1650	Received by [Signature]	Company TA 9/22/10 0937
Relinquished by [Signature]	Company TA	Date / Time 9/21/10 1005	Received by [Signature]	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

Massachusetts (M-NJ312), North Carolina (No 578)

TAL Form 3.2

10/06/2010

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) PANTHER TECHNOLOGIES		Samplers Name (Printed) Todd Vail		Site/Project Identification LAURENCE AUGUSTON				
Company KEVIN DYSON		P. O. #		State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other:				
Address 220 Route 70 East Suite B		Analysis Turnaround Time Standard <input checked="" type="checkbox"/>		ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)				LAB USE ONLY Project No: Job No: Sample Numbers
City Medford State NJ		Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		5001-2400-TR ROUTE 504 5001-2401-TR ROUTINE 502 2540C TDS 2540D TSS 2370 B AMALGAMITY 500.0 980 (MOP) Chloride Sulfate Fe 5153 1010-8 TOTAL CHLORIDE 241051412P 241051412P 241051412P				
Phone 609-714-2420 Fax 609-714-2495								
Sample Identification	Date	Time	Matrix	No. of Cont.				
ISCO MW-10	9-19-10	10:00	GW	1	✓			
ISCO MW-4	9-19-10	12:10	GW	3		✓		
ISCO MW-4	9-19-10	12:10	GW	1			✓	
ISCO MW-4	9-19-10	12:10	GW	1				✓
ISCO MW-4	9-19-10	12:10	GW	1				✓
ISCO MW-4	9-19-10	12:10	GW	1				✓
ISCO MW-4	9-19-10	12:10	GW	1				✓

Preservation Used: 1 = ICE, 2 = HCl, 3 = H₂SO₄, 4 = HNO₃, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil: _____ Water: _____

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by Todd Vail	Company Panther Tech	Date / Time 9/19 11:30:00	Received by [Signature]	Company [Signature]
Relinquished by [Signature]	Company [Signature]	Date / Time 9/20 10:17:15	Received by [Signature]	Company [Signature]
Relinquished by [Signature]	Company	Date / Time	Received by [Signature]	Company
Relinquished by [Signature]	Company	Date / Time	Received by [Signature]	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)