

Premier Environmental Services

DATA VALIDATION SUMMARY

FORMER PROVAN FORD SITE

VOLATILE ORGANIC ANALYSES/BASE NEUTRAL
SEMIVOLATILE ORGANIC ANALYSES
(EPA METHOD 8260B/8270B)

IN NON-AQUEOUS SAMPLES

CHEMTECH
MOUNTAINSIDE, NEW JERSEY

PROJECT NUMBER:

B4222

April, 2011

Prepared for
First Environment, Incorporated
Boonton, New Jersey

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NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	Volatile Organic Compounds (VOC's) Base Neutral Semivolatile Organic Compounds (SVOA's)
SITE:	Former Provan Ford Site
CONTRACT LAB:	Chemtech Mountainside, New Jersey
PROJECT NO.:	B4222
REVIEWER:	Renee Cohen
DATE REVIEW COMPLETED:	April, 2011
MATRIX:	Non-Aqueous

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary Review. In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. 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 I 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 two (2) non-aqueous samples. The samples in this data set were collected November 9, 2010 and November 10, 2010 and received at Chemtech located in Mountainside, NJ on November 11, 2010. The samples were analyzed for Volatile Organic Analytes (VOA) and Base Neutral Semivolatile Organic Analytes (SVOA) as marked on the Chain of Custody documents that accompanied the samples to the laboratory.

ORGANIC DATA ASSESSMENT

1. OVERVIEW:

Samples associated with this data set were analyzed for Volatile Organic Analytes (VOA), Semivolatile Organic Analytes as noted by the COC documentation that accompanied the sample set to the laboratory. All analyses were performed in accordance with USEPA Test Methods for the Evaluation of Solid Waste (SW846) as well as the NYSDC ASP methodologies. Data validation will utilize the validation guidelines listed above, however, QA/QC requirements of the NYS DEC ASP (12/95) will supersede CLP requirements in terms of calibration (where applicable) and holding time. Chemtech generated a stand-alone report for each fraction in compliance with the NYS DEC ASP Category B deliverables. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report B4222 consists of two (2) non-aqueous samples. The Chain of Custody documents indicated the parameters that the samples were to be analyzed for. The laboratory sample ID and field sample ID's are summarized in Table 1 of this report.

A copy of the COC documents associated with this data set is located in Appendix C of this report.

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 NYS DEC ASP criteria specifies holding times for solid and soil samples. These holding times are based on Validated Time of Sample Receipt (VTSR). The holding times cited in the NY ASP were reviewed. EPA SW846 methods cite holding times based on collection date. The technical holding time for properly preserved aqueous and non aqueous Volatile Organic samples is fourteen (14) days.

Proper preservation of a soil sample is refrigeration at 4 degrees C until analysis. The holding time criteria for volatile organic sample analysis is that properly preserved samples be analyzed within ten (10) days of VTSR. The holding time criteria for semivolatile organic samples is that the extraction is to be completed within five (5) days of VTSR and that analysis of the extract is be completed within forty (40) days. The technical holding time for the extraction of non-aqueous samples for semivolatile organic analytes is fourteen (14) days from collection.

Volatile Organic Analyses (EPA Method 8260B) - The sample in this data set was collected November 9, 2010 and November 10, 2010 and received at the laboratory on November 11, 2010. All sample analyses and dilution analyses associated with this data set were completed by November 15, 2010. All holding times were met in this data set.

Semivolatile Organic Analyses (EPA Method 8270C) – The samples in laboratory report B4222 were analyzed for Base Neutral SVOA's. The samples were collected between November 9, 2010 and November 10, 2010 and were received at the laboratory on November 11, 2010. The one (1) non-aqueous sample was extracted on November 12, 2010. All sample extract analyses were completed by November 15, 2010. The sample and associated QC were extracted and analyzed within the method holding time.

ORGANIC DATA ASSESSMENT

3. SURROGATES:

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with four (4) method recommended surrogate compounds. These include 1,2-Dichloroethane-d4, Dibromofluoromethane, Toluene-d8 and 4-Bromofluorobenzene prior to analysis to evaluate the overall laboratory performance and the efficiency of the analytical technique. The samples to be analyzed for Semivolatile Organic Analytes (SVOA) are fortified with the surrogate compounds 2-Fluorophenol, Phenol-d5, 2,4,6-Tribromophenol, Nitrobenzene-d5, 2-Fluorobiphenyl and Terphenyl-d14 prior to sample extraction to evaluate the overall laboratory performance and the efficiency of the analytical technique.

Volatile Organic Analyses (EPA Method 8260B) – Each of the samples in this data set was fortified with the method specified surrogate compounds. The laboratory reported in-house limits for the surrogate recovery limits. The surrogate percent recoveries met QC criteria in all samples associated with this data set with the exception of 4-Bromofluorobenzene in the initial analysis of sample WR-S-1 (11.5-12.0). The sample was reanalyzed as a medium level soil sample. All surrogate recoveries met QC criteria in this dilution analysis. Target analytes in the initial analysis of sample WR-S-1 (11.5-12.0) have been qualified “UJ/J” estimated.

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

Semivolatile Organic Analyses (EPA Method 8270C) - The percent recovery of each surrogate met QC criteria in each of the samples associated with this data set.

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.

Volatile Organic Analyses (EPA Method 8260B) – Batch QC MS/MSD analysis was reported with this data set. Sample data is not qualified based on the results of Batch QC analysis.

The laboratory prepared and analyzed a one (1) Laboratory Control Sample with each of the sample batches in this data set. The laboratory fortified each with a full component spike solution. Chemtech used a “CLP Like” QC summary form to report the data results. In-house QC limits were applied for each analyte. The percent recovery and RPD of each target analytes met QC criteria in the LCS sample.

Semivolatile Organic Analyses (EPA Method 8270C) –Batch QC MS/MSD was prepared and analyzed with this sample batch. Sample data was not qualified based on the results of the MS/MSD data alone.

The laboratory prepared and analyzed one (1) Laboratory Control Sample (LCS) with each sample batch. The laboratory fortified the LCS using a full component (Base Neutral compound)spike solution. Chemtech used a “CLP Like” QC summary form to report the LCS data results. In-house QC limits were utilized. All percent recoveries met QC criteria with the exception of 4-Chloroaniline in the LCS sample associated with this data set. 4-Chloroaniline has been qualified “UJ/J” estimated in the sample and dilution analyses of the sample reported in this data set.

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

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.

A) Method Blank contamination

Volatile Organic Analyses (EPA Method 8260B) – Two (2) low level soil sample method blanks are associated with this data set. Each of these method blank samples was free from contamination of target analytes. One (1) medium level soil sample method blank is associated with this data set. This method blank sample was free from contamination of target analytes.

Semivolatile Organic Analyses (EPA Method 8270C) – One (1) method blank sample is associated with this data set. Each was free from contamination of target and non target analytes with the exception of that listed below:

Sample ID	Date of Extraction	Analyte	Conc (Retention Time)
PB52430B	11/12/10	Dimethylphthalate	110 J ug/kg
		ACP	3.59
		Unknown	14.08
		Unknown	16.1

These analytes were not detected in the associated field sample therefore no action was taken.

B) Field or Equipment Rinse Blank (ERB) contamination

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

C) Trip Blank contamination

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

ORGANIC DATA ASSESSMENT

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. Region USEPA and Region II criteria is the sample for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses is the same, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – One (1) low level soil sample initial calibration curve analysis is associated with the samples in this data set. The laboratory performed a multilevel calibration on November 11, 2010 (Inst. VOAK). The laboratory summarized the relative response factor (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.

One (1) continuing calibration curve analysis is associated with the low level soil sample analysis. The RRF of all target compounds met QC criteria in the low level CCV standard analysis.

One (1) medium level soil sample initial calibration curve is associated with the sample in this data set. The laboratory performed a multilevel calibration on November 15, 2010 (Inst. VOAE). The laboratory summarized the relative response factor (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.

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

A) RESPONSE FACTOR (cont'd):

Semivolatile Organic Analyses (EPA Method 8270C) – One (1) initial calibration curve analysis is associated with the samples in this data set. An initial calibration curve was analyzed on November 9, 2010 (Inst. BNAE). The RRF of all target analytes met QC criteria in this initial calibration curve analysis. One (1) continuing calibration standard analysis is associated with this curve analysis. All RRF met QC criteria in the continuing calibration standard.

An additional initial calibration curve was analyzed on November 1, 2010 (Inst. BNAF). The RRF of all target analytes met QC criteria in this initial calibration curve analysis. Two (2) continuing calibration standard analyses are associated with this curve analysis. All %Difference criteria were met in each of these continuing calibration standards.

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

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. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. 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. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – One (1) low level soil sample initial calibration curve analysis is associated with the sample in this data set. The laboratory performed a multilevel calibration on November 11, 2010 (Inst. VOAK). 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 the initial calibration curve analysis.

One (1) continuing calibration verification (CCV) standard is associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria in this CCV standard analysis.

One (1) medium level soil sample initial calibration curve analysis is associated with the samples in this data set. 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 with the exception of 4-Methyl-Pentanone (34.55%) and 2-Hexanone (36.77%) met QC criteria in this curve analysis. 4-Methyl-2-Pentanone and 2-Hexanone have been qualified "UJ/J" estimated in the medium level dilution analysis of sample WR-S-1 (11.5-12.0) DL.

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

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

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

Semivolatile Organic Analyses (EPA Method 8270C) – One (1) initial calibration curve analysis is associated with the samples in this data set. An initial calibration curve was analyzed on November 9, 2010 (Inst. BNAE). The %RSD of all target compounds met QC criteria in this initial calibration curve analysis. One (1) continuing calibration standard analysis is associated with this curve analysis. All %Difference criteria were met in this continuing calibration standard analysis.

An additional initial calibration curve was analyzed on November 1, 2010 (Inst. BNAF). The %RSD of all target analytes met QC criteria in this initial calibration curve analysis. Two (2) continuing calibration standard analyses are associated with this curve analysis. All %Difference criteria were met for the target analytes reported.

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 tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses/Semivolatile Organic analyses - 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.

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.

Volatile Organic Analyses (EPA Method 8260B) - All samples were spiked with the internal standards Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 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.

Semivolatile Organic Analyses (EPA Method 8270C) - All samples were spiked with the internal standards 1,4-Dichlorobenzene-d4, Naphthalene-d8, Acenaphthene-d10, Phenanthrene-d10, Chrysene-d12 and Perylene-d12 prior to sample analysis. The area counts and retention time shift of each internal standard was reported. All Internal Standard criteria were met in the samples associated with this data set.

ORGANIC DATA ASSESSMENT

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.

Volatile Organic Analyses (EPA Method 8260B) – Two (2) non-aqueous samples are associated with this data set. The sample was analyzed via Method 8260B. Tentatively Identified Compounds (TIC's) when detected are reported for each sample. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

The sample chromatograms associated with this sample set indicated a hump as well as the presence of non target compounds at each sample point. If dilution analysis was performed this dilution analysis was able to reduce the matrix interference. The dilution analysis was necessary to report the target analytes within the concentration of the GC/MS.

Sample WR-S-1 (11.5-12.0) (B4222-02) was initially analyzed as a low level soil sample. The concentration of Methylcyclohexane and Isopropylbenzene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample to report the concentration of Methylcyclohexane (1100 D ug/kg) and Isopropylbenzene (210 JD ug/kg) detected at this sample point.

Semivolatile Organic Analyses (SW846 Method 8270C) – One (1) non-aqueous sample in this data set was analyzed for Base Neutral SVOA analyses. Correspondence between First Environment and the laboratory confirmed these analyses. A copy of the COC documents and associated correspondence is located in Appendix C of this data report. The samples were analyzed in accordance with Method 8270C and reported the Base Neutral compound list. Tentatively Identified Compounds (TIC's) when detected were reported with this data set. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

Sample WR-S-1 (11.5-12.0) (B4222-02) was initially analyzed as a low level soil sample. The concentration of 2-Methylnaphthalene and Bis (2-ethylhexyl) phthalate exceeded the concentration range of the GC/MS. The sample extract was reanalyzed using a 1:2 dilution analysis to report the concentration of 2-Methylnaphthalene (3200 D ug/kg) detected at this sample point. The concentration of Bis(2-ethylhexyl)phthalate was still above the calibration range. The extract was reanalyzed using a 1:40 dilution to report the concentration of Bis(2-ethylhexyl)phthalate (46000 D ug/kg) detected at this sample point. The sample chromatogram in each of these three (3) analyses indicates the presence of matrix interference in the form of a "hump". In addition a number of unknown TIC compounds were detected at this sample point.

10. FIELD DUPLICATE ANALYSES:

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. Soil samples have a greater variability than aqueous samples. Percent moisture and reported dilution factors also tend to lead to greater variability in RPD. Analytes reported above the reporting limit are listed. Data was not qualified based on the calculated RPD of field duplicate sample analyses.

Field duplicate samples were not associated with this data set.

ORGANIC DATA ASSESSMENT

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 DUSR 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. Soil sample results are reported on a dry weight basis. 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.

TABLE 1

FIELD SAMPLE ID

RU-WRV-1
WR-S-1(11.5-12.0)

LABORATORY ID

B4222-01
B4222-02

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

Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)	SDG No.:	B4222
Lab Sample ID:	B4222-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	7
Sample Wt/Vol:	5.02 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041740.D	1		11/12/10	VK111210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.4	U J	0.7	2.7	5.4	ug/Kg
74-87-3	Chloromethane	5.4	U	0.92	2.7	5.4	ug/Kg
75-01-4	Vinyl Chloride	5.4	U	1.3	2.7	5.4	ug/Kg
74-83-9	Bromomethane	5.4	U	2.6	2.7	5.4	ug/Kg
75-00-3	Chloroethane	5.4	U	1.5	2.7	5.4	ug/Kg
75-69-4	Trichlorofluoromethane	5.4	U	1.4	2.7	5.4	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.4	U	1.4	2.7	5.4	ug/Kg
75-35-4	1,1-Dichloroethene	5.4	U	1.6	2.7	5.4	ug/Kg
67-64-1	Acetone	27	U	3.2	13.5	27	ug/Kg
75-15-0	Carbon Disulfide	5.4	U	1.1	2.7	5.4	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.4	U	1	2.7	5.4	ug/Kg
79-20-9	Methyl Acetate	5.4	U	1.6	2.7	5.4	ug/Kg
75-09-2	Methylene Chloride	5.4	U	1.5	2.7	5.4	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.4	U	0.74	2.7	5.4	ug/Kg
75-34-3	1,1-Dichloroethane	5.4	U	1	2.7	5.4	ug/Kg
110-82-7	Cyclohexane	130	J	1.1	2.7	5.4	ug/Kg
78-93-3	2-Butanone	27	U J	3.3	13.5	27	ug/Kg
56-23-5	Carbon Tetrachloride	5.4	U	1.1	2.7	5.4	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.4	U	0.95	2.7	5.4	ug/Kg
67-66-3	Chloroform	5.4	U	0.79	2.7	5.4	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.4	U	0.94	2.7	5.4	ug/Kg
108-87-2	Methylcyclohexane	460	J	1.1	2.7	5.4	ug/Kg
71-43-2	Benzene	5.4	U J	0.41	2.7	5.4	ug/Kg
107-06-2	1,2-Dichloroethane	5.4	U	0.69	2.7	5.4	ug/Kg
79-01-6	Trichloroethene	5.4	U	0.92	2.7	5.4	ug/Kg
78-87-5	1,2-Dichloropropane	5.4	U	0.28	2.7	5.4	ug/Kg
75-27-4	Bromodichloromethane	5.4	U	0.66	2.7	5.4	ug/Kg
108-10-1	4-Methyl-2-Pentanone	27	U	3.1	13.5	27	ug/Kg
108-88-3	Toluene	1.6	J	0.69	2.7	5.4	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.4	U J	0.85	2.7	5.4	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.4	U	0.77	2.7	5.4	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.4	U	0.96	2.7	5.4	ug/Kg
591-78-6	2-Hexanone	27	U	4.2	13.5	27	ug/Kg
124-48-1	Dibromochloromethane	5.4	U	0.58	2.7	5.4	ug/Kg
106-93-4	1,2-Dibromoethane	5.4	U	0.69	2.7	5.4	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)	SDG No.:	B4222
Lab Sample ID:	B4222-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	7
Sample Wt/Vol:	5.02 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041740.D	1		11/12/10	VK111210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.4 <i>UJ</i>	U	1.1	2.7	5.4	ug/Kg
108-90-7	Chlorobenzene	5.4 <i>UJ</i>	U	0.54	2.7	5.4	ug/Kg
100-41-4	Ethyl Benzene	47 <i>J</i>		0.66	2.7	5.4	ug/Kg
179601-23-1	m/p-Xylenes	17 <i>J</i>		0.77	5.5	11	ug/Kg
95-47-6	o-Xylene	5.9 <i>J</i>		0.73	2.7	5.4	ug/Kg
100-42-5	Styrene	5.4 <i>UJ</i>	U	0.48	2.7	5.4	ug/Kg
75-25-2	Bromoform	5.4 <i>UJ</i>	U	0.79	2.7	5.4	ug/Kg
98-82-8	Isopropylbenzene	240 <i>J</i>	E	0.51	2.7	5.4	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.4 <i>UJ</i>	U	0.49	2.7	5.4	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.4 <i>J</i>	U	0.4	2.7	5.4	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.4 <i>J</i>	U	0.44	2.7	5.4	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.4 <i>J</i>	U	0.66	2.7	5.4	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.4 <i>J</i>	U	0.93	2.7	5.4	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.4 <i>J</i>	U	0.75	2.7	5.4	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	44.2		55 - 158	88%	SPK: 50
1868-53-7	Dibromofluoromethane	41.1		53 - 156	82%	SPK: 50
2037-26-5	Toluene-d8	51.4		68 - 122	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	128	*	25 - 144	257%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	200376	3.18
540-36-3	1,4-Difluorobenzene	369587	3.55
3114-55-4	Chlorobenzene-d5	302801	6.25
3855-82-1	1,4-Dichlorobenzene-d4	135499	8.59

TENTATIVE IDENTIFIED COMPOUNDS

000922-28-1	Heptane, 3,4-dimethyl-	92	J		4.08	ug/Kg
002051-30-1	Octane, 2,6-dimethyl-	140	J		7.47	ug/Kg
103-65-1	n-propylbenzene	850	J		7.75	ug/Kg
622-96-8	p-ethyltoluene	52	J		7.86	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	29	J		7.95	ug/Kg
002847-72-5	Decane, 4-methyl-	280	J		8.12	ug/Kg
98-06-6	tert-Butylbenzene	42	J		8.22	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	73	J		8.29	ug/Kg
135-98-8	sec-Butylbenzene	400	J		8.38	ug/Kg
000124-18-5	Decane	130	J		8.48	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/09/10	
Project:	Provan	Date Received:	11/11/10	
Client Sample ID:	WR-S-1 (11.5-12.0)	SDG No.:	B4222	
Lab Sample ID:	B4222-02	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	7	
Sample Wt/Vol:	5.02 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041740.D	1		11/12/10	VK111210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
000135-01-3	Benzene, 1,2-diethyl-	120	J			8.76	ug/Kg
105-05-5	p-diethylbenzene	690	J			8.81	ug/Kg
104-51-8	n-Butylbenzene	810	J			8.85	ug/Kg
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	150	J			9.14	ug/Kg
000767-58-8	Indan, 1-methyl-	91	J			9.19	ug/Kg
004292-92-6	Cyclohexane, pentyl-	94	J			9.26	ug/Kg
95-93-2	1,2,4,5-tetramethylbenzene	1700	J			9.44	ug/Kg
000824-90-8	1-Phenyl-1-butene	110	J			9.76	ug/Kg
056253-64-6	Benzene, (2-methyl-1-butenyl)-	110	J			10.01	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)DL	SDG No.:	B4222
Lab Sample ID:	B4222-02DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	7
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020455.D	1		11/15/10	Ve111510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	530	U	59	265	530	ug/Kg
74-87-3	Chloromethane	530	U	58	265	530	ug/Kg
75-01-4	Vinyl Chloride	530	U	36	265	530	ug/Kg
74-83-9	Bromomethane	530	U	66	265	530	ug/Kg
75-00-3	Chloroethane	530	U	71	265	530	ug/Kg
75-69-4	Trichlorofluoromethane	530	U	37	265	530	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	530	U	48	265	530	ug/Kg
75-35-4	1,1-Dichloroethene	530	U	50	265	530	ug/Kg
67-64-1	Acetone	2700	U	290	1350	2700	ug/Kg
75-15-0	Carbon Disulfide	530	U	58	265	530	ug/Kg
1634-04-4	Methyl tert-butyl Ether	530	U	37	265	530	ug/Kg
79-20-9	Methyl Acetate	530	U	89	265	530	ug/Kg
75-09-2	Methylene Chloride	530	U	44	265	530	ug/Kg
156-60-5	trans-1,2-Dichloroethene	530	U	44	265	530	ug/Kg
75-34-3	1,1-Dichloroethane	530	U	38	265	530	ug/Kg
110-82-7	Cyclohexane	530	U	59	265	530	ug/Kg
78-93-3	2-Butanone	2700	U	140	1350	2700	ug/Kg
56-23-5	Carbon Tetrachloride	530	U	66	265	530	ug/Kg
156-59-2	cis-1,2-Dichloroethene	530	U	37	265	530	ug/Kg
67-66-3	Chloroform	530	U	36	265	530	ug/Kg
71-55-6	1,1,1-Trichloroethane	530	U	43	265	530	ug/Kg
108-87-2	Methylcyclohexane	1100	D	73	265	530	ug/Kg
71-43-2	Benzene	530	U	34	265	530	ug/Kg
107-06-2	1,2-Dichloroethane	530	U	51	265	530	ug/Kg
79-01-6	Trichloroethene	530	U	30	265	530	ug/Kg
78-87-5	1,2-Dichloropropane	530	U	49	265	530	ug/Kg
75-27-4	Bromodichloromethane	530	U	38	265	530	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2700	U J	220	1350	2700	ug/Kg
108-88-3	Toluene	530	U	40	265	530	ug/Kg
10061-02-6	t-1,3-Dichloropropene	530	U	31	265	530	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	530	U	33	265	530	ug/Kg
79-00-5	1,1,2-Trichloroethane	530	U	41	265	530	ug/Kg
591-78-6	2-Hexanone	2700	U J	210	1350	2700	ug/Kg
124-48-1	Dibromochloromethane	530	U	56	265	530	ug/Kg
106-93-4	1,2-Dibromoethane	530	U	44	265	530	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/09/10	
Project:	Provan	Date Received:	11/11/10	
Client Sample ID:	WR-S-1 (11.5-12.0)DL	SDG No.:	B4222	
Lab Sample ID:	B4222-02DL	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	7	
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020455.D	1		11/15/10	Ve111510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	530	U	29	265	530	ug/Kg
108-90-7	Chlorobenzene	530	U	52	265	530	ug/Kg
100-41-4	Ethyl Benzene	530	U	57	265	530	ug/Kg
179601-23-1	m/p-Xylenes	1100	U	100	550	1100	ug/Kg
95-47-6	o-Xylene	530	U	46	265	530	ug/Kg
100-42-5	Styrene	530	U	38	265	530	ug/Kg
75-25-2	Bromoform	530	U	50	265	530	ug/Kg
98-82-8	Isopropylbenzene	210	JD	48	265	530	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	530	U	33	265	530	ug/Kg
541-73-1	1,3-Dichlorobenzene	530	U	46	265	530	ug/Kg
106-46-7	1,4-Dichlorobenzene	530	U	34	265	530	ug/Kg
95-50-1	1,2-Dichlorobenzene	530	U	48	265	530	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	530	U	49	265	530	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	530	U	66	265	530	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.5		55 - 158		99%	SPK: 50
1868-53-7	Dibromofluoromethane	46.1		53 - 156		92%	SPK: 50
2037-26-5	Toluene-d8	51.1		68 - 122		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.8		25 - 144		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	2590990	9.41				
540-36-3	1,4-Difluorobenzene	6754470	10.5				
3114-55-4	Chlorobenzene-d5	6498930	14.92				
3855-82-1	1,4-Dichlorobenzene-d4	3401740	18.72				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)	SDG No.:	B4222
Lab Sample ID:	B4222-02	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041433.D	1	11/12/10	11/15/10	PB52430

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	350	U	19	175	350	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	350	U	17	175	350	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	350	U	15	175	350	ug/Kg
98-86-2	Acetophenone	350	U	11	175	350	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	350	U	18	175	350	ug/Kg
67-72-1	Hexachloroethane	350	U	16	175	350	ug/Kg
98-95-3	Nitrobenzene	350	U	14	175	350	ug/Kg
78-59-1	Isophorone	350	U	12	175	350	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	350	U	21	175	350	ug/Kg
91-20-3	Naphthalene	350	U	12	175	350	ug/Kg
106-47-8	4-Chloroaniline	350	U	25	175	350	ug/Kg
87-68-3	Hexachlorobutadiene	350	U	13	175	350	ug/Kg
105-60-2	Caprolactam	350	U	17	175	350	ug/Kg
91-57-6	2-Methylnaphthalene	3300	E	9	175	350	ug/Kg
77-47-4	Hexachlorocyclopentadiene	350	U	8.7	175	350	ug/Kg
92-52-4	1,1-Biphenyl	350	U	14	175	350	ug/Kg
91-58-7	2-Chloronaphthalene	350	U	8.2	175	350	ug/Kg
88-74-4	2-Nitroaniline	350	U	16	175	350	ug/Kg
131-11-3	Dimethylphthalate	350	U	9.7	175	350	ug/Kg
208-96-8	Acenaphthylene	350	U	9	175	350	ug/Kg
606-20-2	2,6-Dinitrotoluene	350	U	15	175	350	ug/Kg
99-09-2	3-Nitroaniline	350	U	23	175	350	ug/Kg
83-32-9	Acenaphthene	270	J	10	175	350	ug/Kg
132-64-9	Dibenzofuran	350	U	14	175	350	ug/Kg
121-14-2	2,4-Dinitrotoluene	350	U	11	175	350	ug/Kg
84-66-2	Diethylphthalate	350	U	5.6	175	350	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	350	U	19	175	350	ug/Kg
86-73-7	Fluorene	550		14	175	350	ug/Kg
100-01-6	4-Nitroaniline	350	U	47	175	350	ug/Kg
86-30-6	N-Nitrosodiphenylamine	350	U	8.6	175	350	ug/Kg
101-55-3	4-Bromophenyl-phenylether	350	U	7	175	350	ug/Kg
118-74-1	Hexachlorobenzene	350	U	15	175	350	ug/Kg
1912-24-9	Atrazine	350	U	19	175	350	ug/Kg
85-01-8	Phenanthrene	1500		9.7	175	350	ug/Kg
120-12-7	Anthracene	200	J	7.3	175	350	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)	SDG No.:	B4222
Lab Sample ID:	B4222-02	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041433.D	1	11/12/10	11/15/10	PB52430

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	350	U	7.8	175	350	ug/Kg
84-74-2	Di-n-butylphthalate	1700		28	175	350	ug/Kg
206-44-0	Fluoranthene	100	J	7.2	175	350	ug/Kg
129-00-0	Pyrene	150	J	8.6	175	350	ug/Kg
85-68-7	Butylbenzylphthalate	350	U	17	175	350	ug/Kg
91-94-1	3,3-Dichlorobenzidine	350	U	23	175	350	ug/Kg
56-55-3	Benzo(a)anthracene	350	U	17	175	350	ug/Kg
218-01-9	Chrysene	350	U	16	175	350	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	47000	E	13	175	350	ug/Kg
117-84-0	Di-n-octyl phthalate	350	U	4.1	175	350	ug/Kg
205-99-2	Benzo(b)fluoranthene	350	U	12	175	350	ug/Kg
207-08-9	Benzo(k)fluoranthene	350	U	17	175	350	ug/Kg
50-32-8	Benzo(a)pyrene	350	U	7.7	175	350	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	350	U	12	175	350	ug/Kg
53-70-3	Dibenz(a,h)anthracene	350	U	10	175	350	ug/Kg
191-24-2	Benzo(g,h,i)perylene	350	U	15	175	350	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	147		26 - 141	98%	SPK: 150
13127-88-3	Phenol-d5	143		28 - 142	96%	SPK: 150
4165-60-0	Nitrobenzene-d5	110		30 - 150	110%	SPK: 100
321-60-8	2-Fluorobiphenyl	85		19 - 182	85%	SPK: 100
118-79-6	2,4,6-Tribromophenol	143		29 - 150	96%	SPK: 150
1718-51-0	Terphenyl-d14	81.5		24 - 191	82%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	32206	5.66			
1146-65-2	Naphthalene-d8	93406	7			
15067-26-2	Acenaphthene-d10	51306	8.79			
1517-22-2	Phenanthrene-d10	73421	10.47			
1719-03-5	Chrysene-d12	71408	13.66			
1520-96-3	Perylene-d12	65223	15.63			

TENTITIVE IDENTIFIED COMPOUNDS

108-95-2	Phenol	61	J		5.25	ug/Kg
13151-35-4	Decane, 5-methyl-	970	J		6	ug/Kg
	unknown6.03	920	JB		6.03	ug/Kg
13151-34-3	Decane, 3-methyl-	900	J		6.12	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)	SDG No.:	B4222
Lab Sample ID:	B4222-02	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041433.D	1	11/12/10	11/15/10	PB52430

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
17301-28-9	Undecane, 3,6-dimethyl-	930	J			7.09	ug/Kg
2051-30-1	Octane, 2,6-dimethyl-	1100	J			7.44	ug/Kg
582-16-1	Naphthalene, 2,7-dimethyl-	1100	J			8.35	ug/Kg
581-40-8	Naphthalene, 2,3-dimethyl-	1300	J			8.43	ug/Kg
3892-00-0	Pentadecane, 2,6,10-trimethyl-	1300	J			9.55	ug/Kg
2717-39-7	1,4,5,8-Tetramethylnaphthalene	1200	J			9.72	ug/Kg
1921-70-6	Pentadecane, 2,6,10,14-tetramethyl	6600	J			9.85	ug/Kg
7383-90-6	1,1-Biphenyl, 3,4-dimethyl-	1700	J			10.06	ug/Kg
1000104-10-8	3-Methyl-4-(methoxycarbonyl)hexa-2	1800	J			10.09	ug/Kg
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	3700	J			10.4	ug/Kg
54833-48-6	Heptadecane, 2,6,10,15-tetramethyl	1000	J			10.81	ug/Kg
832-69-9	Phenanthrene, 1-methyl-	1100	J			11.1	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)DL	SDG No.:	B4222
Lab Sample ID:	B4222-02DL	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041444.D	2	11/12/10	11/16/10	PB52430

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	710	UD	37	355	710	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	710	UD	34	355	710	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	710	UD	30	355	710	ug/Kg
98-86-2	Acetophenone	710	UD	22	355	710	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	710	UD	36	355	710	ug/Kg
67-72-1	Hexachloroethane	710	UD	32	355	710	ug/Kg
98-95-3	Nitrobenzene	710	UD	27	355	710	ug/Kg
78-59-1	Isophorone	710	UD	24	355	710	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	710	UD	41	355	710	ug/Kg
91-20-3	Naphthalene	710	UD	25	355	710	ug/Kg
106-47-8	4-Chloroaniline	710	UD	50	355	710	ug/Kg
87-68-3	Hexachlorobutadiene	710	UD	26	355	710	ug/Kg
105-60-2	Caprolactam	710	UD	33	355	710	ug/Kg
91-57-6	2-Methylnaphthalene	3200	D	18	355	710	ug/Kg
77-47-4	Hexachlorocyclopentadiene	710	UD	17	355	710	ug/Kg
92-52-4	1,1-Biphenyl	710	UD	27	355	710	ug/Kg
91-58-7	2-Chloronaphthalene	710	UD	16	355	710	ug/Kg
88-74-4	2-Nitroaniline	710	UD	32	355	710	ug/Kg
131-11-3	Dimethylphthalate	710	UD	19	355	710	ug/Kg
208-96-8	Acenaphthylene	710	UD	18	355	710	ug/Kg
606-20-2	2,6-Dinitrotoluene	710	UD	29	355	710	ug/Kg
99-09-2	3-Nitroaniline	710	UD	46	355	710	ug/Kg
83-32-9	Acenaphthene	330	JD	20	355	710	ug/Kg
132-64-9	Dibenzofuran	710	UD	28	355	710	ug/Kg
121-14-2	2,4-Dinitrotoluene	710	UD	22	355	710	ug/Kg
84-66-2	Diethylphthalate	710	UD	11	355	710	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	710	UD	39	355	710	ug/Kg
86-73-7	Fluorene	560	JD	27	355	710	ug/Kg
100-01-6	4-Nitroaniline	710	UD	93	355	710	ug/Kg
86-30-6	N-Nitrosodiphenylamine	710	UD	17	355	710	ug/Kg
101-55-3	4-Bromophenyl-phenylether	710	UD	14	355	710	ug/Kg
118-74-1	Hexachlorobenzene	710	UD	29	355	710	ug/Kg
1912-24-9	Atrazine	710	UD	38	355	710	ug/Kg
85-01-8	Phenanthrene	1400	D	19	355	710	ug/Kg
120-12-7	Anthracene	100	JD	15	355	710	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)DL	SDG No.:	B4222
Lab Sample ID:	B4222-02DL	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041444.D	2	11/12/10	11/16/10	PB52430

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	710	UD	16	355	710	ug/Kg
84-74-2	Di-n-butylphthalate	1600	D	56	355	710	ug/Kg
206-44-0	Fluoranthene	93	JD	14	355	710	ug/Kg
129-00-0	Pyrene	140	JD	17	355	710	ug/Kg
85-68-7	Butylbenzylphthalate	710	UD	34	355	710	ug/Kg
91-94-1	3,3-Dichlorobenzidine	710	UD	46	355	710	ug/Kg
56-55-3	Benzo(a)anthracene	710	UD	34	355	710	ug/Kg
218-01-9	Chrysene	710	UD	32	355	710	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	46000	ED	25	355	710	ug/Kg
117-84-0	Di-n-octyl phthalate	710	UD	8.2	355	710	ug/Kg
205-99-2	Benzo(b)fluoranthene	710	UD	23	355	710	ug/Kg
207-08-9	Benzo(k)fluoranthene	710	UD	34	355	710	ug/Kg
50-32-8	Benzo(a)pyrene	710	UD	15	355	710	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	710	UD	24	355	710	ug/Kg
53-70-3	Dibenz(a,h)anthracene	710	UD	21	355	710	ug/Kg
191-24-2	Benzo(g,h,i)perylene	710	UD	29	355	710	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	149		26 - 141		100%	SPK: 150
13127-88-3	Phenol-d5	146		28 - 142		98%	SPK: 150
4165-60-0	Nitrobenzene-d5	101		30 - 150		102%	SPK: 100
321-60-8	2-Fluorobiphenyl	88.3		19 - 182		88%	SPK: 100
118-79-6	2,4,6-Tribromophenol	135		29 - 150		90%	SPK: 150
1718-51-0	Terphenyl-d14	83.1		24 - 191		83%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	34686	5.65				
1146-65-2	Naphthalene-d8	112455	6.99				
15067-26-2	Acenaphthene-d10	57328	8.77				
1517-22-2	Phenanthrene-d10	87034	10.45				
1719-03-5	Chrysene-d12	77138	13.64				
1520-96-3	Perylene-d12	67756	15.6				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)DL2	SDG No.:	B4222
Lab Sample ID:	B4222-02DL2	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041445.D	40	11/12/10	11/16/10	PB52430

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	14000	UD	750	7000	14000	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	14000	UD	690	7000	14000	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	14000	UD	590	7000	14000	ug/Kg
98-86-2	Acetophenone	14000	UD	440	7000	14000	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	14000	UD	720	7000	14000	ug/Kg
67-72-1	Hexachloroethane	14000	UD	640	7000	14000	ug/Kg
98-95-3	Nitrobenzene	14000	UD	540	7000	14000	ug/Kg
78-59-1	Isophorone	14000	UD	470	7000	14000	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	14000	UD	820	7000	14000	ug/Kg
91-20-3	Naphthalene	14000	UD	490	7000	14000	ug/Kg
106-47-8	4-Chloroaniline	14000	UD	1000	7000	14000	ug/Kg
87-68-3	Hexachlorobutadiene	14000	UD	520	7000	14000	ug/Kg
105-60-2	Caprolactam	14000	UD	670	7000	14000	ug/Kg
91-57-6	2-Methylnaphthalene	3400	JD	360	7000	14000	ug/Kg
77-47-4	Hexachlorocyclopentadiene	14000	UD	350	7000	14000	ug/Kg
92-52-4	1,1-Biphenyl	14000	UD	540	7000	14000	ug/Kg
91-58-7	2-Chloronaphthalene	14000	UD	330	7000	14000	ug/Kg
88-74-4	2-Nitroaniline	14000	UD	640	7000	14000	ug/Kg
131-11-3	Dimethylphthalate	14000	UD	390	7000	14000	ug/Kg
208-96-8	Acenaphthylene	14000	UD	360	7000	14000	ug/Kg
606-20-2	2,6-Dinitrotoluene	14000	UD	580	7000	14000	ug/Kg
99-09-2	3-Nitroaniline	14000	UD	920	7000	14000	ug/Kg
83-32-9	Acenaphthene	14000	UD	400	7000	14000	ug/Kg
132-64-9	Dibenzofuran	14000	UD	560	7000	14000	ug/Kg
121-14-2	2,4-Dinitrotoluene	14000	UD	430	7000	14000	ug/Kg
84-66-2	Diethylphthalate	14000	UD	220	7000	14000	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	14000	UD	780	7000	14000	ug/Kg
86-73-7	Fluorene	14000	UD	540	7000	14000	ug/Kg
100-01-6	4-Nitroaniline	14000	UD	1900	7000	14000	ug/Kg
86-30-6	N-Nitrosodiphenylamine	14000	UD	340	7000	14000	ug/Kg
101-55-3	4-Bromophenyl-phenylether	14000	UD	280	7000	14000	ug/Kg
118-74-1	Hexachlorobenzene	14000	UD	580	7000	14000	ug/Kg
1912-24-9	Atrazine	14000	UD	760	7000	14000	ug/Kg
85-01-8	Phenanthrene	14000	UD	390	7000	14000	ug/Kg
120-12-7	Anthracene	14000	UD	290	7000	14000	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	11/09/10
Project:	Provan	Date Received:	11/11/10
Client Sample ID:	WR-S-1 (11.5-12.0)DL2	SDG No.:	B4222
Lab Sample ID:	B4222-02DL2	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	7
Sample Wt/Vol:	30.03 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041445.D	40	11/12/10	11/16/10	PB52430

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	14000	UD	310	7000	14000	ug/Kg
84-74-2	Di-n-butylphthalate	14000	UD	1100	7000	14000	ug/Kg
206-44-0	Fluoranthene	14000	UD	290	7000	14000	ug/Kg
129-00-0	Pyrene	14000	UD	340	7000	14000	ug/Kg
85-68-7	Butylbenzylphthalate	14000	UD	690	7000	14000	ug/Kg
91-94-1	3,3-Dichlorobenzidine	14000	UD	920	7000	14000	ug/Kg
56-55-3	Benzo(a)anthracene	14000	UD	680	7000	14000	ug/Kg
218-01-9	Chrysene	14000	UD	650	7000	14000	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	46000	D	510	7000	14000	ug/Kg
117-84-0	Di-n-octyl phthalate	14000	UD	160	7000	14000	ug/Kg
205-99-2	Benzo(b)fluoranthene	14000	UD	470	7000	14000	ug/Kg
207-08-9	Benzo(k)fluoranthene	14000	UD	670	7000	14000	ug/Kg
50-32-8	Benzo(a)pyrene	14000	UD	310	7000	14000	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	14000	UD	480	7000	14000	ug/Kg
53-70-3	Dibenz(a,h)anthracene	14000	UD	410	7000	14000	ug/Kg
191-24-2	Benzo(g,h,i)perylene	14000	UD	580	7000	14000	ug/Kg

SURROGATES

367-12-4	2-Fluorophenol	128		26 - 141		86%	SPK: 150
13127-88-3	Phenol-d5	133		28 - 142		89%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.2		30 - 150		89%	SPK: 100
321-60-8	2-Fluorobiphenyl	90.8		19 - 182		91%	SPK: 100
118-79-6	2,4,6-Tribromophenol	119		29 - 150		79%	SPK: 150
1718-51-0	Terphenyl-d14	83.2		24 - 191		83%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	37673	5.65				
1146-65-2	Naphthalene-d8	129520	6.99				
15067-26-2	Acenaphthene-d10	70721	8.77				
1517-22-2	Phenanthrene-d10	106391	10.45				
1719-03-5	Chrysene-d12	91919	13.64				
1520-96-3	Perylene-d12	79369	15.6				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

APPENDIX C

CHAIN OF CUSTODY

Page 7 of 7[illegible]

From: Michael Richardson [MSR@firstenvironment.com]
Sent: Thursday, November 11, 2010 4:21 PM
To: Christopher Wolski
Subject: RE: sample results for B4135-Provan
Chris,

Unfortunately I still have not gotten clarification from the State. As per our discussion, for right now please hold PROVA002 samples

WR-S-1
WR-S-2
WR-S-3
WR-S-4

and run Sample RU-WRV-1 on a 1 week turn.

Please note that sample "WR-S-2 (0-6) AGW" should actually read "WR-S-2 (12.5'-13.0)"

Any questions please let me know.

Thanks,

Michael

Michael S. Richardson P.E.
Senior Engineer
First Environment, Inc.
91 Fulton St
Boonton, NJ 07005
p (973) 334 0003
f (973) 334 0928
www.firstenvironment.com

From: Christopher Wolski [mailto:C.Wolski@chemtech.net]
Sent: Friday, November 05, 2010 1:31 PM
To: Michael Richardson
Subject: sample results for B4135-Provan

Hi Michael,

Please see attached. If you have any questions please don't hesitate to ask.

Regards,

Chris Wolski

Tel. 908 728 3149

Fax: 908-789-8514

From: Michael Richardson [MSR@firstenvironment.com]
Sent: Friday, November 12, 2010 11:52 AM
To: Christopher Wolski
Cc: Matthew G. Butler; Ron Tai; Gary B. Fields
Subject: FW: Current sidewall post-ex (Provan)
Chris for the samples we have recently sent in for Provan please run:

WR-S-1 (11.5-12.0) for VOCs and BN+15 on a 48-hr turn.

Hold samples: WR-S-2 (12.5-13.0), WR-S-3 (12.0-12.5), WR-S-4 (11.5-12.0).

Please call or email to confirm
Thanks,

Michael

Michael S. Richardson P.E.
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Premier Environmental Services

DATA VALIDATION SUMMARY

FORMER PROVAN FORD SITE

VOLATILE ORGANIC ANALYSES/BASE NEUTRAL
SEMIVOLATILE ORGANIC ANALYSES
(EPA METHOD 8260B/8270B)

IN NON-AQUEOUS SAMPLES

CHEMTECH
MOUNTAINSIDE, NEW JERSEY

PROJECT NUMBER:

B4275

April, 2011

Prepared for
First Environment, Incorporated
Boonton, New Jersey

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566
(516) 223-9761 • FAX (516) 223-0983

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	Volatile Organic Compounds (VOC's) Base Neutral Semivolatile Organic Compounds (SVOA's)
SITE:	Former Provan Ford Site
CONTRACT LAB:	Chemtech Mountainside, New Jersey
PROJECT NO.:	B4275
REVIEWER:	Renee Cohen
DATE REVIEW COMPLETED:	April, 2011
MATRIX:	Non-Aqueous

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary Review. In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. 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 thirteen (13) non-aqueous samples. The samples in this data set were collected November 16, 2010, November 17, 2010, November 18, 2010, November 22, 2010 and November 23, 2010. The sample was received at Chemtech located in Mountainside, NJ on November 17, 2010, November 19, 2010 and November 24, 2010. The samples were analyzed for Volatile Organic Analytes (VOA) and Base Neutral Semivolatile Organic Analytes (SVOA) as marked on the Chain of Custody documents that accompanied the samples to the laboratory.

ORGANIC DATA ASSESSMENT

1. OVERVIEW:

Samples associated with this data set were analyzed for Volatile Organic Analytes (VOA), Semivolatile Organic Analytes as noted by the COC documentation that accompanied the sample set to the laboratory. All analyses were performed in accordance with USEPA Test Methods for the Evaluation of Solid Waste (SW846) as well as the NYSDC ASP methodologies. Data validation will utilize the validation guidelines listed above, however, QA/QC requirements of the NYS DEC ASP (12/95) will supersede CLP requirements in terms of calibration (where applicable) and holding time. Chemtech generated a stand-alone report for each fraction in compliance with the NYS DEC ASP Category B deliverables. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report B4275 consists of thirteen (13) non-aqueous samples. The Chain of Custody documents indicated the parameters that the samples were to be analyzed for. The laboratory sample ID and field sample ID's are summarized in Table 1 of this report.

A copy of the COC documents associated with this data set is located in Appendix C of this report.

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 NYS DEC ASP criteria specifies holding times for solid and soil samples. These holding times are based on Validated Time of Sample Receipt (VTSR). The holding times cited in the NY ASP were reviewed. EPA SW846 methods cite holding times based on collection date. The technical holding time for properly preserved aqueous and non aqueous Volatile Organic samples is fourteen (14) days.

Proper preservation of a soil sample is refrigeration at 4 degrees C until analysis. The holding time criteria for volatile organic sample analysis is that properly preserved samples be analyzed within ten (10) days of VTSR. The holding time criteria for semivolatile organic samples is that the extraction is to be completed within five (5) days of VTSR and that analysis of the extract is be completed within forty (40) days. The technical holding time for the extraction of non-aqueous samples for semivolatile organic analytes is fourteen (14) days from collection.

Volatile Organic Analyses (EPA Method 8260B) - The sample in this data set was collected November 16-23, 2010 and received at the laboratory November 17, 2010, November 19, 2010 and November 24, 2010. All analyses associated with this data set were completed by November 28, 2010.

Semivolatile Organic Analyses (EPA Method 8270C) – The samples in laboratory report B4275 were analyzed for Base Neutral SVOA's. The samples were collected between November 16, 2010 and November 23, 2010 and were received at the laboratory between November 17, 2010 and November 24, 2010. The samples were extracted in two (2) batches on November 17, 2010 and November 19, 2010. All sample extract analyses were completed by November 22, 2010. The sample and associated QC were extracted and analyzed within the method holding time.

ORGANIC DATA ASSESSMENT

3. SURROGATES:

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with four (4) method recommended surrogate compounds. These include 1,2-Dichloroethane-d4, Dibromofluoromethane, Toluene-d8 and 4-Bromofluorobenzene prior to analysis to evaluate the overall laboratory performance and the efficiency of the analytical technique. The samples to be analyzed for Semivolatile Organic Analytes (SVOA) are fortified with the surrogate compounds 2-Fluorophenol, Phenol-d5, 2,4,6-Tribromophenol, Nitrobenzene-d5, 2-Fluorobiphenyl and Terphenyl-d14 prior to sample extraction to evaluate the overall laboratory performance and the efficiency of the analytical technique.

Volatile Organic Analyses (EPA Method 8260B) – Each of the samples in this data set was fortified with the method specified surrogate compounds. The laboratory reported in-house limits for the surrogate recovery limits. The surrogate percent recoveries met QC criteria in all samples associated with this data set with the exception of that listed below:

Sample ID	Surrogate
WR-S-7 (16.5-17.0)	4-Bromofluorobenzene
WR-S-7 (16.5-17.0) RE	4-Bromofluorobenzene
WR-S-6 (16.0-16.5)	1,2-Dichloroethane-d4, 4-Bromofluorobenzene
WR-S-9 (16.5-17.0)	4-Bromofluorobenzene
WR-B-2 (17.0-17.5)	4-Bromofluorobenzene

Semivolatile Organic Analyses (EPA Method 8270C) - The percent recovery of each surrogate met QC criteria in each of the samples associated with this data set.

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.

Volatile Organic Analyses (EPA Method 8260B) – Site specific MS/MSD analysis was performed on sample WR-S-12BETA. The MS/MSD were fortified with the complete target analyte list of analytes. The percent recovery of all target analytes and all RPD's met QC criteria.

The laboratory prepared and analyzed a one (1) Laboratory Control Sample with each of the sample batches in this data set. The laboratory fortified each with a full component spike solution. Chemtech used a "CLP Like" QC summary form to report the data results. In-house QC limits were applied for each analyte. The percent recovery and RPD of each target analytes met QC criteria in the LCS sample.

Semivolatile Organic Analyses (EPA Method 8270C) –Site specific MS/MSD analyses was prepared and analyzed using sample WR-B-1-18.0-18.5 (B4372-02). All percent recoveries in the MS and MSD sample met QC criteria. The Relative Percent Difference of all target analytes met QC with the exception of 3,3'-Dichlorobenzidine. Sample data was not qualified based on the results of the MS/MSD data alone.

The laboratory prepared and analyzed one (1) Laboratory Control Sample (LCS) with each sample batch. The laboratory fortified the LCS using a full component (Base Neutral compound)spike solution. Chemtech used a "CLP Like" QC summary form to report the LCS data results. In-house QC limits were utilized. All percent recoveries met QC criteria in each of the LCS samples associated with 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.

A) Method Blank contamination

Volatile Organic Analyses (EPA Method 8260B) – Four (4) low level soil sample method blanks are associated with this data set. Each of these method blank samples was free from contamination of target analytes. Five (5) medium level soil sample method blanks are associated with this data set. Each was free from contamination of target analytes.

Semivolatile Organic Analyses (EPA Method 8270C) – Two (2) method blank samples are associated with this data set. Each was free from contamination of target and non target analytes with the exception of that listed below:

Sample ID	Date of Extraction	Analyte	Conc (Retention Time)
PB52518B	11/17/10	Dimethylphthalate	200 J ug/kg
		ACP	3.52
		Unknown	21.13
PB52550B	11/19/10	Dimethylphthalate	110 J ug/kg
		ACP	3.51
		Unknown	14.0

When detected in associated field samples, Dimethylphthalate and the TIC's have been negated and qualified "U".

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

B) Field or Equipment Rinse Blank (ERB) contamination

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

C) Trip Blank contamination

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

ORGANIC DATA ASSESSMENT

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. Region USEPA and Region II criteria is the sample for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses is the same, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Three (3) low level soil sample initial calibration curve analyses are associated with the sample in this data set. The laboratory performed a multilevel calibration on November 17, 2010, November 22, 2010 and November 27, 2010 (Inst. VOAK). The laboratory summarized the relative response factor (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 each of these initial calibration curve analyses.

Two (2) continuing calibration curve analyses are associated with the low level samples in this data set. The RRF of all target compounds met QC criteria in each of the low level CCV standards associated with this data set.

Three (3) medium level soil sample initial calibration curve analyses are associated with the sample in this data set. The laboratory performed a multilevel calibration on November 23, 2010 (Inst. VOAE), November 20, 2010 (Inst. VOAF) and November 25, 2010 (Inst. VOAH). The laboratory summarized the relative response factor (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 each of these initial calibration curve analyses.

Five (5) continuing calibration curve analyses are associated with the medium level samples in this data set. The RRF of all target compounds met QC criteria in each of the medium level CCV standards associated with this data set.

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

A) RESPONSE FACTOR (cont'd):

Semivolatile Organic Analyses (EPA Method 8270C) – Two (2) initial calibration curve analyses are associated with the samples in this data set. An initial calibration curve was analyzed on November 9, 2010 (Inst. BNAE). The RRF of all target analytes met QC criteria in this initial calibration curve analysis. Three (3) continuing calibration standard analyses are associated with this curve analysis. All RRF met QC criteria in each of these continuing calibration standards.

An additional initial calibration curve was analyzed on November 17, 2010 (Inst. BNAF). The RRF of all target compounds met QC criteria in this initial calibration curve analysis. One (1) continuing calibration standard is associated with this curve analysis. All RRF met QC criteria in this continuing calibration standard.

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

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

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. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. 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. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Three (3) low level soil sample initial calibration curve analyses are associated with the sample in this data set. The laboratory performed a multilevel calibration on November 17, 2010, November 22, 2010 and November 27, 2010 (Inst. VOAK). 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 each of these initial calibration curve analyses.

Two (2) continuing calibration verification (CCV) standards are associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria.

Three (3) medium level soil sample initial calibration curve analyses are associated with the sample in this data set. The laboratory performed a multilevel calibration on November 23, 2010 (Inst. VOAE), November 20, 2010 (Inst. VOAF) and November 25, 2010 (Inst. VOAH). 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 with the exception of that listed below met QC criteria in each of these initial calibration curve analyses.

Date of Analysis	Instrument	Analyte	RSD (%)
11/23/10	E	Bromoform	41.28

Bromoform has been qualified "UJ/J" estimated in each sample associated with this initial calibration curve analysis.

Five (5) continuing calibration verification (CCV) standards are associated with this calibration curve analysis. The %Difference of all target analytes with the exception of that listed below:

Date of Analysis	File ID	Analyte	%Difference
11/25/10	VE020628.D	Bromoform	44.8
11/26/10	VE020648.D	Carbon Tetrachloride	33.6
		Bromoform	36.9

These target analytes have been qualified "UJ/J" estimated in each of the samples associated with these continuing calibration standard analyses.

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

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

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

Semivolatile Organic Analyses (EPA Method 8270C) – Two (2) initial calibration curve analyses are associated with the samples in this data set. An initial calibration curve was analyzed on November 9, 2010 (Inst. BNAE). The %RSD of all target compounds met QC criteria in this initial calibration curve analysis. Three (3) continuing calibration standard analyses are associated with this curve analysis. All %Difference criteria were met in each of these continuing calibration standards.

An additional initial calibration curve was analyzed on November 17, 2010 (Inst. BNAF). The %RSD of all target analytes met QC criteria in this initial calibration curve analysis. One (1) continuing calibration standard analysis is associated with this curve analysis. All %Difference criteria were met in this continuing calibration standard.

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 tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses/Semivolatile Organic analyses - 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.

Volatile Organic Analyses (EPA Method 8260B) - All samples were spiked with the internal standards Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 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 with the exception of that listed below:

Sample ID	Internal Standard
WR-S-7 (16.5-17.0) RE	1,4-Difluorobenzene
WR-B-3 (14.5-15.0)	1,4-Dichlorobenzene-d4
WR-S-11 (14.5-15.0)	1,4-Dichlorobenzene-d4
WR-S-6 (16.0-16.5)	Chlorobenzene-d5, 1,4-Dichlorobenzene-d4
WR-B-2 (17.0-17.5)	Chlorobenzene-d5, 1,4-Dichlorobenzene-d4
WR-S-9 (16.5-17.0)	1,4-Dichlorobenzene-d5

The target analytes associated with these internal standards have been qualified "UJ/J" estimated.

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

Semivolatile Organic Analyses (EPA Method 8270C) - All samples were spiked with the internal standards 1,4-Dichlorobenzene-d4, Naphthalene-d8, Acenaphthene-d10, Phenanthrene-d10, Chrysene-d12 and Perylene-d12 prior to sample analysis. The area counts and retention time shift of each internal standard was reported. All Internal Standard criteria were met in the samples associated with this data set.

ORGANIC DATA ASSESSMENT

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.

Volatile Organic Analyses (EPA Method 8260B) – Thirteen (13) non-aqueous samples are associated with this data set. The sample was analyzed via Method 8260B. Tentatively Identified Compounds (TIC's) when detected are reported for each sample. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

The sample chromatograms associated with this sample set indicated a hump as well as the presence of non target compounds at each sample point. The dilution analysis was able to reduce the matrix interference in some cases. The dilution analysis was necessary to report the target analytes within the concentration of the GC/MS.

Sample WR-S-6 (16.0-16.5) (B4275-03) was initially analyzed as a low level soil sample. The concentration of Cyclohexane, 1,1,1-Trichloroethane, Methylcyclohexane, Toluene, Ethylbenzene, m,p-Xylene, o-Xylene and Isopropylbenzene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample with an additional 1:10 dilution analysis to report the concentration of Cyclohexane (3700 JD ug/kg), Methylcyclohexane (16000 D ug/kg), Toluene (1500 JD ug/kg), Ethylbenzene (10000 D ug/kg), m,p-Xylene (16000 D ug/kg), o-Xylene (4900 JD ug/kg) and Isopropylbenzene (3200 JD ug/kg) detected at this sample point. 1,1,1-Trichloroethane was not detected in the dilution analysis and the laboratory did not reanalyze the sample less dilute. The concentration of 1,1,1-Trichloroethane in the initial analysis is an estimated value and qualified "J". Surrogates exceeded QC limits in this sample, all target analytes in this initial analysis are qualified "J" estimated.

Sample WR-S-9 (16.5-17.0) (B4275-06) was initially analyzed as a low level soil sample. The concentration of Cyclohexane, Methylcyclohexane, Ethylbenzene, m,p-Xylene, and Isopropylbenzene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample with an additional 1:10 dilution analysis to report the concentration of Cyclohexane (1000 JD ug/kg), Methylcyclohexane (2700 JD ug/kg), Ethylbenzene (890 JD ug/kg), m,p-Xylene (1200 JD ug/kg) and Isopropylbenzene (720 JD ug/kg) detected at this sample point. Surrogates exceeded QC limits in this sample, all target analytes in this initial analysis are qualified "J" estimated.

Sample WR-B-2 (17.0-17.5) (B4275-07) was initially analyzed as a low level soil sample. The concentration of Cyclohexane, Methylcyclohexane, Ethylbenzene, m,p-Xylene, and Isopropylbenzene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample with an additional 1:10 dilution analysis to report the concentration of Cyclohexane (810 JD ug/kg), Methylcyclohexane (3100 JD ug/kg) and m,p-Xylene (1400 JD ug/kg) detected at this sample point. The dilution utilized for this analysis was too high to report the concentration of Ethylbenzene and Isopropylbenzene. These concentrations have been qualified "J" estimated in the initial low level sample analysis. Surrogates exceeded QC limits in this initial sample analysis, all target analytes in this initial analysis are qualified "J" estimated.

Sample WR-B-3 (14.5-15.0) (B4275-08) was initially analyzed as a low level soil sample. The concentration of cis 1,2-Dichloroethene and 1,2-Dichloroethane exceeded the concentration range. This sample was reanalyzed as a medium level soil sample to report the concentration of cis 1,2-Dichloroethene (8700 D ug/kg) and 1,2-Dichloroethane (210 JD ug/kg) detected at this sample point.

ORGANIC DATA ASSESSMENT

9. COMPOUND IDENTIFICATION (cont'd):

Sample WR-S-10 (14.5-15.0) (B4275-09) was initially analyzed as a medium level soil sample. The concentration of cis 1,2-Dichloroethene and 1,2-Dichloroethane exceeded the concentration range. This sample was reanalyzed as a medium level soil sample using an additional 1:8 dilution to report the concentration of cis 1,2-Dichloroethene (58000 D ug/kg) and 1,2-Dichloroethane (18000 D ug/kg) detected at this sample point.

Sample WR-S-11 (14.5-15.0) (B4275-10) was initially analyzed as a low level soil sample. The concentration of cis 1,2-Dichloroethene and 1,2-Dichloroethane exceeded the concentration range. This sample was reanalyzed as a medium level soil sample to report the concentration of cis 1,2-Dichloroethene (81000 D ug/kg) and 1,2-Dichloroethane (8200 D ug/kg) detected at this sample point.

Sample WR-B-4 (14.5-15.0) (B4275-11) was initially analyzed as a medium level soil sample. The concentration of cis 1,2-Dichloroethene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample with an additional dilution of 1:8 to report the concentration of cis 1,2-Dichloroethene (54000 D ug/kg) detected at this sample point.

Sample WR-S-12BETA (B4275-121) was initially analyzed as a medium level soil sample. The concentration of cis 1,2-Dichloroethene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample with an additional dilution of 1:8 to report the concentration of cis 1,2-Dichloroethene (57000 D ug/kg) detected at this sample point.

Semivolatile Organic Analyses (SW846 Method 8270C) – Three (3) non-aqueous samples are marked on the COC documents for these Base Neutral SVOA analyses. Correspondence between First Environment and the laboratory confirmed these analyses. A copy of the COC documents and associated correspondence is located in Appendix C of this data report. The samples were analyzed in accordance with Method 8270C and reported the Base Neutral compound list. Tentatively Identified Compounds (TIC's) when detected were reported with this data set. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

Sample WR-S-9 (16.5-17.0) (B4275-06) was initially analyzed as a low level soil sample. The concentration of 2-Methylnaphthalene, Phenanthrene and Bis (2-ethylhexyl) phthalate exceeded the concentration range of the GC/MS. The sample extract was reanalyzed using a 1:5 dilution analysis to report the concentration of Phenanthrene (8900 D ug/kg) and Bis (2-ethylhexyl) phthalate (6100 D ug/kg) detected at this sample point. The concentration of 2-Methylnaphthalene was still above the calibration range. The extract was reanalyzed using a 1:25 dilution to report the concentration of 2-Methylnaphthalene (27000 D ug/kg) detected at this sample point. The sample chromatogram in each of these three (3) analyses indicates the presence of matrix interference in the form of a "hump". In addition a number of unknown TIC compounds were detected at this sample point.

10. FIELD DUPLICATE ANALYSES:

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. Soil samples have a greater variability than aqueous samples. Percent moisture and reported dilution factors also tend to lead to greater variability in RPD. Analytes reported above the reporting limit are listed. Data was not qualified based on the calculated RPD of field duplicate sample analyses.

Field duplicate samples were not associated with this data set.

ORGANIC DATA ASSESSMENT

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 DUSR 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. Soil sample results are reported on a dry weight basis. 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.

TABLE 1

FIELD SAMPLE ID**LABORATORY ID**

WR-S-5-16.5-17	B4275-01
WR-B-1-18.0-18.5	B4275-02
WR-S-6(16.0-16.5)	B4275-03
WR-S-7 (16.5-17.0)	B4275-04
WR-S-8 (16.0-16.5)	B4275-05
WR-S-9 (16.5-17.0)	B4275-06
WR-B-2(17.0-17.5)	B4275-07
WR-B-3 (14.5-15.0)	B4275-08
WR-S-10 (14.5-15.0)	B4275-09
WR-S-11 (14.5-15.0)	B4275-10
WR-B-4 (14.5-15.0)	B4275-11
WR-S-12 BETA	B4275-12
WR-S-12MS	B4275-13
WR-S-12 MSD	B4275-14
RU-WRV-2	B4275-15

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



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-S-5-16.5-17.0	SDG No.:	B4275
Lab Sample ID:	B4275-01	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	12
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VK041993.D	1	11/24/10	VK112410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.7	U	0.74	2.85	5.7	ug/Kg
74-87-3	Chloromethane	5.7	U	0.98	2.85	5.7	ug/Kg
75-01-4	Vinyl Chloride	5.7	U	1.4	2.85	5.7	ug/Kg
74-83-9	Bromomethane	5.7	U	2.8	2.85	5.7	ug/Kg
75-00-3	Chloroethane	5.7	U	1.6	2.85	5.7	ug/Kg
75-69-4	Trichlorofluoromethane	5.7	U	1.5	2.85	5.7	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.7	U	1.5	2.85	5.7	ug/Kg
75-35-4	1,1-Dichloroethene	5.7	U	1.7	2.85	5.7	ug/Kg
67-64-1	Acetone	28	U	3.4	14	28	ug/Kg
75-15-0	Carbon Disulfide	5.7	U	1.2	2.85	5.7	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.7	U	1.1	2.85	5.7	ug/Kg
79-20-9	Methyl Acetate	5.7	U	1.7	2.85	5.7	ug/Kg
75-09-2	Methylene Chloride	2.3	J	1.6	2.85	5.7	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.7	U	0.78	2.85	5.7	ug/Kg
75-34-3	1,1-Dichloroethane	5.7	U	1.1	2.85	5.7	ug/Kg
110-82-7	Cyclohexane	5.7	U	1.1	2.85	5.7	ug/Kg
78-93-3	2-Butanone	28	U	3.5	14	28	ug/Kg
56-23-5	Carbon Tetrachloride	5.7	U	1.1	2.85	5.7	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.7	U	1	2.85	5.7	ug/Kg
67-66-3	Chloroform	5.7	U	0.84	2.85	5.7	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.7	U	1	2.85	5.7	ug/Kg
108-87-2	Methylcyclohexane	5.7	U	1.2	2.85	5.7	ug/Kg
71-43-2	Benzene	5.7	U	0.43	2.85	5.7	ug/Kg
107-06-2	1,2-Dichloroethane	5.7	U	0.73	2.85	5.7	ug/Kg
79-01-6	Trichloroethene	5.7	U	0.98	2.85	5.7	ug/Kg
78-87-5	1,2-Dichloropropane	5.7	U	0.29	2.85	5.7	ug/Kg
75-27-4	Bromodichloromethane	5.7	U	0.7	2.85	5.7	ug/Kg
108-10-1	4-Methyl-2-Pentanone	28	U	3.3	14	28	ug/Kg
108-88-3	Toluene	5.7	U	0.73	2.85	5.7	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.7	U	0.9	2.85	5.7	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.7	U	0.82	2.85	5.7	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.7	U	1	2.85	5.7	ug/Kg
591-78-6	2-Hexanone	28	U	4.4	14	28	ug/Kg
124-48-1	Dibromochloromethane	5.7	U	0.61	2.85	5.7	ug/Kg
106-93-4	1,2-Dibromoethane	5.7	U	0.73	2.85	5.7	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-S-5-16.5-17.0	SDG No.:	B4275
Lab Sample ID:	B4275-01	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	12
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041993.D	1		11/24/10	VK112410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.7	U	1.1	2.85	5.7	ug/Kg
108-90-7	Chlorobenzene	5.7	U	0.57	2.85	5.7	ug/Kg
100-41-4	Ethyl Benzene	5.7	U	0.7	2.85	5.7	ug/Kg
179601-23-1	m/p-Xylenes	11	U	0.82	5.5	11	ug/Kg
95-47-6	o-Xylene	5.7	U	0.77	2.85	5.7	ug/Kg
100-42-5	Styrene	5.7	U	0.51	2.85	5.7	ug/Kg
75-25-2	Bromoform	5.7	U	0.84	2.85	5.7	ug/Kg
98-82-8	Isopropylbenzene	5.7	U	0.54	2.85	5.7	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U	0.52	2.85	5.7	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.7	U	0.42	2.85	5.7	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.7	U	0.46	2.85	5.7	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.7	U	0.7	2.85	5.7	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.7	U	0.99	2.85	5.7	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.7	U	0.79	2.85	5.7	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	52.1		55 - 158		104%	SPK: 50
1868-53-7	Dibromofluoromethane	40.8		53 - 156		82%	SPK: 50
2037-26-5	Toluene-d8	42.2		68 - 122		84%	SPK: 50
460-00-4	4-Bromofluorobenzene	68.7		25 - 144		137%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	262122	3.18				
540-36-3	1,4-Difluorobenzene	727155	3.57				
3114-55-4	Chlorobenzene-d5	581774	6.24				
3855-82-1	1,4-Dichlorobenzene-d4	242429	8.58				
TENTATIVE IDENTIFIED COMPOUNDS							
016747-26-5	Hexane, 2,2,4-trimethyl-	86	J			4.44	ug/Kg
003074-71-3	Heptane, 2,3-dimethyl-	82	J			4.97	ug/Kg
002216-30-0	Heptane, 2,5-dimethyl-	140	J			5.27	ug/Kg
001502-38-1	Cyclooctane, methyl-	130	J			5.42	ug/Kg
002234-75-5	Cyclohexane, 1,2,4-trimethyl-	140	J			5.66	ug/Kg
014720-74-2	Heptane, 2,2,4-trimethyl-	98	J			6.14	ug/Kg
015869-86-0	Octane, 4-ethyl-	160	J			6.58	ug/Kg
001072-16-8	Octane, 2,7-dimethyl-	110	J			6.83	ug/Kg
062338-09-4	Decane, 2,2,3-trimethyl-	340	J			7.41	ug/Kg
000544-76-3	Hexadecane	120	J			8.24	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/16/10	
Project:	Provan	Date Received:	11/17/10	
Client Sample ID:	WR-S-5-16.5-17.0	SDG No.:	B4275	
Lab Sample ID:	B4275-01	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	12	
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041993.D	1		11/24/10	VK112410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
91-20-3	Naphthalene	3.9	J			10.3	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	11/16/10	
Project:	Provan	Date Received:	11/17/10	
Client Sample ID:	WR-B-1-18.0-18.5	SDG No.:	B4275	
Lab Sample ID:	B4275-02	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	11	
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041839.D	1		11/17/10	VK111710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.6	U	0.73	2.8	5.6	ug/Kg
74-87-3	Chloromethane	5.6	U	0.96	2.8	5.6	ug/Kg
75-01-4	Vinyl Chloride	5.6	U	1.4	2.8	5.6	ug/Kg
74-83-9	Bromomethane	5.6	U	2.7	2.8	5.6	ug/Kg
75-00-3	Chloroethane	5.6	U	1.6	2.8	5.6	ug/Kg
75-69-4	Trichlorofluoromethane	5.6	U	1.5	2.8	5.6	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.6	U	1.5	2.8	5.6	ug/Kg
75-35-4	1,1-Dichloroethene	5.6	U	1.6	2.8	5.6	ug/Kg
67-64-1	Acetone	28	U	3.4	14	28	ug/Kg
75-15-0	Carbon Disulfide	5.6	U	1.2	2.8	5.6	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.6	U	1.1	2.8	5.6	ug/Kg
79-20-9	Methyl Acetate	5.6	U	1.7	2.8	5.6	ug/Kg
75-09-2	Methylene Chloride	5.6	U	1.6	2.8	5.6	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.6	U	0.77	2.8	5.6	ug/Kg
75-34-3	1,1-Dichloroethane	5.6	U	1	2.8	5.6	ug/Kg
110-82-7	Cyclohexane	5.6	U	1.1	2.8	5.6	ug/Kg
78-93-3	2-Butanone	28	U	3.5	14	28	ug/Kg
56-23-5	Carbon Tetrachloride	5.6	U	1.1	2.8	5.6	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.6	U	0.99	2.8	5.6	ug/Kg
67-66-3	Chloroform	5.6	U	0.83	2.8	5.6	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.6	U	0.98	2.8	5.6	ug/Kg
108-87-2	Methylcyclohexane	21		1.2	2.8	5.6	ug/Kg
71-43-2	Benzene	5.6	U	0.42	2.8	5.6	ug/Kg
107-06-2	1,2-Dichloroethane	5.6	U	0.71	2.8	5.6	ug/Kg
79-01-6	Trichloroethene	5.6	U	0.96	2.8	5.6	ug/Kg
78-87-5	1,2-Dichloropropane	5.6	U	0.29	2.8	5.6	ug/Kg
75-27-4	Bromodichloromethane	5.6	U	0.69	2.8	5.6	ug/Kg
108-10-1	4-Methyl-2-Pentanone	28	U	3.3	14	28	ug/Kg
108-88-3	Toluene	5.6	U	0.71	2.8	5.6	ug/Kg
10061-02-6	trans-1,3-Dichloropropene	5.6	U	0.88	2.8	5.6	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.6	U	0.8	2.8	5.6	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.6	U	1	2.8	5.6	ug/Kg
591-78-6	2-Hexanone	28	U	4.4	14	28	ug/Kg
124-48-1	Dibromochloromethane	5.6	U	0.6	2.8	5.6	ug/Kg
106-93-4	1,2-Dibromoethane	5.6	U	0.71	2.8	5.6	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-B-1-18.0-18.5	SDG No.:	B4275
Lab Sample ID:	B4275-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VK041839.D	1		11/17/10
			Prep Batch ID
			VK111710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.6	U	1.1	2.8	5.6	ug/Kg
108-90-7	Chlorobenzene	5.6	U	0.56	2.8	5.6	ug/Kg
100-41-4	Ethyl Benzene	2.8	J	0.69	2.8	5.6	ug/Kg
179601-23-1	m/p-Xylenes	4.3	J	0.8	5.5	11	ug/Kg
95-47-6	o-Xylene	5.6	U	0.76	2.8	5.6	ug/Kg
100-42-5	Styrene	5.6	U	0.5	2.8	5.6	ug/Kg
75-25-2	Bromoform	5.6	U	0.83	2.8	5.6	ug/Kg
98-82-8	Isopropylbenzene	1.3	J	0.54	2.8	5.6	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U	0.51	2.8	5.6	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.6	U	0.41	2.8	5.6	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.6	U	0.46	2.8	5.6	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.6	U	0.69	2.8	5.6	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.6	U	0.97	2.8	5.6	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.6	U	0.78	2.8	5.6	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.2		55 - 158		86%	SPK: 50
1868-53-7	Dibromofluoromethane	49.2		53 - 156		98%	SPK: 50
2037-26-5	Toluene-d8	50.4		68 - 122		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.1		25 - 144		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	211389	3.18				
540-36-3	1,4-Difluorobenzene	332636	3.57				
3114-55-4	Chlorobenzene-d5	345808	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	179822	8.59				
TENTATIVE IDENTIFIED COMPOUNDS							
000591-76-4	Hexane, 2-methyl-	41	J			2.69	ug/Kg
000589-34-4	Hexane, 3-methyl-	58	J			2.81	ug/Kg
000564-02-3	Pentane, 2,2,3-trimethyl-	110	J			3.05	ug/Kg
000592-13-2	Hexane, 2,5-dimethyl-	39	J			4.08	ug/Kg
103-65-1	n-propylbenzene	7.8	J			7.74	ug/Kg
622-96-8	p-ethyltoluene	11	J			7.85	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	14	J			7.94	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	30	J			8.27	ug/Kg
135-98-8	sec-Butylbenzene	2.3	J			8.37	ug/Kg
104-51-8	n-Butylbenzene	11	J			8.84	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-B-1-18.0-18.5	SDG No.:	B4275
Lab Sample ID:	B4275-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041839.D	1		11/17/10	VK111710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
95-93-2	1,2,4,5-tetramethylbenzene	27	J			9.42	ug/Kg
000824-90-8	1-Phenyl-1-butene	62	J			9.73	ug/Kg
013632-94-5	Benzene, 1,4-diethyl-2-methyl-	57	J			9.99	ug/Kg
91-20-3	Naphthalene	13	J			10.26	ug/Kg
001685-82-1	1H-Indene, 2,3-dihydro-4,6-dimethy	60	J			10.64	ug/Kg
000090-12-0	Naphthalene, 1-methyl-	52	J			10.98	ug/Kg
004453-90-1	1,4-Methanonaphthalene, 1,4-dihydr	49	J			11.08	ug/Kg
000581-40-8	Naphthalene, 2,3-dimethyl-	39	J			11.7	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/17/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-6(16.0-16.5)	SDG No.:	B4275
Lab Sample ID:	B4275-03	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	14
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041941.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.8	U J	0.75	2.9	5.8	ug/Kg
74-87-3	Chloromethane	5.8	U	1	2.9	5.8	ug/Kg
75-01-4	Vinyl Chloride	5.8	U	1.4	2.9	5.8	ug/Kg
74-83-9	Bromomethane	5.8	U	2.8	2.9	5.8	ug/Kg
75-00-3	Chloroethane	5.8	U	1.6	2.9	5.8	ug/Kg
75-69-4	Trichlorofluoromethane	5.8	U	1.5	2.9	5.8	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.8	U	1.5	2.9	5.8	ug/Kg
75-35-4	1,1-Dichloroethene	170	J	1.7	2.9	5.8	ug/Kg
67-64-1	Acetone	29	U J	3.5	14.5	29	ug/Kg
75-15-0	Carbon Disulfide	5.8	U	1.2	2.9	5.8	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.8	U	1.1	2.9	5.8	ug/Kg
79-20-9	Methyl Acetate	5.8	U	1.8	2.9	5.8	ug/Kg
75-09-2	Methylene Chloride	5.8	U	1.6	2.9	5.8	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.8	U	0.8	2.9	5.8	ug/Kg
75-34-3	1,1-Dichloroethane	5.8	U	1.1	2.9	5.8	ug/Kg
110-82-7	Cyclohexane	610	J	1.2	2.9	5.8	ug/Kg
78-93-3	2-Butanone	29	U J	3.6	14.5	29	ug/Kg
56-23-5	Carbon Tetrachloride	5.8	U	1.1	2.9	5.8	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.8	U	1	2.9	5.8	ug/Kg
67-66-3	Chloroform	5.8	U	0.86	2.9	5.8	ug/Kg
71-55-6	1,1,1-Trichloroethane	480	J	1	2.9	5.8	ug/Kg
108-87-2	Methylcyclohexane	2700	J	1.2	2.9	5.8	ug/Kg
71-43-2	Benzene	5.8	U J	0.44	2.9	5.8	ug/Kg
107-06-2	1,2-Dichloroethane	5.8	U	0.74	2.9	5.8	ug/Kg
79-01-6	Trichloroethene	5.8	U	1	2.9	5.8	ug/Kg
78-87-5	1,2-Dichloropropane	5.8	U	0.3	2.9	5.8	ug/Kg
75-27-4	Bromodichloromethane	5.8	U	0.72	2.9	5.8	ug/Kg
108-10-1	4-Methyl-2-Pentanone	29	U	3.4	14.5	29	ug/Kg
108-88-3	Toluene	1000	J	0.74	2.9	5.8	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.8	U J	0.92	2.9	5.8	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.8	U	0.84	2.9	5.8	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.8	U	1	2.9	5.8	ug/Kg
591-78-6	2-Hexanone	29	U	4.5	14.5	29	ug/Kg
124-48-1	Dibromochloromethane	5.8	U	0.63	2.9	5.8	ug/Kg
106-93-4	1,2-Dibromoethane	5.8	U	0.74	2.9	5.8	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/17/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-6(16.0-16.5)	SDG No.:	B4275
Lab Sample ID:	B4275-03	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	14
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041941.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	14	J	1.2	2.9	5.8	ug/Kg
108-90-7	Chlorobenzene	5.8	U	0.58	2.9	5.8	ug/Kg
100-41-4	Ethyl Benzene	3000	E	0.72	2.9	5.8	ug/Kg
179601-23-1	m/p-Xylenes	6400	E	0.84	6	12	ug/Kg
95-47-6	o-Xylene	1800	E	0.79	2.9	5.8	ug/Kg
100-42-5	Styrene	5.8	U	0.52	2.9	5.8	ug/Kg
75-25-2	Bromoform	5.8	U	0.86	2.9	5.8	ug/Kg
98-82-8	Isopropylbenzene	2300	E	0.56	2.9	5.8	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U	0.53	2.9	5.8	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.8	U	0.43	2.9	5.8	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.8	U	0.48	2.9	5.8	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.8	U	0.72	2.9	5.8	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.8	U	1	2.9	5.8	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.8	U	0.81	2.9	5.8	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	91.1	*	55 - 158		182%	SPK: 50
1868-53-7	Dibromofluoromethane	33.8		53 - 156		68%	SPK: 50
2037-26-5	Toluene-d8	41.3		68 - 122		83%	SPK: 50
460-00-4	4-Bromofluorobenzene	300	*	25 - 144		601%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	214267	3.19				
540-36-3	1,4-Difluorobenzene	688653	3.56				
3114-55-4	Chlorobenzene-d5	357858	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	64021	8.6				
TENTATIVE IDENTIFIED COMPOUNDS							
000109-66-0	Pentane	65	J			1.39	ug/Kg
000107-83-5	Pentane, 2-methyl-	95	J			1.73	ug/Kg
000079-29-8	Butane, 2,3-dimethyl-	210	J			1.8	ug/Kg
000096-14-0	Pentane, 3-methyl-	81	J			1.92	ug/Kg
	unknown1.97	120	J			1.97	ug/Kg
000096-37-7	Cyclopentane, methyl-	80	J			2.32	ug/Kg
000589-34-4	Hexane, 3-methyl-	370	J			2.81	ug/Kg
	unknown3.09	620	J			3.09	ug/Kg
103-65-1	n-propylbenzene	4400	J			7.76	ug/Kg
622-96-8	p-ethyltoluene	8300	J			7.88	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/17/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-6(16.0-16.5)	SDG No.:	B4275
Lab Sample ID:	B4275-03	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	14
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041941.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
108-67-8	1,3,5-Trimethylbenzene	7800	J			7.98	ug/Kg
002847-72-5	Decane, 4-methyl-	84	J			8.14	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	11000	J			8.32	ug/Kg
135-98-8	sec-Butylbenzene	2000	J			8.39	ug/Kg
99-87-6	p-Isopropyltoluene	3700	J			8.51	ug/Kg
000526-73-8	Benzene, 1,2,3-trimethyl-	58	J			8.67	ug/Kg
104-51-8	n-Butylbenzene	4100	J			8.87	ug/Kg
91-20-3	Naphthalene	1100	J			10.27	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/17/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-6(16.0-16.5)DL	SDG No.:	B4275
Lab Sample ID:	B4275-03DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	14
Sample Wt/Vol:	5.02 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VF024623.D	10		11/22/10
			Prep Batch ID
			VF112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5800	U	640	2900	5800	ug/Kg
74-87-3	Chloromethane	5800	U	630	2900	5800	ug/Kg
75-01-4	Vinyl Chloride	5800	U	390	2900	5800	ug/Kg
74-83-9	Bromomethane	5800	U	720	2900	5800	ug/Kg
75-00-3	Chloroethane	5800	U	760	2900	5800	ug/Kg
75-69-4	Trichlorofluoromethane	5800	U	410	2900	5800	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5800	U	520	2900	5800	ug/Kg
75-35-4	1,1-Dichloroethene	5800	U	540	2900	5800	ug/Kg
67-64-1	Acetone	29000	U	3200	14500	29000	ug/Kg
75-15-0	Carbon Disulfide	5800	U	630	2900	5800	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5800	U	410	2900	5800	ug/Kg
79-20-9	Methyl Acetate	5800	U	960	2900	5800	ug/Kg
75-09-2	Methylene Chloride	5800	U	470	2900	5800	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5800	U	470	2900	5800	ug/Kg
75-34-3	1,1-Dichloroethane	5800	U	420	2900	5800	ug/Kg
110-82-7	Cyclohexane	3700	JD	640	2900	5800	ug/Kg
78-93-3	2-Butanone	29000	U	1500	14500	29000	ug/Kg
56-23-5	Carbon Tetrachloride	5800	U	720	2900	5800	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5800	U	410	2900	5800	ug/Kg
67-66-3	Chloroform	5800	U	390	2900	5800	ug/Kg
71-55-6	1,1,1-Trichloroethane	5800	U	460	2900	5800	ug/Kg
108-87-2	Methylcyclohexane	16000	D	790	2900	5800	ug/Kg
71-43-2	Benzene	5800	U	370	2900	5800	ug/Kg
107-06-2	1,2-Dichloroethane	5800	U	560	2900	5800	ug/Kg
79-01-6	Trichloroethene	5800	U	320	2900	5800	ug/Kg
78-87-5	1,2-Dichloropropane	5800	U	530	2900	5800	ug/Kg
75-27-4	Bromodichloromethane	5800	U	420	2900	5800	ug/Kg
108-10-1	4-Methyl-2-Pentanone	29000	U	2400	14500	29000	ug/Kg
108-88-3	Toluene	1500	JD	430	2900	5800	ug/Kg
10061-02-6	trans-1,3-Dichloropropene	5800	U	340	2900	5800	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5800	U	360	2900	5800	ug/Kg
79-00-5	1,1,2-Trichloroethane	5800	U	440	2900	5800	ug/Kg
591-78-6	2-Hexanone	29000	U	2200	14500	29000	ug/Kg
124-48-1	Dibromochloromethane	5800	U	600	2900	5800	ug/Kg
106-93-4	1,2-Dibromoethane	5800	U	470	2900	5800	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/17/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-6(16.0-16.5)DL	SDG No.:	B4275
Lab Sample ID:	B4275-03DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	14
Sample Wt/Vol:	5.02 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024623.D	10		11/22/10	VF112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5800	U	310	2900	5800	ug/Kg
108-90-7	Chlorobenzene	5800	U	570	2900	5800	ug/Kg
100-41-4	Ethyl Benzene	10000	D	610	2900	5800	ug/Kg
179601-23-1	m/p-Xylenes	16000	D	1100	6000	12000	ug/Kg
95-47-6	o-Xylene	4900	JD	500	2900	5800	ug/Kg
100-42-5	Styrene	5800	U	420	2900	5800	ug/Kg
75-25-2	Bromoform	5800	U	540	2900	5800	ug/Kg
98-82-8	Isopropylbenzene	3200	JD	520	2900	5800	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5800	U	360	2900	5800	ug/Kg
541-73-1	1,3-Dichlorobenzene	5800	U	500	2900	5800	ug/Kg
106-46-7	1,4-Dichlorobenzene	5800	U	370	2900	5800	ug/Kg
95-50-1	1,2-Dichlorobenzene	5800	U	520	2900	5800	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5800	U	530	2900	5800	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5800	U	720	2900	5800	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	437		55 - 158		87%	SPK: 50
1868-53-7	Dibromofluoromethane	480		53 - 156		96%	SPK: 50
2037-26-5	Toluene-d8	485		68 - 122		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	491		25 - 144		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	819420	3.23				
540-36-3	1,4-Difluorobenzene	1490820	3.64				
3114-55-4	Chlorobenzene-d5	1345110	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	689134	8.96				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-7(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	13
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041939.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.8	U	0.75	2.9	5.8	ug/Kg
74-87-3	Chloromethane	5.8	U	0.99	2.9	5.8	ug/Kg
75-01-4	Vinyl Chloride	5.8	U	1.4	2.9	5.8	ug/Kg
74-83-9	Bromomethane	5.8	U	2.8	2.9	5.8	ug/Kg
75-00-3	Chloroethane	5.8	U	1.6	2.9	5.8	ug/Kg
75-69-4	Trichlorofluoromethane	5.8	U	1.5	2.9	5.8	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.8	U	1.5	2.9	5.8	ug/Kg
75-35-4	1,1-Dichloroethene	5.8	U	1.7	2.9	5.8	ug/Kg
67-64-1	Acetone	29	U	3.5	14.5	29	ug/Kg
75-15-0	Carbon Disulfide	1.9	J	1.2	2.9	5.8	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.8	U	1.1	2.9	5.8	ug/Kg
79-20-9	Methyl Acetate	5.8	U	1.7	2.9	5.8	ug/Kg
75-09-2	Methylene Chloride	5.8	U	1.6	2.9	5.8	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.8	U	0.79	2.9	5.8	ug/Kg
75-34-3	1,1-Dichloroethane	5.8	U	1.1	2.9	5.8	ug/Kg
110-82-7	Cyclohexane	5.8	U	1.2	2.9	5.8	ug/Kg
78-93-3	2-Butanone	29	U	3.6	14.5	29	ug/Kg
56-23-5	Carbon Tetrachloride	5.8	U	1.1	2.9	5.8	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.8	U	1	2.9	5.8	ug/Kg
67-66-3	Chloroform	5.8	U	0.85	2.9	5.8	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.8	U	1	2.9	5.8	ug/Kg
108-87-2	Methylcyclohexane	5.8	U	1.2	2.9	5.8	ug/Kg
71-43-2	Benzene	5.8	U	0.44	2.9	5.8	ug/Kg
107-06-2	1,2-Dichloroethane	5.8	U	0.74	2.9	5.8	ug/Kg
79-01-6	Trichloroethene	5.8	U	0.99	2.9	5.8	ug/Kg
78-87-5	1,2-Dichloropropane	5.8	U	0.3	2.9	5.8	ug/Kg
75-27-4	Bromodichloromethane	5.8	U	0.71	2.9	5.8	ug/Kg
108-10-1	4-Methyl-2-Pentanone	29	U	3.4	14.5	29	ug/Kg
108-88-3	Toluene	5.8	U	0.74	2.9	5.8	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.8	U	0.91	2.9	5.8	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.8	U	0.83	2.9	5.8	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.8	U	1	2.9	5.8	ug/Kg
591-78-6	2-Hexanone	29	U	4.5	14.5	29	ug/Kg
124-48-1	Dibromochloromethane	5.8	U	0.62	2.9	5.8	ug/Kg
106-93-4	1,2-Dibromoethane	5.8	U	0.74	2.9	5.8	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-7(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	13
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041939.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.8	U	1.2	2.9	5.8	ug/Kg
108-90-7	Chlorobenzene	5.8	U	0.58	2.9	5.8	ug/Kg
100-41-4	Ethyl Benzene	5.8	U	0.71	2.9	5.8	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.83	6	12	ug/Kg
95-47-6	o-Xylene	5.8	U	0.78	2.9	5.8	ug/Kg
100-42-5	Styrene	5.8	U	0.52	2.9	5.8	ug/Kg
75-25-2	Bromoform	5.8	U	0.85	2.9	5.8	ug/Kg
98-82-8	Isopropylbenzene	2.4	J	0.55	2.9	5.8	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U	0.53	2.9	5.8	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.8	U	0.43	2.9	5.8	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.8	U	0.47	2.9	5.8	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.8	U	0.71	2.9	5.8	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.8	U	1	2.9	5.8	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.8	U	0.81	2.9	5.8	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	45.6		55 - 158		91%	SPK: 50
1868-53-7	Dibromofluoromethane	34.2		53 - 156		68%	SPK: 50
2037-26-5	Toluene-d8	36.1		68 - 122		72%	SPK: 50
460-00-4	4-Bromofluorobenzene	109	*	25 - 144		220%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	328252	3.18				
540-36-3	1,4-Difluorobenzene	990587	3.57				
3114-55-4	Chlorobenzene-d5	660059	6.25				
3855-82-1	1,4-Dichlorobenzene-d4	266223	8.58				

TENTATIVE IDENTIFIED COMPOUNDS

002216-30-0	Heptane, 2,5-dimethyl-	87	J			5.29	ug/Kg
003073-66-3	Cyclohexane, 1,1,3-trimethyl-	110	J			5.44	ug/Kg
002234-75-5	Cyclohexane, 1,2,4-trimethyl-	140	J			5.69	ug/Kg
002207-03-6	Cyclohexane, 1,3-dimethyl-, trans-	180	J			6.61	ug/Kg
	unknown6.85	130	J			6.85	ug/Kg
127204-12-0	Dodecane, 2,2,11,11-tetramethyl-	150	J			7.43	ug/Kg
103-65-1	n-propylbenzene	3.1	J			7.74	ug/Kg
622-96-8	p-ethyltoluene	45	J			7.86	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	93	J			7.95	ug/Kg
006975-98-0	Decane, 2-methyl-	84	J			8.17	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-7(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	13
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041939.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
95-63-6	1,2,4-Trimethylbenzene	3.1	J			8.29	ug/Kg
135-98-8	sec-Butylbenzene	13	J			8.37	ug/Kg
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl)	87	J			9.12	ug/Kg
002958-76-1	Naphthalene, decahydro-2-methyl-	69	J			9.33	ug/Kg
95-93-2	1,2,4,5-tetramethylbenzene	300	J			9.43	ug/Kg
017301-23-4	Undecane, 2,6-dimethyl-	140	J			9.76	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-7(16.5-17.0)RE	SDG No.:	B4275
Lab Sample ID:	B4275-04RE	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	13
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041994.D	1		11/24/10	VK112410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.7 UJ	U	0.74	2.85	5.7	ug/Kg
74-87-3	Chloromethane	5.7	U	0.98	2.85	5.7	ug/Kg
75-01-4	Vinyl Chloride	5.7	U	1.4	2.85	5.7	ug/Kg
74-83-9	Bromomethane	5.7	U	2.8	2.85	5.7	ug/Kg
75-00-3	Chloroethane	5.7	U	1.6	2.85	5.7	ug/Kg
75-69-4	Trichlorofluoromethane	5.7	U	1.5	2.85	5.7	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.7	U	1.5	2.85	5.7	ug/Kg
75-35-4	1,1-Dichloroethene	5.7	U	1.7	2.85	5.7	ug/Kg
67-64-1	Acetone	29	U	3.4	14.5	29	ug/Kg
75-15-0	Carbon Disulfide	4.5 J	J	1.2	2.85	5.7	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.7 UJ	U	1.1	2.85	5.7	ug/Kg
79-20-9	Methyl Acetate	5.7 UJ	U	1.7	2.85	5.7	ug/Kg
75-09-2	Methylene Chloride	2.6 J	J	1.6	2.85	5.7	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.7 UJ	U	0.79	2.85	5.7	ug/Kg
75-34-3	1,1-Dichloroethane	5.7	U	1.1	2.85	5.7	ug/Kg
110-82-7	Cyclohexane	5.7	U	1.2	2.85	5.7	ug/Kg
78-93-3	2-Butanone	29	U	3.5	14.5	29	ug/Kg
56-23-5	Carbon Tetrachloride	5.7	U	1.1	2.85	5.7	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.7	U	1	2.85	5.7	ug/Kg
67-66-3	Chloroform	5.7	U	0.84	2.85	5.7	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.7	U	1	2.85	5.7	ug/Kg
108-87-2	Methylcyclohexane	5.7	U	1.2	2.85	5.7	ug/Kg
71-43-2	Benzene	5.7	U	0.43	2.85	5.7	ug/Kg
107-06-2	1,2-Dichloroethane	5.7	U	0.73	2.85	5.7	ug/Kg
79-01-6	Trichloroethene	5.7	U	0.98	2.85	5.7	ug/Kg
78-87-5	1,2-Dichloropropane	5.7	U	0.3	2.85	5.7	ug/Kg
75-27-4	Bromodichloromethane	5.7	U	0.71	2.85	5.7	ug/Kg
108-10-1	4-Methyl-2-Pentanone	29	U	3.3	14.5	29	ug/Kg
108-88-3	Toluene	5.7	U	0.73	2.85	5.7	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.7	U	0.9	2.85	5.7	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.7	U	0.82	2.85	5.7	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.7	U	1	2.85	5.7	ug/Kg
591-78-6	2-Hexanone	29	U	4.5	14.5	29	ug/Kg
124-48-1	Dibromochloromethane	5.7	U	0.62	2.85	5.7	ug/Kg
106-93-4	1,2-Dibromoethane	5.7	U	0.73	2.85	5.7	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-7(16.5-17.0)RE	SDG No.:	B4275
Lab Sample ID:	B4275-04RE	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	13
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041994.D	1		11/24/10	VK112410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.7	U	1.2	2.85	5.7	ug/Kg
108-90-7	Chlorobenzene	5.7	U	0.57	2.85	5.7	ug/Kg
100-41-4	Ethyl Benzene	5.7	U	0.71	2.85	5.7	ug/Kg
179601-23-1	m/p-Xylenes	11	U	0.82	5.5	11	ug/Kg
95-47-6	o-Xylene	5.7	U	0.78	2.85	5.7	ug/Kg
100-42-5	Styrene	5.7	U	0.51	2.85	5.7	ug/Kg
75-25-2	Bromoform	5.7	U	0.84	2.85	5.7	ug/Kg
98-82-8	Isopropylbenzene	5.7	U	0.55	2.85	5.7	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U	0.52	2.85	5.7	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.7	U	0.42	2.85	5.7	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.7	U	0.47	2.85	5.7	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.7	U	0.71	2.85	5.7	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.7	U	0.99	2.85	5.7	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.7	U	0.8	2.85	5.7	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50		55 - 158		100%	SPK: 50
1868-53-7	Dibromofluoromethane	21.4	*	53 - 156		43%	SPK: 50
2037-26-5	Toluene-d8	25.4	*	68 - 122		51%	SPK: 50
460-00-4	4-Bromofluorobenzene	137	*	25 - 144		275%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	252173	3.18				
540-36-3	1,4-Difluorobenzene	1256650	3.57				
3114-55-4	Chlorobenzene-d5	418985	6.25				
3855-82-1	1,4-Dichlorobenzene-d4	193049	8.59				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10	
Project:	Provan	Date Received:	11/19/10	
Client Sample ID:	WR-S-8(16.0-16.5)	SDG No.:	B4275	
Lab Sample ID:	B4275-05	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	9	
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042066.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.5	U	0.71	2.75	5.5	ug/Kg
74-87-3	Chloromethane	5.5	U	0.94	2.75	5.5	ug/Kg
75-01-4	Vinyl Chloride	5.5	U	1.3	2.75	5.5	ug/Kg
74-83-9	Bromomethane	5.5	U	2.7	2.75	5.5	ug/Kg
75-00-3	Chloroethane	5.5	U	1.5	2.75	5.5	ug/Kg
75-69-4	Trichlorofluoromethane	5.5	U	1.4	2.75	5.5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.5	U	1.5	2.75	5.5	ug/Kg
75-35-4	1,1-Dichloroethene	5.5	U	1.6	2.75	5.5	ug/Kg
67-64-1	Acetone	27	U	3.3	13.5	27	ug/Kg
75-15-0	Carbon Disulfide	5.5	U	1.2	2.75	5.5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.5	U	1	2.75	5.5	ug/Kg
79-20-9	Methyl Acetate	5.5	U	1.6	2.75	5.5	ug/Kg
75-09-2	Methylene Chloride	5.5	U	1.6	2.75	5.5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.5	U	0.75	2.75	5.5	ug/Kg
75-34-3	1,1-Dichloroethane	5.5	U	1	2.75	5.5	ug/Kg
110-82-7	Cyclohexane	5.5	U	1.1	2.75	5.5	ug/Kg
78-93-3	2-Butanone	27	U	3.4	13.5	27	ug/Kg
56-23-5	Carbon Tetrachloride	5.5	U	1.1	2.75	5.5	ug/Kg
136-59-2	cis-1,2-Dichloroethene	5.5	U	0.97	2.75	5.5	ug/Kg
67-66-3	Chloroform	5.5	U	0.81	2.75	5.5	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.5	U	0.96	2.75	5.5	ug/Kg
108-87-2	Methylcyclohexane	5.5	U	1.2	2.75	5.5	ug/Kg
71-43-2	Benzene	5.5	U	0.42	2.75	5.5	ug/Kg
107-06-2	1,2-Dichloroethane	5.5	U	0.7	2.75	5.5	ug/Kg
79-01-6	Trichloroethene	5.5	U	0.94	2.75	5.5	ug/Kg
78-87-5	1,2-Dichloropropane	5.5	U	0.28	2.75	5.5	ug/Kg
75-27-4	Bromodichloromethane	5.5	U	0.68	2.75	5.5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	27	U	3.2	13.5	27	ug/Kg
108-88-3	Toluene	5.5	U	0.7	2.75	5.5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.5	U	0.86	2.75	5.5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.5	U	0.79	2.75	5.5	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.5	U	0.98	2.75	5.5	ug/Kg
591-78-6	2-Hexanone	27	U	4.3	13.5	27	ug/Kg
124-48-1	Dibromochloromethane	5.5	U	0.59	2.75	5.5	ug/Kg
106-93-4	1,2-Dibromoethane	5.5	U	0.7	2.75	5.5	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-8(16.0-16.5)	SDG No.:	B4275
Lab Sample ID:	B4275-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042066.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.5	U	1.1	2.75	5.5	ug/Kg
108-90-7	Chlorobenzene	5.5	U	0.55	2.75	5.5	ug/Kg
100-41-4	Ethyl Benzene	5.5	U	0.68	2.75	5.5	ug/Kg
179601-23-1	m/p-Xylenes	11	U	0.79	5.5	11	ug/Kg
95-47-6	o-Xylene	5.5	U	0.74	2.75	5.5	ug/Kg
100-42-5	Styrene	5.5	U	0.49	2.75	5.5	ug/Kg
75-25-2	Bromoform	5.5	U	0.81	2.75	5.5	ug/Kg
98-82-8	Isopropylbenzene	5.5	U	0.52	2.75	5.5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U	0.5	2.75	5.5	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.5	U	0.4	2.75	5.5	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.5	U	0.45	2.75	5.5	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.5	U	0.68	2.75	5.5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.5	U	0.95	2.75	5.5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.5	U	0.76	2.75	5.5	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.1		55 - 158		90%	SPK: 50
1868-53-7	Dibromofluoromethane	49		53 - 156		98%	SPK: 50
2037-26-5	Toluene-d8	50.4		68 - 122		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.5		25 - 144		107%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	336023	3.18				
540-36-3	1,4-Difluorobenzene	522071	3.56				
3114-55-4	Chlorobenzene-d5	548155	6.24				
3855-82-1	1,4-Dichlorobenzene-d4	312983	8.57				
TENTATIVE IDENTIFIED COMPOUNDS							
002051-30-1	Octane, 2,6-dimethyl-	51	J			8.23	ug/Kg
001002-68-2	3-Undecene, (E)-	43	J			8.71	ug/Kg
062238-01-1	Decane, 2,2,8-trimethyl-	60	J			9.1	ug/Kg
002958-76-1	Naphthalene, decahydro-2-methyl-	42	J			9.3	ug/Kg
031295-56-4	Dodecane, 2,6,11-trimethyl-	130	J			9.48	ug/Kg
017312-77-5	Undecane, 2,3-dimethyl-	46	J			9.58	ug/Kg
017301-23-4	Undecane, 2,6-dimethyl-	160	J			9.74	ug/Kg
017312-57-1	Dodecane, 3-methyl-	130	J			10.18	ug/Kg
	unknown10.28	97	J			10.28	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-8(16.0-16.5)	SDG No.:	B4275
Lab Sample ID:	B4275-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042066.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
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U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	10
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041942.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
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TARGETS							
75-71-8	Dichlorodifluoromethane	5.5	U	0.72	2.75	5.5	ug/Kg
74-87-3	Chloromethane	5.5	U	0.95	2.75	5.5	ug/Kg
75-01-4	Vinyl Chloride	5.5	U	1.4	2.75	5.5	ug/Kg
74-83-9	Bromomethane	5.5	U	2.7	2.75	5.5	ug/Kg
75-00-3	Chloroethane	5.5	U	1.6	2.75	5.5	ug/Kg
75-69-4	Trichlorofluoromethane	5.5	U	1.5	2.75	5.5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.5	U	1.5	2.75	5.5	ug/Kg
75-35-4	1,1-Dichloroethene	5.5	U	1.6	2.75	5.5	ug/Kg
67-64-1	Acetone	28	U	3.3	14	28	ug/Kg
75-15-0	Carbon Disulfide	5.5	U	1.2	2.75	5.5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.5	U	1.1	2.75	5.5	ug/Kg
79-20-9	Methyl Acetate	5.5	U	1.7	2.75	5.5	ug/Kg
75-09-2	Methylene Chloride	5.5	U	1.6	2.75	5.5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.5	U	0.77	2.75	5.5	ug/Kg
75-34-3	1,1-Dichloroethane	40	J	1	2.75	5.5	ug/Kg
110-82-7	Cyclohexane	510	J	1.1	2.75	5.5	ug/Kg
78-93-3	2-Butanone	28	U	3.4	14	28	ug/Kg
56-23-5	Carbon Tetrachloride	5.5	U	1.1	2.75	5.5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.5	U	0.99	2.75	5.5	ug/Kg
67-66-3	Chloroform	5.5	U	0.82	2.75	5.5	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.5	U	0.98	2.75	5.5	ug/Kg
108-87-2	Methylcyclohexane	1400	J	1.2	2.75	5.5	ug/Kg
71-43-2	Benzene	110	J	0.42	2.75	5.5	ug/Kg
107-06-2	1,2-Dichloroethane	5.5	U	0.71	2.75	5.5	ug/Kg
79-01-6	Trichloroethene	5.5	U	0.95	2.75	5.5	ug/Kg
78-87-5	1,2-Dichloropropane	5.5	U	0.29	2.75	5.5	ug/Kg
75-27-4	Bromodichloromethane	5.5	U	0.69	2.75	5.5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	28	U	3.2	14	28	ug/Kg
108-88-3	Toluene	45	J	0.71	2.75	5.5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.5	U	0.88	2.75	5.5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.5	U	0.8	2.75	5.5	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.5	U	1	2.75	5.5	ug/Kg
591-78-6	2-Hexanone	28	U	4.3	14	28	ug/Kg
124-48-1	Dibromochloromethane	5.5	U	0.6	2.75	5.5	ug/Kg
106-93-4	1,2-Dibromoethane	5.5	U	0.71	2.75	5.5	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	10
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041942.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.5	UJ U	1.1	2.75	5.5	ug/Kg
108-90-7	Chlorobenzene	5.5	UJ U	0.55	2.75	5.5	ug/Kg
100-41-4	Ethyl Benzene	1100	J E	0.69	2.75	5.5	ug/Kg
179601-23-1	m/p-Xylenes	1400	J E	0.8	5.5	11	ug/Kg
95-47-6	o-Xylene	140	J	0.75	2.75	5.5	ug/Kg
100-42-5	Styrene	5.5	UJ U	0.5	2.75	5.5	ug/Kg
75-25-2	Bromoform	5.5	UJ U	0.82	2.75	5.5	ug/Kg
98-82-8	Isopropylbenzene	1100	J E	0.53	2.75	5.5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.5	UJ U	0.51	2.75	5.5	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.5	U	0.41	2.75	5.5	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.5	U	0.45	2.75	5.5	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.5	U	0.69	2.75	5.5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.5	U	0.96	2.75	5.5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.5	U	0.78	2.75	5.5	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	65.6		55 - 158		131%	SPK: 50
1868-53-7	Dibromofluoromethane	44		53 - 156		88%	SPK: 50
2037-26-5	Toluene-d8	56.9		68 - 122		114%	SPK: 50
460-00-4	4-Bromofluorobenzene	84.7	*	25 - 144		169%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	215489	3.19				
540-36-3	1,4-Difluorobenzene	495276	3.57				
3114-55-4	Chlorobenzene-d5	442809	6.25				
3855-82-1	1,4-Dichlorobenzene-d4	118872	8.59				

TENTATIVE IDENTIFIED COMPOUNDS

000107-83-5	Pentane, 2-methyl-	280	J			1.79	ug/Kg
	unknown1.97	150	J			1.97	ug/Kg
000589-34-4	Hexane, 3-methyl-	280	J			2.81	ug/Kg
001678-91-7	Cyclohexane, ethyl-	150	J			5.32	ug/Kg
002213-23-2	Heptane, 2,4-dimethyl-	240	J			5.73	ug/Kg
002216-33-3	Octane, 3-methyl-	120	J			5.86	ug/Kg
000589-90-2	Cyclohexane, 1,4-dimethyl-	160	J			6.63	ug/Kg
006221-55-2	Bicyclo[3.2.1]octane	120	J			6.85	ug/Kg
014676-29-0	Heptane, 3-ethyl-2-methyl-	100	J			7.09	ug/Kg
103-65-1	n-propylbenzene	1600	J			7.75	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	10
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041942.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
622-96-8	p-ethyltoluene	2500	J			7.87	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	860	J			7.96	ug/Kg
002847-72-5	Decane, 4-methyl-	110	J			8.13	ug/Kg
98-06-6	tert-Butylbenzene	49	J			8.24	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	3900	J			8.31	ug/Kg
135-98-8	sec-Butylbenzene	1400	J			8.39	ug/Kg
99-87-6	p-Isopropyltoluene	1300	J			8.52	ug/Kg
104-51-8	n-Butylbenzene	1400	J			8.86	ug/Kg
95-93-2	1,2,4,5-tetramethylbenzene	4200	J			9.49	ug/Kg
91-20-3	Naphthalene	420	J			10.26	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	11/18/10	
Project:	Provan	Date Received:	11/19/10	
Client Sample ID:	WR-S-9(16.5-17.0)DL	SDG No.:	B4275	
Lab Sample ID:	B4275-06DL	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	10	
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024624.D	10		11/22/10	VF112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5600	U	610	2800	5600	ug/Kg
74-87-3	Chloromethane	5600	U	600	2800	5600	ug/Kg
75-01-4	Vinyl Chloride	5600	U	380	2800	5600	ug/Kg
74-83-9	Bromomethane	5600	U	690	2800	5600	ug/Kg
75-00-3	Chloroethane	5600	U	730	2800	5600	ug/Kg
75-69-4	Trichlorofluoromethane	5600	U	390	2800	5600	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5600	U	500	2800	5600	ug/Kg
75-35-4	1,1-Dichloroethene	5600	U	520	2800	5600	ug/Kg
67-64-1	Acetone	28000	U	3100	14000	28000	ug/Kg
75-15-0	Carbon Disulfide	5600	U	600	2800	5600	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5600	U	390	2800	5600	ug/Kg
79-20-9	Methyl Acetate	5600	U	920	2800	5600	ug/Kg
75-09-2	Methylene Chloride	5600	U	460	2800	5600	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5600	U	460	2800	5600	ug/Kg
75-34-3	1,1-Dichloroethane	5600	U	400	2800	5600	ug/Kg
110-82-7	Cyclohexane	1000	JD	610	2800	5600	ug/Kg
78-93-3	2-Butanone	28000	U	1500	14000	28000	ug/Kg
56-23-5	Carbon Tetrachloride	5600	U	690	2800	5600	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5600	U	390	2800	5600	ug/Kg
67-66-3	Chloroform	5600	U	380	2800	5600	ug/Kg
71-55-6	1,1,1-Trichloroethane	5600	U	440	2800	5600	ug/Kg
108-87-2	Methylcyclohexane	2700	JD	760	2800	5600	ug/Kg
71-43-2	Benzene	5600	U	360	2800	5600	ug/Kg
107-06-2	1,2-Dichloroethane	5600	U	530	2800	5600	ug/Kg
79-01-6	Trichloroethene	5600	U	310	2800	5600	ug/Kg
78-87-5	1,2-Dichloropropane	5600	U	510	2800	5600	ug/Kg
75-27-4	Bromodichloromethane	5600	U	400	2800	5600	ug/Kg
108-10-1	4-Methyl-2-Pentanone	28000	U	2300	14000	28000	ug/Kg
108-88-3	Toluene	5600	U	410	2800	5600	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5600	U	320	2800	5600	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5600	U	340	2800	5600	ug/Kg
79-00-5	1,1,2-Trichloroethane	5600	U	420	2800	5600	ug/Kg
591-78-6	2-Hexanone	28000	U	2200	14000	28000	ug/Kg
124-48-1	Dibromochloromethane	5600	U	580	2800	5600	ug/Kg
106-93-4	1,2-Dibromoethane	5600	U	460	2800	5600	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-06DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	10
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024624.D	10		11/22/10	VF112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5600	U	300	2800	5600	ug/Kg
108-90-7	Chlorobenzene	5600	U	540	2800	5600	ug/Kg
100-41-4	Ethyl Benzene	890	JD	590	2800	5600	ug/Kg
179601-23-1	m/p-Xylenes	1200	JD	1100	5500	11000	ug/Kg
95-47-6	o-Xylene	5600	U	480	2800	5600	ug/Kg
100-42-5	Styrene	5600	U	400	2800	5600	ug/Kg
75-25-2	Bromoform	5600	U	520	2800	5600	ug/Kg
98-82-8	Isopropylbenzene	720	JD	500	2800	5600	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5600	U	340	2800	5600	ug/Kg
541-73-1	1,3-Dichlorobenzene	5600	U	480	2800	5600	ug/Kg
106-46-7	1,4-Dichlorobenzene	5600	U	360	2800	5600	ug/Kg
95-50-1	1,2-Dichlorobenzene	5600	U	500	2800	5600	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5600	U	510	2800	5600	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5600	U	690	2800	5600	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	434		55 - 158		87%	SPK: 50
1868-53-7	Dibromofluoromethane	511		53 - 156		102%	SPK: 50
2037-26-5	Toluene-d8	492		68 - 122		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	498		25 - 144		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1358780	3.23				
540-36-3	1,4-Difluorobenzene	2494430	3.64				
3114-55-4	Chlorobenzene-d5	2347780	6.53				
3855-82-1	1,4-Dichlorobenzene-d4	1230720	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-B-2(17.0-17.5)	SDG No.:	B4275
Lab Sample ID:	B4275-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041943.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.6 U J	U	0.73	2.8	5.6	ug/Kg
74-87-3	Chloromethane	5.6	U	0.96	2.8	5.6	ug/Kg
75-01-4	Vinyl Chloride	5.6	U	1.4	2.8	5.6	ug/Kg
74-83-9	Bromomethane	5.6	U	2.7	2.8	5.6	ug/Kg
75-00-3	Chloroethane	5.6	U	1.6	2.8	5.6	ug/Kg
75-69-4	Trichlorofluoromethane	5.6	U	1.5	2.8	5.6	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.6	U	1.5	2.8	5.6	ug/Kg
75-35-4	1,1-Dichloroethene	3.6 J	J	1.6	2.8	5.6	ug/Kg
67-64-1	Acetone	28 U J	U	3.4	14	28	ug/Kg
75-15-0	Carbon Disulfide	5.6	U	1.2	2.8	5.6	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.6	U	1.1	2.8	5.6	ug/Kg
79-20-9	Methyl Acetate	5.6	U	1.7	2.8	5.6	ug/Kg
75-09-2	Methylene Chloride	5.6	U	1.6	2.8	5.6	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.6	U	0.77	2.8	5.6	ug/Kg
75-34-3	1,1-Dichloroethane	5.6	U	1.1	2.8	5.6	ug/Kg
110-82-7	Cyclohexane	420 J	E	1.1	2.8	5.6	ug/Kg
78-93-3	2-Butanone	28 U J	U	3.5	14	28	ug/Kg
56-23-5	Carbon Tetrachloride	5.6 U J	U	1.1	2.8	5.6	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20 J		1	2.8	5.6	ug/Kg
67-66-3	Chloroform	5.6 U J	U	0.83	2.8	5.6	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.6 U J	U	0.99	2.8	5.6	ug/Kg
108-87-2	Methylcyclohexane	1000 J	E	1.2	2.8	5.6	ug/Kg
71-43-2	Benzene	5.6 U J	U	0.43	2.8	5.6	ug/Kg
107-06-2	1,2-Dichloroethane	5.6	U	0.72	2.8	5.6	ug/Kg
79-01-6	Trichloroethene	5.6	U	0.96	2.8	5.6	ug/Kg
78-87-5	1,2-Dichloropropane	5.6	U	0.29	2.8	5.6	ug/Kg
75-27-4	Bromodichloromethane	5.6	U	0.7	2.8	5.6	ug/Kg
108-10-1	4-Methyl-2-Pentanone	28 J	U	3.3	14	28	ug/Kg
108-88-3	Toluene	26 J		0.72	2.8	5.6	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.6 U J	U	0.89	2.8	5.6	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.6	U	0.81	2.8	5.6	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.6	U	1	2.8	5.6	ug/Kg
591-78-6	2-Hexanone	28	U	4.4	14	28	ug/Kg
124-48-1	Dibromochloromethane	5.6	U	0.61	2.8	5.6	ug/Kg
106-93-4	1,2-Dibromoethane	5.6	U	0.72	2.8	5.6	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-B-2(17.0-17.5)	SDG No.:	B4275
Lab Sample ID:	B4275-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041943.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.6	U	1.1	2.8	5.6	ug/Kg
108-90-7	Chlorobenzene	5.6	U	0.56	2.8	5.6	ug/Kg
100-41-4	Ethyl Benzene	250	E	0.7	2.8	5.6	ug/Kg
179601-23-1	m/p-Xylenes	710	E	0.81	5.5	11	ug/Kg
95-47-6	o-Xylene	110	J	0.76	2.8	5.6	ug/Kg
100-42-5	Styrene	5.6	U	0.5	2.8	5.6	ug/Kg
75-25-2	Bromoform	5.6	U	0.83	2.8	5.6	ug/Kg
98-82-8	Isopropylbenzene	250	E	0.54	2.8	5.6	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U	0.52	2.8	5.6	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.6	U	0.41	2.8	5.6	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.6	U	0.46	2.8	5.6	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.6	U	0.7	2.8	5.6	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.6	U	0.98	2.8	5.6	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.6	U	0.78	2.8	5.6	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	65		55 - 158	130%	SPK: 50
1868-53-7	Dibromofluoromethane	39.8		53 - 156	80%	SPK: 50
2037-26-5	Toluene-d8	39.4		68 - 122	79%	SPK: 50
460-00-4	4-Bromofluorobenzene	110	*	25 - 144	221%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	213103	3.19
540-36-3	1,4-Difluorobenzene	558921	3.57
3114-55-4	Chlorobenzene-d5	367596	6.26
3855-82-1	1,4-Dichlorobenzene-d4	128318	8.59

TENTATIVE IDENTIFIED COMPOUNDS

002216-34-4	Octane, 4-methyl-	89	J		5.74	ug/Kg
103-65-1	n-propylbenzene	690	J		7.76	ug/Kg
622-96-8	p-ethyltoluene	2000	J		7.87	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	1700	J		7.97	ug/Kg
002847-72-5	Decane, 4-methyl-	270	J		8.13	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	3200	J		8.31	ug/Kg
135-98-8	sec-Butylbenzene	660	J		8.38	ug/Kg
99-87-6	p-Isopropyltoluene	540	J		8.52	ug/Kg
000526-73-8	Benzene, 1,2,3-trimethyl-	120	J		8.66	ug/Kg
000141-93-5	Benzene, 1,3-diethyl-	94	J		8.76	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-B-2(17.0-17.5)	SDG No.:	B4275
Lab Sample ID:	B4275-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK041943.D	1		11/22/10	VK112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
104-51-8	n-Butylbenzene	1300	J			8.86	ug/Kg
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	77	J			9.08	ug/Kg
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	140	J			9.14	ug/Kg
95-93-2	1,2,4,5-tetramethylbenzene	1800	J			9.44	ug/Kg
001196-58-3	Benzene, (1-ethylpropyl)-	140	J			9.5	ug/Kg
001587-04-8	Benzene, 1-methyl-2-(2-propenyl)-	74	J			9.62	ug/Kg
000824-90-8	1-Phenyl-1-butene	150	J			9.76	ug/Kg
056253-64-6	Benzene, (2-methyl-1-butenyl)-	99	J			10.01	ug/Kg
91-20-3	Naphthalene	260	J			10.26	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-B-2(17.0-17.5)DL	SDG No.:	B4275
Lab Sample ID:	B4275-07DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024625.D	10		11/22/10	VF112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5600	U	620	2800	5600	ug/Kg
74-87-3	Chloromethane	5600	U	610	2800	5600	ug/Kg
75-01-4	Vinyl Chloride	5600	U	380	2800	5600	ug/Kg
74-83-9	Bromomethane	5600	U	700	2800	5600	ug/Kg
75-00-3	Chloroethane	5600	U	740	2800	5600	ug/Kg
75-69-4	Trichlorofluoromethane	5600	U	390	2800	5600	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5600	U	500	2800	5600	ug/Kg
75-35-4	1,1-Dichloroethene	5600	U	530	2800	5600	ug/Kg
67-64-1	Acetone	28000	U	3100	14000	28000	ug/Kg
75-15-0	Carbon Disulfide	5600	U	610	2800	5600	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5600	U	390	2800	5600	ug/Kg
79-20-9	Methyl Acetate	5600	U	930	2800	5600	ug/Kg
75-09-2	Methylene Chloride	5600	U	460	2800	5600	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5600	U	460	2800	5600	ug/Kg
75-34-3	1,1-Dichloroethane	5600	U	400	2800	5600	ug/Kg
110-82-7	Cyclohexane	810	JD	620	2800	5600	ug/Kg
78-93-3	2-Butanone	28000	U	1500	14000	28000	ug/Kg
56-23-5	Carbon Tetrachloride	5600	U	700	2800	5600	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5600	U	390	2800	5600	ug/Kg
67-66-3	Chloroform	5600	U	380	2800	5600	ug/Kg
71-55-6	1,1,1-Trichloroethane	5600	U	450	2800	5600	ug/Kg
108-87-2	Methylcyclohexane	3100	JD	760	2800	5600	ug/Kg
71-43-2	Benzene	5600	U	360	2800	5600	ug/Kg
107-06-2	1,2-Dichloroethane	5600	U	540	2800	5600	ug/Kg
79-01-6	Trichloroethene	5600	U	310	2800	5600	ug/Kg
78-87-5	1,2-Dichloropropane	5600	U	520	2800	5600	ug/Kg
75-27-4	Bromodichloromethane	5600	U	400	2800	5600	ug/Kg
108-10-1	4-Methyl-2-Pentanone	28000	U	2400	14000	28000	ug/Kg
108-88-3	Toluene	5600	U	410	2800	5600	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5600	U	330	2800	5600	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5600	U	350	2800	5600	ug/Kg
79-00-5	1,1,2-Trichloroethane	5600	U	430	2800	5600	ug/Kg
591-78-6	2-Hexanone	28000	U	2200	14000	28000	ug/Kg
124-48-1	Dibromochloromethane	5600	U	580	2800	5600	ug/Kg
106-93-4	1,2-Dibromoethane	5600	U	460	2800	5600	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-B-2(17.0-17.5)DL	SDG No.:	B4275
Lab Sample ID:	B4275-07DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024625.D	10		11/22/10	VF112210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5600	U	300	2800	5600	ug/Kg
108-90-7	Chlorobenzene	5600	U	550	2800	5600	ug/Kg
100-41-4	Ethyl Benzene	5600	U	590	2800	5600	ug/Kg
179601-23-1	m/p-Xylenes	1400	JD	1100	5500	11000	ug/Kg
95-47-6	o-Xylene	5600	U	480	2800	5600	ug/Kg
100-42-5	Styrene	5600	U	400	2800	5600	ug/Kg
75-25-2	Bromoform	5600	U	530	2800	5600	ug/Kg
98-82-8	Isopropylbenzene	5600	U	500	2800	5600	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5600	U	350	2800	5600	ug/Kg
541-73-1	1,3-Dichlorobenzene	5600	U	480	2800	5600	ug/Kg
106-46-7	1,4-Dichlorobenzene	5600	U	360	2800	5600	ug/Kg
95-50-1	1,2-Dichlorobenzene	5600	U	500	2800	5600	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5600	U	520	2800	5600	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5600	U	700	2800	5600	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	456		55 - 158		91%	SPK: 50
1868-53-7	Dibromofluoromethane	526		53 - 156		105%	SPK: 50
2037-26-5	Toluene-d8	505		68 - 122		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	511		25 - 144		102%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1287990	3.23				
540-36-3	1,4-Difluorobenzene	2368490	3.64				
3114-55-4	Chlorobenzene-d5	2167830	6.53				
3855-82-1	1,4-Dichlorobenzene-d4	1150940	8.97				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	11/22/10	
Project:	Provan	Date Received:	11/24/10	
Client Sample ID:	WR-B-3(14.5-15.0)	SDG No.:	B4275	
Lab Sample ID:	B4275-08	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	22	
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042064.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.4	U	0.83	3.2	6.4	ug/Kg
74-87-3	Chloromethane	6.4	U	1.1	3.2	6.4	ug/Kg
75-01-4	Vinyl Chloride	6.4	U	1.6	3.2	6.4	ug/Kg
74-83-9	Bromomethane	6.4	U	3.1	3.2	6.4	ug/Kg
75-00-3	Chloroethane	6.4	U	1.8	3.2	6.4	ug/Kg
75-69-4	Trichlorofluoromethane	6.4	U	1.7	3.2	6.4	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.4	U	1.7	3.2	6.4	ug/Kg
75-35-4	1,1-Dichloroethene	6.4	U	1.9	3.2	6.4	ug/Kg
67-64-1	Acetone	170		3.8	16	32	ug/Kg
75-15-0	Carbon Disulfide	45		1.4	3.2	6.4	ug/Kg
1634-04-4	Methyl tert-butyl Ether	9.6		1.2	3.2	6.4	ug/Kg
79-20-9	Methyl Acetate	6.4	U	1.9	3.2	6.4	ug/Kg
75-09-2	Methylene Chloride	6.4	U	1.8	3.2	6.4	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.4	U	0.88	3.2	6.4	ug/Kg
75-34-3	1,1-Dichloroethane	58		1.2	3.2	6.4	ug/Kg
110-82-7	Cyclohexane	6.4	U	1.3	3.2	6.4	ug/Kg
78-93-3	2-Butanone	260		4	16	32	ug/Kg
56-23-5	Carbon Tetrachloride	6.4	U	1.3	3.2	6.4	ug/Kg
156-59-2	cis-1,2-Dichloroethene	9400	E	1.1	3.2	6.4	ug/Kg
67-66-3	Chloroform	6.4	U	0.94	3.2	6.4	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.4	U	1.1	3.2	6.4	ug/Kg
108-87-2	Methylcyclohexane	6.4	U	1.4	3.2	6.4	ug/Kg
71-43-2	Benzene	41		0.48	3.2	6.4	ug/Kg
107-06-2	1,2-Dichloroethane	270	E	0.82	3.2	6.4	ug/Kg
79-01-6	Trichloroethene	6.4	U	1.1	3.2	6.4	ug/Kg
78-87-5	1,2-Dichloropropane	6.4	U	0.33	3.2	6.4	ug/Kg
75-27-4	Bromodichloromethane	6.4	U	0.79	3.2	6.4	ug/Kg
108-10-1	4-Methyl-2-Pentanone	310		3.7	16	32	ug/Kg
108-88-3	Toluene	4.9	J	0.82	3.2	6.4	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.4	U	1	3.2	6.4	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.4	U	0.92	3.2	6.4	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.4	U	1.1	3.2	6.4	ug/Kg
591-78-6	2-Hexanone	32	U	5	16	32	ug/Kg
124-48-1	Dibromochloromethane	6.4	U	0.69	3.2	6.4	ug/Kg
106-93-4	1,2-Dibromoethane	6.4	U	0.82	3.2	6.4	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-B-3(14.5-15.0)	SDG No.:	B4275
Lab Sample ID:	B4275-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042064.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.4	U	1.3	3.2	6.4	ug/Kg
108-90-7	Chlorobenzene	6.4	U	0.64	3.2	6.4	ug/Kg
100-41-4	Ethyl Benzene	6.4	U	0.79	3.2	6.4	ug/Kg
179601-23-1	m/p-Xylenes	2.2	J	0.92	6.5	13	ug/Kg
95-47-6	o-Xylene	6.4	U	0.87	3.2	6.4	ug/Kg
100-42-5	Styrene	6.4	U	0.57	3.2	6.4	ug/Kg
75-25-2	Bromoform	6.4	U	0.94	3.2	6.4	ug/Kg
98-82-8	Isopropylbenzene	6.4	U	0.61	3.2	6.4	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.4	U	0.59	3.2	6.4	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.4	U	0.47	3.2	6.4	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.4	U	0.52	3.2	6.4	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.4	U	0.79	3.2	6.4	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.4	U	1.1	3.2	6.4	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.4	U	0.89	3.2	6.4	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	59.3		55 - 158		119%	SPK: 50
1868-53-7	Dibromofluoromethane	52.1		53 - 156		104%	SPK: 50
2037-26-5	Toluene-d8	45.1		68 - 122		90%	SPK: 50
460-00-4	4-Bromofluorobenzene	24.5		25 - 144		49%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	271436	3.18				
540-36-3	1,4-Difluorobenzene	462586	3.56				
3114-55-4	Chlorobenzene-d5	352105	6.24				
3855-82-1	1,4-Dichlorobenzene-d4	112533	8.58				
TENTITIVE IDENTIFIED COMPOUNDS							
75-65-0	Tert butyl alcohol	140	J			2.07	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-B-3(14.5-15.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-08DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.6 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020662.D	1		11/26/10	VE112610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	570	U	63	285	570	ug/Kg
74-87-3	Chloromethane	570	U	62	285	570	ug/Kg
75-01-4	Vinyl Chloride	570	U	39	285	570	ug/Kg
74-83-9	Bromomethane	570	U	71	285	570	ug/Kg
75-00-3	Chloroethane	570	U	76	285	570	ug/Kg
75-69-4	Trichlorofluoromethane	570	U	40	285	570	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	570	U	52	285	570	ug/Kg
75-35-4	1,1-Dichloroethene	570	U	54	285	570	ug/Kg
67-64-1	Acetone	2900	U	310	1450	2900	ug/Kg
75-15-0	Carbon Disulfide	570	U	62	285	570	ug/Kg
1634-04-4	Methyl tert-butyl Ether	570	U	40	285	570	ug/Kg
79-20-9	Methyl Acetate	570	U	95	285	570	ug/Kg
75-09-2	Methylene Chloride	570	U	47	285	570	ug/Kg
156-60-5	trans-1,2-Dichloroethene	570	U	47	285	570	ug/Kg
75-34-3	1,1-Dichloroethane	570	U	41	285	570	ug/Kg
110-82-7	Cyclohexane	570	U	63	285	570	ug/Kg
78-93-3	2-Butanone	2900	U	150	1450	2900	ug/Kg
56-23-5	Carbon Tetrachloride	570	U	71	285	570	ug/Kg
156-59-2	cis-1,2-Dichloroethene	8700	D	40	285	570	ug/Kg
67-66-3	Chloroform	570	U	39	285	570	ug/Kg
71-55-6	1,1,1-Trichloroethane	570	U	46	285	570	ug/Kg
108-87-2	Methylcyclohexane	570	U	78	285	570	ug/Kg
71-43-2	Benzene	570	U	37	285	570	ug/Kg
107-06-2	1,2-Dichloroethane	210	JD	55	285	570	ug/Kg
79-01-6	Trichloroethene	570	U	32	285	570	ug/Kg
78-87-5	1,2-Dichloropropane	570	U	53	285	570	ug/Kg
75-27-4	Bromodichloromethane	570	U	41	285	570	ug/Kg
108-10-1	4-Methyl-2-Pentanone	1300	JD	240	1450	2900	ug/Kg
108-88-3	Toluene	570	U	42	285	570	ug/Kg
10061-02-6	t-1,3-Dichloropropene	570	U	33	285	570	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	570	U	35	285	570	ug/Kg
79-00-5	1,1,2-Trichloroethane	570	U	43	285	570	ug/Kg
591-78-6	2-Hexanone	2900	U	220	1450	2900	ug/Kg
124-48-1	Dibromochloromethane	570	U	60	285	570	ug/Kg
106-93-4	1,2-Dibromoethane	570	U	47	285	570	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-B-3(14.5-15.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-08DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.6 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020662.D	1		11/26/10	VE112610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	570	U	31	285	570	ug/Kg
108-90-7	Chlorobenzene	570	U	56	285	570	ug/Kg
100-41-4	Ethyl Benzene	570	U	61	285	570	ug/Kg
179601-23-1	m/p-Xylenes	1100	U	110	550	1100	ug/Kg
95-47-6	o-Xylene	570	U	49	285	570	ug/Kg
100-42-5	Styrene	570	U	41	285	570	ug/Kg
75-25-2	Bromoform	570 UJ	U	54	285	570	ug/Kg
98-82-8	Isopropylbenzene	570	U	52	285	570	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	570	U	35	285	570	ug/Kg
541-73-1	1,3-Dichlorobenzene	570	U	49	285	570	ug/Kg
106-46-7	1,4-Dichlorobenzene	570	U	37	285	570	ug/Kg
95-50-1	1,2-Dichlorobenzene	570	U	52	285	570	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	570	U	53	285	570	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	570	U	71	285	570	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	38.7		55 - 158		77%	SPK: 50
1868-53-7	Dibromofluoromethane	49.5		53 - 156		99%	SPK: 50
2037-26-5	Toluene-d8	42.4		68 - 122		85%	SPK: 50
460-00-4	4-Bromofluorobenzene	42.5		25 - 144		85%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1859130	9.44				
540-36-3	1,4-Difluorobenzene	3588700	10.54				
3114-55-4	Chlorobenzene-d5	3449610	14.95				
3855-82-1	1,4-Dichlorobenzene-d4	1776380	18.76				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-10(14.5-15.0)	SDG No.:	B4275
Lab Sample ID:	B4275-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VH038597.D	1		11/27/10
			Prep Batch ID
			VH112710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	650	U	71	325	650	ug/Kg
74-87-3	Chloromethane	650	U	70	325	650	ug/Kg
75-01-4	Vinyl Chloride	650	U	44	325	650	ug/Kg
74-83-9	Bromomethane	650	U	80	325	650	ug/Kg
75-00-3	Chloroethane	650	U	85	325	650	ug/Kg
75-69-4	Trichlorofluoromethane	650	U	45	325	650	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	650	U	58	325	650	ug/Kg
75-35-4	1,1-Dichloroethene	650	U	61	325	650	ug/Kg
67-64-1	Acetone	3200	U	360	1600	3200	ug/Kg
75-15-0	Carbon Disulfide	650	U	70	325	650	ug/Kg
1634-04-4	Methyl tert-butyl Ether	650	U	45	325	650	ug/Kg
79-20-9	Methyl Acetate	650	U	110	325	650	ug/Kg
75-09-2	Methylene Chloride	650	U	53	325	650	ug/Kg
156-60-5	trans-1,2-Dichloroethene	650	U	53	325	650	ug/Kg
75-34-3	1,1-Dichloroethane	650	U	46	325	650	ug/Kg
110-82-7	Cyclohexane	650	U	71	325	650	ug/Kg
78-93-3	2-Butanone	3200	U	170	1600	3200	ug/Kg
56-23-5	Carbon Tetrachloride	650	U	80	325	650	ug/Kg
156-59-2	cis-1,2-Dichloroethene	73000	E	45	325	650	ug/Kg
67-66-3	Chloroform	650	U	44	325	650	ug/Kg
71-55-6	1,1,1-Trichloroethane	650	U	52	325	650	ug/Kg
108-87-2	Methylcyclohexane	650	U	88	325	650	ug/Kg
71-43-2	Benzene	170	J	41	325	650	ug/Kg
107-06-2	1,2-Dichloroethane	27000	E	62	325	650	ug/Kg
79-01-6	Trichloroethene	650	U	36	325	650	ug/Kg
78-87-5	1,2-Dichloropropane	650	U	59	325	650	ug/Kg
75-27-4	Bromodichloromethane	650	U	46	325	650	ug/Kg
108-10-1	4-Methyl-2-Pentanone	1700	J	270	1600	3200	ug/Kg
108-88-3	Toluene	650	U	48	325	650	ug/Kg
10061-02-6	t-1,3-Dichloropropene	650	U	37	325	650	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	650	U	40	325	650	ug/Kg
79-00-5	1,1,2-Trichloroethane	650	U	49	325	650	ug/Kg
591-78-6	2-Hexanone	3200	U	250	1600	3200	ug/Kg
124-48-1	Dibromochloromethane	650	U	67	325	650	ug/Kg
106-93-4	1,2-Dibromoethane	650	U	53	325	650	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-10(14.5-15.0)	SDG No.:	B4275
Lab Sample ID:	B4275-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH038597.D	1		11/27/10	VH112710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	650	U	35	325	650	ug/Kg
108-90-7	Chlorobenzene	650	U	63	325	650	ug/Kg
100-41-4	Ethyl Benzene	650	U	68	325	650	ug/Kg
179601-23-1	m/p-Xylenes	1300	U	120	650	1300	ug/Kg
95-47-6	o-Xylene	650	U	56	325	650	ug/Kg
100-42-5	Styrene	650	U	46	325	650	ug/Kg
75-25-2	Bromoform	650	U	61	325	650	ug/Kg
98-82-8	Isopropylbenzene	650	U	58	325	650	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	650	U	40	325	650	ug/Kg
541-73-1	1,3-Dichlorobenzene	650	U	56	325	650	ug/Kg
106-46-7	1,4-Dichlorobenzene	650	U	41	325	650	ug/Kg
95-50-1	1,2-Dichlorobenzene	650	U	58	325	650	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	650	U	59	325	650	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	650	U	80	325	650	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.1		55 - 158		92%	SPK: 50
1868-53-7	Dibromofluoromethane	48		53 - 156		96%	SPK: 50
2037-26-5	Toluene-d8	48.7		68 - 122		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.9		25 - 144		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	244521	4.08				
540-36-3	1,4-Difluorobenzene	490912	4.6				
3114-55-4	Chlorobenzene-d5	383382	7.95				
3855-82-1	1,4-Dichlorobenzene-d4	158188	10.44				

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-10(14.5-15.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-09DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH038598.D	8		11/27/10	VH112710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5200	U	570	2600	5200	ug/Kg
74-87-3	Chloromethane	5200	U	560	2600	5200	ug/Kg
75-01-4	Vinyl Chloride	5200	U	350	2600	5200	ug/Kg
74-83-9	Bromomethane	5200	U	640	2600	5200	ug/Kg
75-00-3	Chloroethane	5200	U	680	2600	5200	ug/Kg
75-69-4	Trichlorofluoromethane	5200	U	360	2600	5200	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5200	U	460	2600	5200	ug/Kg
75-35-4	1,1-Dichloroethene	5200	U	490	2600	5200	ug/Kg
67-64-1	Acetone	26000	U	2800	13000	26000	ug/Kg
75-15-0	Carbon Disulfide	5200	U	560	2600	5200	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5200	U	360	2600	5200	ug/Kg
79-20-9	Methyl Acetate	5200	U	860	2600	5200	ug/Kg
75-09-2	Methylene Chloride	5200	U	420	2600	5200	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5200	U	420	2600	5200	ug/Kg
75-34-3	1,1-Dichloroethane	5200	U	370	2600	5200	ug/Kg
110-82-7	Cyclohexane	5200	U	570	2600	5200	ug/Kg
78-93-3	2-Butanone	26000	U	1400	13000	26000	ug/Kg
56-23-5	Carbon Tetrachloride	5200	U	640	2600	5200	ug/Kg
156-59-2	cis-1,2-Dichloroethene	58000	D	360	2600	5200	ug/Kg
67-66-3	Chloroform	5200	U	350	2600	5200	ug/Kg
71-55-6	1,1,1-Trichloroethane	5200	U	410	2600	5200	ug/Kg
108-87-2	Methylcyclohexane	5200	U	700	2600	5200	ug/Kg
71-43-2	Benzene	5200	U	330	2600	5200	ug/Kg
107-06-2	1,2-Dichloroethane	18000	D	500	2600	5200	ug/Kg
79-01-6	Trichloroethene	5200	U	290	2600	5200	ug/Kg
78-87-5	1,2-Dichloropropane	5200	U	480	2600	5200	ug/Kg
75-27-4	Bromodichloromethane	5200	U	370	2600	5200	ug/Kg
108-10-1	4-Methyl-2-Pentanone	26000	U	2200	13000	26000	ug/Kg
108-88-3	Toluene	5200	U	380	2600	5200	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5200	U	300	2600	5200	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5200	U	320	2600	5200	ug/Kg
79-00-5	1,1,2-Trichloroethane	5200	U	390	2600	5200	ug/Kg
591-78-6	2-Hexanone	26000	U	2000	13000	26000	ug/Kg
124-48-1	Dibromochloromethane	5200	U	540	2600	5200	ug/Kg
106-93-4	1,2-Dibromoethane	5200	U	420	2600	5200	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-10(14.5-15.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-09DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VH038598.D	8		11/27/10
			Prep Batch ID
			VH112710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5200	U	280	2600	5200	ug/Kg
108-90-7	Chlorobenzene	5200	U	510	2600	5200	ug/Kg
100-41-4	Ethyl Benzene	5200	U	550	2600	5200	ug/Kg
179601-23-1	m/p-Xylenes	10000	U	980	5000	10000	ug/Kg
95-47-6	o-Xylene	5200	U	440	2600	5200	ug/Kg
100-42-5	Styrene	5200	U	370	2600	5200	ug/Kg
75-25-2	Bromoform	5200	U	490	2600	5200	ug/Kg
98-82-8	Isopropylbenzene	5200	U	460	2600	5200	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5200	U	320	2600	5200	ug/Kg
541-73-1	1,3-Dichlorobenzene	5200	U	440	2600	5200	ug/Kg
106-46-7	1,4-Dichlorobenzene	5200	U	330	2600	5200	ug/Kg
95-50-1	1,2-Dichlorobenzene	5200	U	460	2600	5200	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5200	U	480	2600	5200	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5200	U	640	2600	5200	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	360		55 - 158		90%	SPK: 50
1868-53-7	Dibromofluoromethane	327		53 - 156		82%	SPK: 50
2037-26-5	Toluene-d8	314		68 - 122		79%	SPK: 50
460-00-4	4-Bromofluorobenzene	310		25 - 144		78%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	306304	4.09				
540-36-3	1,4-Difluorobenzene	648663	4.61				
3114-55-4	Chlorobenzene-d5	485260	7.95				
3855-82-1	1,4-Dichlorobenzene-d4	201188	10.44				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-11(14.5-15.0)	SDG No.:	B4275
Lab Sample ID:	B4275-10	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	16
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042065.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6	U	0.78	3	6	ug/Kg
74-87-3	Chloromethane	6	U	1	3	6	ug/Kg
75-01-4	Vinyl Chloride	28		1.5	3	6	ug/Kg
74-83-9	Bromomethane	6	U	2.9	3	6	ug/Kg
75-00-3	Chloroethane	6	U	1.7	3	6	ug/Kg
75-69-4	Trichlorofluoromethane	6	U	1.6	3	6	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6	U	1.6	3	6	ug/Kg
75-35-4	1,1-Dichloroethene	6	U	1.8	3	6	ug/Kg
67-64-1	Acetone	97		3.6	15	30	ug/Kg
75-15-0	Carbon Disulfide	8.3		1.3	3	6	ug/Kg
1634-04-4	Methyl tert-butyl Ether	7.5		1.1	3	6	ug/Kg
79-20-9	Methyl Acetate	6	U	1.8	3	6	ug/Kg
75-09-2	Methylene Chloride	6	U	1.7	3	6	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6	U	0.82	3	6	ug/Kg
75-34-3	1,1-Dichloroethane	83		1.1	3	6	ug/Kg
110-82-7	Cyclohexane	6	U	1.2	3	6	ug/Kg
78-93-3	2-Butanone	330		3.7	15	30	ug/Kg
56-23-5	Carbon Tetrachloride	6	U	1.2	3	6	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6300	E	1.1	3	6	ug/Kg
67-66-3	Chloroform	6	U	0.88	3	6	ug/Kg
71-55-6	1,1,1-Trichloroethane	6	U	1	3	6	ug/Kg
108-87-2	Methyleyclohexane	6	U	1.3	3	6	ug/Kg
71-43-2	Benzene	2.1	J	0.45	3	6	ug/Kg
107-06-2	1,2-Dichloroethane	2700	E	0.76	3	6	ug/Kg
79-01-6	Trichloroethene	6	U	1	3	6	ug/Kg
78-87-5	1,2-Dichloropropane	6	U	0.31	3	6	ug/Kg
75-27-4	Bromodichloromethane	6	U	0.74	3	6	ug/Kg
108-10-1	4-Methyl-2-Pentanone	140		3.5	15	30	ug/Kg
108-88-3	Toluene	8.1		0.76	3	6	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6	U	0.94	3	6	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6	U	0.86	3	6	ug/Kg
79-00-5	1,1,2-Trichloroethane	6	U	1.1	3	6	ug/Kg
591-78-6	2-Hexanone	30	U	4.7	15	30	ug/Kg
124-48-1	Dibromochloromethane	6	U	0.64	3	6	ug/Kg
106-93-4	1,2-Dibromoethane	6	U	0.76	3	6	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-11(14.5-15.0)	SDG No.:	B4275
Lab Sample ID:	B4275-10	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	16
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042065.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6	U	1.2	3	6	ug/Kg
108-90-7	Chlorobenzene	6	U	0.6	3	6	ug/Kg
100-41-4	Ethyl Benzene	1.4	J	0.74	3	6	ug/Kg
179601-23-1	m/p-Xylenes	4.2	J	0.86	6	12	ug/Kg
95-47-6	o-Xylene	1.7	J	0.81	3	6	ug/Kg
100-42-5	Styrene	6	U	0.54	3	6	ug/Kg
75-25-2	Bromoform	6	U	0.88	3	6	ug/Kg
98-82-8	Isopropylbenzene	6 UJ	U	0.57	3	6	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6 UJ	U	0.55	3	6	ug/Kg
541-73-1	1,3-Dichlorobenzene	6 UJ	U	0.44	3	6	ug/Kg
106-46-7	1,4-Dichlorobenzene	6 UJ	U	0.49	3	6	ug/Kg
95-50-1	1,2-Dichlorobenzene	6 UJ	U	0.74	3	6	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6 UJ	U	1	3	6	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6 UJ	U	0.84	3	6	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	48.6		55 - 158		97%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		53 - 156		105%	SPK: 50
2037-26-5	Toluene-d8	46.3		68 - 122		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	22.7		25 - 144		45%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	272376	3.18				
540-36-3	1,4-Difluorobenzene	466104	3.56				
3114-55-4	Chlorobenzene-d5	365911	6.24				
3855-82-1	1,4-Dichlorobenzene-d4	86579	8.57				
TENTITIVE IDENTIFIED COMPOUNDS							
75-65-0	Tert butyl alcohol	410	J			2.08	ug/Kg

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-11(14.5-15.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-10DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	16
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020661.D	1		11/26/10	VE112610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	590	U	65	295	590	ug/Kg
74-87-3	Chloromethane	590	U	64	295	590	ug/Kg
75-01-4	Vinyl Chloride	590	U	40	295	590	ug/Kg
74-83-9	Bromomethane	590	U	74	295	590	ug/Kg
75-00-3	Chloroethane	590	U	78	295	590	ug/Kg
75-69-4	Trichlorofluoromethane	590	U	42	295	590	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	590	U	53	295	590	ug/Kg
75-35-4	1,1-Dichloroethene	590	U	56	295	590	ug/Kg
67-64-1	Acetone	3000	U	330	1500	3000	ug/Kg
75-15-0	Carbon Disulfide	590	U	64	295	590	ug/Kg
1634-04-4	Methyl tert-butyl Ether	590	U	42	295	590	ug/Kg
79-20-9	Methyl Acetate	590	U	99	295	590	ug/Kg
75-09-2	Methylene Chloride	590	U	49	295	590	ug/Kg
156-60-5	trans-1,2-Dichloroethene	590	U	49	295	590	ug/Kg
75-34-3	1,1-Dichloroethane	590	U	43	295	590	ug/Kg
110-82-7	Cyclohexane	590	U	65	295	590	ug/Kg
78-93-3	2-Butanone	3000	U	160	1500	3000	ug/Kg
56-23-5	Carbon Tetrachloride	590	U	74	295	590	ug/Kg
156-59-2	cis-1,2-Dichloroethene	8100	D	42	295	590	ug/Kg
67-66-3	Chloroform	590	U	40	295	590	ug/Kg
71-55-6	1,1,1-Trichloroethane	590	U	48	295	590	ug/Kg
108-87-2	Methylcyclohexane	590	U	81	295	590	ug/Kg
71-43-2	Benzene	590	U	38	295	590	ug/Kg
107-06-2	1,2-Dichloroethane	8200	D	57	295	590	ug/Kg
79-01-6	Trichloroethene	590	U	33	295	590	ug/Kg
78-87-5	1,2-Dichloropropane	590	U	55	295	590	ug/Kg
75-27-4	Bromodichloromethane	590	U	43	295	590	ug/Kg
108-10-1	4-Methyl-2-Pentanone	1500	JD	250	1500	3000	ug/Kg
108-88-3	Toluene	590	U	44	295	590	ug/Kg
10061-02-6	t-1,3-Dichloropropene	590	U	34	295	590	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	590	U	37	295	590	ug/Kg
79-00-5	1,1,2-Trichloroethane	590	U	45	295	590	ug/Kg
591-78-6	2-Hexanone	3000	U	230	1500	3000	ug/Kg
124-48-1	Dibromochloromethane	590	U	62	295	590	ug/Kg
106-93-4	1,2-Dibromoethane	590	U	49	295	590	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-11(14.5-15.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-10DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	16
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020661.D	1		11/26/10	VE112610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	590	U	32	295	590	ug/Kg
108-90-7	Chlorobenzene	590	U	58	295	590	ug/Kg
100-41-4	Ethyl Benzene	590	U	63	295	590	ug/Kg
179601-23-1	m/p-Xylenes	1200	U	110	600	1200	ug/Kg
95-47-6	o-Xylene	590	U	51	295	590	ug/Kg
100-42-5	Styrene	590	U	43	295	590	ug/Kg
75-25-2	Bromoform	590	U	56	295	590	ug/Kg
98-82-8	Isopropylbenzene	590	U	53	295	590	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	590	U	37	295	590	ug/Kg
541-73-1	1,3-Dichlorobenzene	590	U	51	295	590	ug/Kg
106-46-7	1,4-Dichlorobenzene	590	U	38	295	590	ug/Kg
95-50-1	1,2-Dichlorobenzene	590	U	53	295	590	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	590	U	55	295	590	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	590	U	74	295	590	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.3		55 - 158		93%	SPK: 50
1868-53-7	Dibromofluoromethane	62.3		53 - 156		125%	SPK: 50
2037-26-5	Toluene-d8	51.1		68 - 122		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.8		25 - 144		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	2442400	9.44				
540-36-3	1,4-Difluorobenzene	4602030	10.53				
3114-55-4	Chlorobenzene-d5	4368880	14.96				
3855-82-1	1,4-Dichlorobenzene-d4	2235540	18.76				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-B-4(14.5-15.0)	SDG No.:	B4275
Lab Sample ID:	B4275-11	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.4 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VE020635.D	1		11/25/10
			Prep Batch ID
			VE112510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	590	U	65	295	590	ug/Kg
74-87-3	Chloromethane	590	U	64	295	590	ug/Kg
75-01-4	Vinyl Chloride	590	U	40	295	590	ug/Kg
74-83-9	Bromomethane	590	U	74	295	590	ug/Kg
75-00-3	Chloroethane	590	U	78	295	590	ug/Kg
75-69-4	Trichlorofluoromethane	590	U	42	295	590	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	590	U	53	295	590	ug/Kg
75-35-4	1,1-Dichloroethene	590	U	56	295	590	ug/Kg
67-64-1	Acetone	3000	U	330	1500	3000	ug/Kg
75-15-0	Carbon Disulfide	590	U	64	295	590	ug/Kg
1634-04-4	Methyl tert-butyl Ether	590	U	42	295	590	ug/Kg
79-20-9	Methyl Acetate	590	U	99	295	590	ug/Kg
75-09-2	Methylene Chloride	590	U	49	295	590	ug/Kg
156-60-5	trans-1,2-Dichloroethene	590	U	49	295	590	ug/Kg
75-34-3	1,1-Dichloroethane	120	J	43	295	590	ug/Kg
110-82-7	Cyclohexane	590	U	65	295	590	ug/Kg
78-93-3	2-Butanone	3000	U	160	1500	3000	ug/Kg
56-23-5	Carbon Tetrachloride	590	U	74	295	590	ug/Kg
156-59-2	cis-1,2-Dichloroethene	25000	E	42	295	590	ug/Kg
67-66-3	Chloroform	590	U	40	295	590	ug/Kg
71-55-6	1,1,1-Trichloroethane	590	U	47	295	590	ug/Kg
108-87-2	Methylcyclohexane	590	U	81	295	590	ug/Kg
71-43-2	Benzene	590	U	38	295	590	ug/Kg
107-06-2	1,2-Dichloroethane	6800		57	295	590	ug/Kg
79-01-6	Trichloroethene	590	U	33	295	590	ug/Kg
78-87-5	1,2-Dichloropropane	590	U	55	295	590	ug/Kg
75-27-4	Bromodichloromethane	590	U	43	295	590	ug/Kg
108-10-1	4-Methyl-2-Pentanone	1900	J	250	1500	3000	ug/Kg
108-88-3	Toluene	590	U	44	295	590	ug/Kg
10061-02-6	t-1,3-Dichloropropene	590	U	34	295	590	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	590	U	37	295	590	ug/Kg
79-00-5	1,1,2-Trichloroethane	590	U	45	295	590	ug/Kg
591-78-6	2-Hexanone	3000	U	230	1500	3000	ug/Kg
124-48-1	Dibromochloromethane	590	U	62	295	590	ug/Kg
106-93-4	1,2-Dibromoethane	590	U	49	295	590	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-B-4(14.5-15.0)	SDG No.:	B4275
Lab Sample ID:	B4275-11	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.4 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020635.D	1		11/25/10	VE112510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	590	U	32	295	590	ug/Kg
108-90-7	Chlorobenzene	590	U	58	295	590	ug/Kg
100-41-4	Ethyl Benzene	590	U	63	295	590	ug/Kg
179601-23-1	m/p-Xylenes	170	J	110	600	1200	ug/Kg
95-47-6	o-Xylene	100	J	51	295	590	ug/Kg
100-42-5	Styrene	590	U	43	295	590	ug/Kg
75-25-2	Bromoform	590	U	56	295	590	ug/Kg
98-82-8	Isopropylbenzene	590	U	53	295	590	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	590	U	37	295	590	ug/Kg
541-73-1	1,3-Dichlorobenzene	590	U	51	295	590	ug/Kg
106-46-7	1,4-Dichlorobenzene	590	U	38	295	590	ug/Kg
95-50-1	1,2-Dichlorobenzene	590	U	53	295	590	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	590	U	55	295	590	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	590	U	74	295	590	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45		55 - 158		90%	SPK: 50
1868-53-7	Dibromofluoromethane	53.8		53 - 156		108%	SPK: 50
2037-26-5	Toluene-d8	47.3		68 - 122		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.8		25 - 144		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	2013200	9.41				
540-36-3	1,4-Difluorobenzene	4247390	10.5				
3114-55-4	Chlorobenzene-d5	4113210	14.92				
3855-82-1	1,4-Dichlorobenzene-d4	2027150	18.71				
TENTATIVE IDENTIFIED COMPOUNDS							
74-88-4	Methyl Iodide	660	J			6.62	ug/Kg
91-20-3	Naphthalene	460	J			22.78	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-B-4(14.5-15.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-11DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.4 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020665.D	8		11/26/10	VE112610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	4700	U	520	2350	4700	ug/Kg
74-87-3	Chloromethane	4700	U	510	2350	4700	ug/Kg
75-01-4	Vinyl Chloride	4700	U	320	2350	4700	ug/Kg
74-83-9	Bromomethane	4700	U	590	2350	4700	ug/Kg
75-00-3	Chloroethane	4700	U	630	2350	4700	ug/Kg
75-69-4	Trichlorofluoromethane	4700	U	330	2350	4700	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	4700	U	430	2350	4700	ug/Kg
75-35-4	1,1-Dichloroethene	4700	U	450	2350	4700	ug/Kg
67-64-1	Acetone	24000	U	2600	12000	24000	ug/Kg
75-15-0	Carbon Disulfide	4700	U	510	2350	4700	ug/Kg
1634-04-4	Methyl tert-butyl Ether	4700	U	330	2350	4700	ug/Kg
79-20-9	Methyl Acetate	4700	U	790	2350	4700	ug/Kg
75-09-2	Methylene Chloride	4700	U	390	2350	4700	ug/Kg
156-60-5	trans-1,2-Dichloroethene	4700	U	390	2350	4700	ug/Kg
75-34-3	1,1-Dichloroethane	4700	U	340	2350	4700	ug/Kg
110-82-7	Cyclohexane	4700	U	520	2350	4700	ug/Kg
78-93-3	2-Butanone	24000	U	1300	12000	24000	ug/Kg
56-23-5	Carbon Tetrachloride	4700	U	590	2350	4700	ug/Kg
156-59-2	cis-1,2-Dichloroethene	54000	D	330	2350	4700	ug/Kg
67-66-3	Chloroform	4700	U	320	2350	4700	ug/Kg
71-55-6	1,1,1-Trichloroethane	4700	U	380	2350	4700	ug/Kg
108-87-2	Methylcyclohexane	4700	U	650	2350	4700	ug/Kg
71-43-2	Benzene	4700	U	300	2350	4700	ug/Kg
107-06-2	1,2-Dichloroethane	14000	D	460	2350	4700	ug/Kg
79-01-6	Trichloroethene	4700	U	270	2350	4700	ug/Kg
78-87-5	1,2-Dichloropropane	4700	U	440	2350	4700	ug/Kg
75-27-4	Bromodichloromethane	4700	U	340	2350	4700	ug/Kg
108-10-1	4-Methyl-2-Pentanone	10000	JD	2000	12000	24000	ug/Kg
108-88-3	Toluene	4700	U	350	2350	4700	ug/Kg
10061-02-6	t-1,3-Dichloropropene	4700	U	280	2350	4700	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	4700	U	290	2350	4700	ug/Kg
79-00-5	1,1,2-Trichloroethane	4700	U	360	2350	4700	ug/Kg
591-78-6	2-Hexanone	24000	U	1800	12000	24000	ug/Kg
124-48-1	Dibromochloromethane	4700	U	490	2350	4700	ug/Kg
106-93-4	1,2-Dibromoethane	4700	U	390	2350	4700	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/22/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-B-4(14.5-15.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-11DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.4 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020665.D	8		11/26/10	VE112610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	4700	U	260	2350	4700	ug/Kg
108-90-7	Chlorobenzene	4700	U	470	2350	4700	ug/Kg
100-41-4	Ethyl Benzene	4700	U	500	2350	4700	ug/Kg
179601-23-1	m/p-Xylenes	1900	JD	900	4750	9500	ug/Kg
95-47-6	o-Xylene	1000	JD	410	2350	4700	ug/Kg
100-42-5	Styrene	4700	U	340	2350	4700	ug/Kg
75-25-2	Bromoform	4700	U	450	2350	4700	ug/Kg
98-82-8	Isopropylbenzene	4700	U	430	2350	4700	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	4700	U	290	2350	4700	ug/Kg
541-73-1	1,3-Dichlorobenzene	4700	U	410	2350	4700	ug/Kg
106-46-7	1,4-Dichlorobenzene	4700	U	300	2350	4700	ug/Kg
95-50-1	1,2-Dichlorobenzene	4700	U	430	2350	4700	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	4700	U	440	2350	4700	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	4700	U	590	2350	4700	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	379		55 - 158		95%	SPK: 50
1868-53-7	Dibromofluoromethane	481		53 - 156		120%	SPK: 50
2037-26-5	Toluene-d8	396		68 - 122		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	395		25 - 144		99%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1710600	9.45				
540-36-3	1,4-Difluorobenzene	3452070	10.54				
3114-55-4	Chlorobenzene-d5	3265790	14.96				
3855-82-1	1,4-Dichlorobenzene-d4	1613150	18.76				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	11/23/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-12BETA	SDG No.:	B4275
Lab Sample ID:	B4275-12	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.07 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VE020639.D	1		11/25/10
			Prep Batch ID
			VE112510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	640	U	70	320	640	ug/Kg
74-87-3	Chloromethane	640	U	69	320	640	ug/Kg
75-01-4	Vinyl Chloride	100	J	44	320	640	ug/Kg
74-83-9	Bromomethane	640	U	79	320	640	ug/Kg
75-00-3	Chloroethane	640	U	85	320	640	ug/Kg
75-69-4	Trichlorofluoromethane	640	U	45	320	640	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	640	U	58	320	640	ug/Kg
75-35-4	1,1-Dichloroethene	640	U	60	320	640	ug/Kg
67-64-1	Acetone	3200	U	350	1600	3200	ug/Kg
75-15-0	Carbon Disulfide	640	U	69	320	640	ug/Kg
1634-04-4	Methyl tert-butyl Ether	640	U	45	320	640	ug/Kg
79-20-9	Methyl Acetate	640	U	110	320	640	ug/Kg
75-09-2	Methylene Chloride	640	U	53	320	640	ug/Kg
156-60-5	trans-1,2-Dichloroethene	640	U	53	320	640	ug/Kg
75-34-3	1,1-Dichloroethane	110	J	46	320	640	ug/Kg
110-82-7	Cyclohexane	640	U	70	320	640	ug/Kg
78-93-3	2-Butanone	3200	U	170	1600	3200	ug/Kg
56-23-5	Carbon Tetrachloride	640	U	79	320	640	ug/Kg
156-59-2	cis-1,2-Dichloroethene	22000	E	45	320	640	ug/Kg
67-66-3	Chloroform	640	U	44	320	640	ug/Kg
71-55-6	1,1,1-Trichloroethane	640	U	51	320	640	ug/Kg
108-87-2	Methylcyclohexane	640	U	87	320	640	ug/Kg
71-43-2	Benzene	640	U	41	320	640	ug/Kg
107-06-2	1,2-Dichloroethane	680		61	320	640	ug/Kg
79-01-6	Trichloroethene	72	J	36	320	640	ug/Kg
78-87-5	1,2-Dichloropropane	640	U	59	320	640	ug/Kg
75-27-4	Bromodichloromethane	640	U	46	320	640	ug/Kg
108-10-1	4-Methyl-2-Pentanone	1900	J	270	1600	3200	ug/Kg
108-88-3	Toluene	70	J	47	320	640	ug/Kg
10061-02-6	t-1,3-Dichloropropene	640	U	37	320	640	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	640	U	40	320	640	ug/Kg
79-00-5	1,1,2-Trichloroethane	640	U	49	320	640	ug/Kg
591-78-6	2-Hexanone	3200	U	250	1600	3200	ug/Kg
124-48-1	Dibromochloromethane	640	U	67	320	640	ug/Kg
106-93-4	1,2-Dibromoethane	640	U	53	320	640	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/23/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-12BETA	SDG No.:	B4275
Lab Sample ID:	B4275-12	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.07 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VE020639.D	1		11/25/10	VE112510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	640	U	35	320	640	ug/Kg
108-90-7	Chlorobenzene	640	U	63	320	640	ug/Kg
100-41-4	Ethyl Benzene	640	U	68	320	640	ug/Kg
179601-23-1	m/p-Xylenes	230	J	120	650	1300	ug/Kg
95-47-6	o-Xylene	140	J	55	320	640	ug/Kg
100-42-5	Styrene	640	U	46	320	640	ug/Kg
75-25-2	Bromoform	640	U	60	320	640	ug/Kg
98-82-8	Isopropylbenzene	640	U	58	320	640	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	640	U	40	320	640	ug/Kg
541-73-1	1,3-Dichlorobenzene	640	U	55	320	640	ug/Kg
106-46-7	1,4-Dichlorobenzene	640	U	41	320	640	ug/Kg
95-50-1	1,2-Dichlorobenzene	640	U	58	320	640	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	640	U	59	320	640	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	640	U	79	320	640	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.5		55 - 158		87%	SPK: 50
1868-53-7	Dibromofluoromethane	53.6		53 - 156		107%	SPK: 50
2037-26-5	Toluene-d8	47.1		68 - 122		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.9		25 - 144		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	2142080	9.42				
540-36-3	1,4-Difluorobenzene	4368240	10.51				
3114-55-4	Chlorobenzene-d5	4212290	14.92				
3855-82-1	1,4-Dichlorobenzene-d4	2067840	18.72				
TENTATIVE IDENTIFIED COMPOUNDS							
108-67-8	1,3,5-Trimethylbenzene	91	J			17.34	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	270	J			18.01	ug/Kg
91-20-3	Naphthalene	490	J			22.78	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/23/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	WR-S-12BETADL	SDG No.:	B4275
Lab Sample ID:	B4275-12DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.07 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH038599.D	8		11/27/10	VH112710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5100	U	560	2550	5100	ug/Kg
74-87-3	Chloromethane	5100	U	550	2550	5100	ug/Kg
75-01-4	Vinyl Chloride	5100	U	350	2550	5100	ug/Kg
74-83-9	Bromomethane	5100	U	640	2550	5100	ug/Kg
75-00-3	Chloroethane	5100	U	680	2550	5100	ug/Kg
75-69-4	Trichlorofluoromethane	5100	U	360	2550	5100	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5100	U	460	2550	5100	ug/Kg
75-35-4	1,1-Dichloroethene	5100	U	480	2550	5100	ug/Kg
67-64-1	Acetone	26000	U	2800	13000	26000	ug/Kg
75-15-0	Carbon Disulfide	5100	U	550	2550	5100	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5100	U	360	2550	5100	ug/Kg
79-20-9	Methyl Acetate	5100	U	850	2550	5100	ug/Kg
75-09-2	Methylene Chloride	5100	U	420	2550	5100	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5100	U	420	2550	5100	ug/Kg
75-34-3	1,1-Dichloroethane	5100	U	370	2550	5100	ug/Kg
110-82-7	Cyclohexane	5100	U	560	2550	5100	ug/Kg
78-93-3	2-Butanone	26000	U	1400	13000	26000	ug/Kg
56-23-5	Carbon Tetrachloride	5100	U	640	2550	5100	ug/Kg
156-59-2	cis-1,2-Dichloroethene	57000	D	360	2550	5100	ug/Kg
67-66-3	Chloroform	5100	U	350	2550	5100	ug/Kg
71-55-6	1,1,1-Trichloroethane	5100	U	410	2550	5100	ug/Kg
108-87-2	Methylcyclohexane	5100	U	700	2550	5100	ug/Kg
71-43-2	Benzene	5100	U	330	2550	5100	ug/Kg
107-06-2	1,2-Dichloroethane	5100	U	490	2550	5100	ug/Kg
79-01-6	Trichloroethene	5100	U	290	2550	5100	ug/Kg
78-87-5	1,2-Dichloropropane	5100	U	470	2550	5100	ug/Kg
75-27-4	Bromodichloromethane	5100	U	370	2550	5100	ug/Kg
108-10-1	4-Methyl-2-Pentanone	26000	U	2200	13000	26000	ug/Kg
108-88-3	Toluene	5100	U	380	2550	5100	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5100	U	300	2550	5100	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5100	U	320	2550	5100	ug/Kg
79-00-5	1,1,2-Trichloroethane	5100	U	390	2550	5100	ug/Kg
591-78-6	2-Hexanone	26000	U	2000	13000	26000	ug/Kg
124-48-1	Dibromochloromethane	5100	U	530	2550	5100	ug/Kg
106-93-4	1,2-Dibromoethane	5100	U	420	2550	5100	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/23/10	
Project:	Provan	Date Received:	11/24/10	
Client Sample ID:	WR-S-12BETADL	SDG No.:	B4275	
Lab Sample ID:	B4275-12DL	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	23	
Sample Wt/Vol:	5.07 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH038599.D	8		11/27/10	VH112710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5100	U	280	2550	5100	ug/Kg
108-90-7	Chlorobenzene	5100	U	500	2550	5100	ug/Kg
100-41-4	Ethyl Benzene	5100	U	540	2550	5100	ug/Kg
179601-23-1	m/p-Xylenes	10000	U	970	5000	10000	ug/Kg
95-47-6	o-Xylene	5100	U	440	2550	5100	ug/Kg
100-42-5	Styrene	5100	U	370	2550	5100	ug/Kg
75-25-2	Bromoform	5100	U	480	2550	5100	ug/Kg
98-82-8	Isopropylbenzene	5100	U	460	2550	5100	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5100	U	320	2550	5100	ug/Kg
541-73-1	1,3-Dichlorobenzene	5100	U	440	2550	5100	ug/Kg
106-46-7	1,4-Dichlorobenzene	5100	U	330	2550	5100	ug/Kg
95-50-1	1,2-Dichlorobenzene	5100	U	460	2550	5100	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5100	U	470	2550	5100	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5100	U	640	2550	5100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	404		55 - 158		101%	SPK: 50
1868-53-7	Dibromofluoromethane	391		53 - 156		98%	SPK: 50
2037-26-5	Toluene-d8	383		68 - 122		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	370		25 - 144		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	292024	4.09				
540-36-3	1,4-Difluorobenzene	622057	4.61				
3114-55-4	Chlorobenzene-d5	489588	7.95				
3855-82-1	1,4-Dichlorobenzene-d4	196528	10.44				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/23/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	RU-WRV-2	SDG No.:	B4275
Lab Sample ID:	B4275-15	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042063.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.5	U	0.71	2.75	5.5	ug/Kg
74-87-3	Chloromethane	5.5	U	0.94	2.75	5.5	ug/Kg
75-01-4	Vinyl Chloride	5.5	U	1.3	2.75	5.5	ug/Kg
74-83-9	Bromomethane	5.5	U	2.7	2.75	5.5	ug/Kg
75-00-3	Chloroethane	5.5	U	1.5	2.75	5.5	ug/Kg
75-69-4	Trichlorofluoromethane	5.5	U	1.4	2.75	5.5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.5	U	1.4	2.75	5.5	ug/Kg
75-35-4	1,1-Dichloroethene	5.5	U	1.6	2.75	5.5	ug/Kg
67-64-1	Acetone	27	U	3.3	13.5	27	ug/Kg
75-15-0	Carbon Disulfide	5.5	U	1.2	2.75	5.5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.5	U	1	2.75	5.5	ug/Kg
79-20-9	Methyl Acetate	5.5	U	1.6	2.75	5.5	ug/Kg
75-09-2	Methylene Chloride	5.5	U	1.5	2.75	5.5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.5	U	0.75	2.75	5.5	ug/Kg
75-34-3	1,1-Dichloroethane	5.5	U	1	2.75	5.5	ug/Kg
110-82-7	Cyclohexane	5.5	U	1.1	2.75	5.5	ug/Kg
78-93-3	2-Butanone	27	U	3.4	13.5	27	ug/Kg
56-23-5	Carbon Tetrachloride	5.5	U	1.1	2.75	5.5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	13		0.97	2.75	5.5	ug/Kg
67-66-3	Chloroform	5.5	U	0.81	2.75	5.5	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.5	U	0.96	2.75	5.5	ug/Kg
108-87-2	Methylcyclohexane	5.5	U	1.2	2.75	5.5	ug/Kg
71-43-2	Benzene	5.5	U	0.41	2.75	5.5	ug/Kg
107-06-2	1,2-Dichloroethane	5.5	U	0.7	2.75	5.5	ug/Kg
79-01-6	Trichloroethene	5.5	U	0.94	2.75	5.5	ug/Kg
78-87-5	1,2-Dichloropropane	5.5	U	0.28	2.75	5.5	ug/Kg
75-27-4	Bromodichloromethane	5.5	U	0.68	2.75	5.5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	27	U	3.2	13.5	27	ug/Kg
108-88-3	Toluene	5.5	U	0.7	2.75	5.5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.5	U	0.86	2.75	5.5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.5	U	0.78	2.75	5.5	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.5	U	0.98	2.75	5.5	ug/Kg
591-78-6	2-Hexanone	27	U	4.3	13.5	27	ug/Kg
124-48-1	Dibromochloromethane	5.5	U	0.59	2.75	5.5	ug/Kg
106-93-4	1,2-Dibromoethane	5.5	U	0.7	2.75	5.5	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	11/23/10
Project:	Provan	Date Received:	11/24/10
Client Sample ID:	RU-WRV-2	SDG No.:	B4275
Lab Sample ID:	B4275-15	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042063.D	1		11/28/10	vk112810

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.5	U	1.1	2.75	5.5	ug/Kg
108-90-7	Chlorobenzene	5.5	U	0.55	2.75	5.5	ug/Kg
100-41-4	Ethyl Benzene	5.5	U	0.68	2.75	5.5	ug/Kg
179601-23-1	m/p-Xylenes	11	U	0.78	5.5	11	ug/Kg
95-47-6	o-Xylene	5.5	U	0.74	2.75	5.5	ug/Kg
100-42-5	Styrene	5.5	U	0.49	2.75	5.5	ug/Kg
75-25-2	Bromoform	5.5	U	0.81	2.75	5.5	ug/Kg
98-82-8	Isopropylbenzene	5.5	U	0.52	2.75	5.5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U	0.5	2.75	5.5	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.5	U	0.4	2.75	5.5	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.5	U	0.45	2.75	5.5	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.5	U	0.68	2.75	5.5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.5	U	0.95	2.75	5.5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.5	U	0.76	2.75	5.5	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.6		55 - 158		91%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		53 - 156		97%	SPK: 50
2037-26-5	Toluene-d8	49.4		68 - 122		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	47		25 - 144		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	337091	3.18				
540-36-3	1,4-Difluorobenzene	515013	3.56				
3114-55-4	Chlorobenzene-d5	548812	6.24				
3855-82-1	1,4-Dichlorobenzene-d4	304807	8.57				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-S-5-16.5-17.0	SDG No.:	B4275
Lab Sample ID:	B4275-01	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	12
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067408.D	1	11/17/10	11/17/10	PB52518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	370	U	20	185	370	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	370	U	18	185	370	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	370	U	16	185	370	ug/Kg
98-86-2	Acetophenone	370	U	12	185	370	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	370	U	19	185	370	ug/Kg
67-72-1	Hexachloroethane	370	U	17	185	370	ug/Kg
98-95-3	Nitrobenzene	370	U	14	185	370	ug/Kg
78-59-1	Isophorone	370	U	12	185	370	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	370	U	22	185	370	ug/Kg
91-20-3	Naphthalene	370	U	13	185	370	ug/Kg
106-47-8	4-Chloroaniline	370	U	27	185	370	ug/Kg
87-68-3	Hexachlorobutadiene	370	U	14	185	370	ug/Kg
105-60-2	Caprolactam	370	U	18	185	370	ug/Kg
91-57-6	2-Methylnaphthalene	370	U	9.5	185	370	ug/Kg
77-47-4	Hexachlorocyclopentadiene	370	U	9.2	185	370	ug/Kg
92-52-4	1,1-Biphenyl	370	U	14	185	370	ug/Kg
91-58-7	2-Chloronaphthalene	370	U	8.6	185	370	ug/Kg
88-74-4	2-Nitroaniline	370	U	17	185	370	ug/Kg
131-11-3	Dimethylphthalate	300	U	10	185	370	ug/Kg
208-96-8	Acenaphthylene	370	U	9.5	185	370	ug/Kg
606-20-2	2,6-Dinitrotoluene	370	U	15	185	370	ug/Kg
99-09-2	3-Nitroaniline	370	U	24	185	370	ug/Kg
83-32-9	Acenaphthene	370	U	11	185	370	ug/Kg
132-64-9	Dibenzofuran	370	U	15	185	370	ug/Kg
121-14-2	2,4-Dinitrotoluene	370	U	11	185	370	ug/Kg
84-66-2	Diethylphthalate	370	U	5.9	185	370	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	370	U	21	185	370	ug/Kg
86-73-7	Fluorene	370	U	14	185	370	ug/Kg
100-01-6	4-Nitroaniline	370	U	49	185	370	ug/Kg
86-30-6	N-Nitrosodiphenylamine	370	U	9.1	185	370	ug/Kg
101-55-3	4-Bromophenyl-phenylether	370	U	7.4	185	370	ug/Kg
118-74-1	Hexachlorobenzene	370	U	15	185	370	ug/Kg
1912-24-9	Atrazine	370	U	20	185	370	ug/Kg
85-01-8	Phenanthrene	370	U	10	185	370	ug/Kg
120-12-7	Anthracene	370	U	7.7	185	370	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-S-5-16.5-17.0	SDG No.:	B4275
Lab Sample ID:	B4275-01	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	12
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067408.D	1	11/17/10	11/17/10	PB52518

CAS Number	Parameter	Cone.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	370	U	8.3	185	370	ug/Kg
84-74-2	Di-n-butylphthalate	370	U	30	185	370	ug/Kg
206-44-0	Fluoranthene	370	U	7.6	185	370	ug/Kg
129-00-0	Pyrene	370	U	9.1	185	370	ug/Kg
85-68-7	Butylbenzylphthalate	370	U	18	185	370	ug/Kg
91-94-1	3,3-Dichlorobenzidine	370	U	24	185	370	ug/Kg
56-55-3	Benzo(a)anthracene	370	U	18	185	370	ug/Kg
218-01-9	Chrysene	370	U	17	185	370	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	560		13	185	370	ug/Kg
117-84-0	Di-n-octyl phthalate	370	U	4.3	185	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	370	U	12	185	370	ug/Kg
207-08-9	Benzo(k)fluoranthene	370	U	18	185	370	ug/Kg
50-32-8	Benzo(a)pyrene	370	U	8.2	185	370	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	370	U	13	185	370	ug/Kg
53-70-3	Dibenz(a,h)anthracene	370	U	11	185	370	ug/Kg
191-24-2	Benzo(g,h,i)perylene	370	U	15	185	370	ug/Kg
SURROGATES							
4165-60-0	Nitrobenzene-d5	70.8		30 - 150		71%	SPK:
321-60-8	2-Fluorobiphenyl	63.8		19 - 182		64%	SPK:
1718-51-0	Terphenyl-d14	64.4		24 - 191		64%	SPK:
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	63614	6.18				
1146-65-2	Naphthalene-d8	226935	8.02				
15067-26-2	Acenaphthene-d10	131543	9.98				
1517-22-2	Phenanthrene-d10	257077	12				
1719-03-5	Chrysene-d12	266589	16.11				
1520-96-3	Perylene-d12	240634	18.26				
TENTATIVE IDENTIFIED COMPOUNDS							
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	750	AB			3.55	ug/Kg
17301-22-3	Undecane, 2,5-dimethyl-	410	J			4.87	ug/Kg
1186-53-4	Pentane, 2,2,3,4-tetramethyl-	420	J			5.33	ug/Kg
62016-18-6	Octane, 5-ethyl-2-methyl-	320	J			6.1	ug/Kg
62238-00-0	Decane, 2,2,9-trimethyl-	350	J			6.27	ug/Kg
6975-98-0	Decane, 2-methyl-	430	J			6.36	ug/Kg
1000193-63-0	Acetic acid, 3,7,11,15-tetramethyl	310	J			6.71	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-S-5-16.5-17.0	SDG No.:	B4275
Lab Sample ID:	B4275-01	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	12
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067408.D	1	11/17/10	11/17/10	PB52518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
2051-30-1	Octane, 2,6-dimethyl-	350	J			6.84	ug/Kg
17312-55-9	Decane, 3,8-dimethyl-	240	J			7.55	ug/Kg
1667-01-2	Ethanone, 1-(2,4,6-trimethylphenyl)	250	J			7.9	ug/Kg
62016-33-5	Octane, 2,3,6-trimethyl-	450	J			8.16	ug/Kg
629-97-0	Docosane	280	J			8.22	ug/Kg
6117-97-1	Dodecane, 4-methyl-	430	J			8.26	ug/Kg
	unknown8.35	280	J			8.35	ug/Kg
629-59-4	Tetradecane	270	J			8.81	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-B-1-18.0-18.5	SDG No.:	B4275
Lab Sample ID:	B4275-02	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067430.D	1	11/17/10	11/18/10	PB52518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	370	U	19	185	370	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	370	U	18	185	370	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	370	U	15	185	370	ug/Kg
98-86-2	Acetophenone	370	U	11	185	370	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	370	U	19	185	370	ug/Kg
67-72-1	Hexachloroethane	370	U	17	185	370	ug/Kg
98-95-3	Nitrobenzene	370	U	14	185	370	ug/Kg
78-59-1	Isophorone	370	U	12	185	370	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	370	U	22	185	370	ug/Kg
91-20-3	Naphthalene	370	U	13	185	370	ug/Kg
106-47-8	4-Chloroaniline	370	U	26	185	370	ug/Kg
87-68-3	Hexachlorobutadiene	370	U	14	185	370	ug/Kg
105-60-2	Caprolactam	370	U	17	185	370	ug/Kg
91-57-6	2-Methylnaphthalene	370	U	9.4	185	370	ug/Kg
77-47-4	Hexachlorocyclopentadiene	370	U	9.1	185	370	ug/Kg
92-52-4	1,1-Biphenyl	370	U	14	185	370	ug/Kg
91-58-7	2-Chloronaphthalene	370	U	8.5	185	370	ug/Kg
88-74-4	2-Nitroaniline	370	U	17	185	370	ug/Kg
131-11-3	Dimethylphthalate	300	U	10	185	370	ug/Kg
208-96-8	Acenaphthylene	370	U	9.4	185	370	ug/Kg
606-20-2	2,6-Dinitrotoluene	370	U	15	185	370	ug/Kg
99-09-2	3-Nitroaniline	370	U	24	185	370	ug/Kg
83-32-9	Acenaphthene	370	U	11	185	370	ug/Kg
132-64-9	Dibenzofuran	370	U	15	185	370	ug/Kg
121-14-2	2,4-Dinitrotoluene	370	U	11	185	370	ug/Kg
84-66-2	Diethylphthalate	370	U	5.8	185	370	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	370	U	20	185	370	ug/Kg
86-73-7	Fluorene	370	U	14	185	370	ug/Kg
100-01-6	4-Nitroaniline	370	U	49	185	370	ug/Kg
86-30-6	N-Nitrosodiphenylamine	370	U	9	185	370	ug/Kg
101-55-3	4-Bromophenyl-phenylether	370	U	7.3	185	370	ug/Kg
118-74-1	Hexachlorobenzene	370	U	15	185	370	ug/Kg
1912-24-9	Atrazine	370	U	20	185	370	ug/Kg
85-01-8	Phenanthrene	370	U	10	185	370	ug/Kg
120-12-7	Anthracene	370	U	7.6	185	370	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/16/10
Project:	Provan	Date Received:	11/17/10
Client Sample ID:	WR-B-1-18.0-18.5	SDG No.:	B4275
Lab Sample ID:	B4275-02	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067430.D	1	11/17/10	11/18/10	PB52518

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	370	U	8.2	185	370	ug/Kg
84-74-2	Di-n-butylphthalate	370	U	29	185	370	ug/Kg
206-44-0	Fluoranthene	370	U	7.5	185	370	ug/Kg
129-00-0	Pyrene	370	U	9	185	370	ug/Kg
85-68-7	Butylbenzylphthalate	370	U	18	185	370	ug/Kg
91-94-1	3,3-Dichlorobenzidine	370	U	24	185	370	ug/Kg
56-55-3	Benzo(a)anthracene	370	U	18	185	370	ug/Kg
218-01-9	Chrysene	370	U	17	185	370	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	370	U	13	185	370	ug/Kg
117-84-0	Di-n-octyl phthalate	370	U	4.3	185	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	370	U	12	185	370	ug/Kg
207-08-9	Benzo(k)fluoranthene	370	U	18	185	370	ug/Kg
50-32-8	Benzo(a)pyrene	370	U	8.1	185	370	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	370	U	12	185	370	ug/Kg
53-70-3	Dibenz(a,h)anthracene	370	U	11	185	370	ug/Kg
191-24-2	Benzo(g,h,i)perylene	370	U	15	185	370	ug/Kg
SURROGATES							
4165-60-0	Nitrobenzene-d5	76.2		30 - 150		76%	SPK:
321-60-8	2-Fluorobiphenyl	71.4		19 - 182		71%	SPK:
1718-51-0	Terphenyl-d14	70.6		24 - 191		71%	SPK:
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	62037	6.16				
1146-65-2	Naphthalene-d8	224492	8				
15067-26-2	Acenaphthene-d10	131839	9.97				
1517-22-2	Phenanthrene-d10	263985	11.97				
1719-03-5	Chrysene-d12	262410	16.08				
1520-96-3	Perylene-d12	238554	18.23				
TENTITIVE IDENTIFIED COMPOUNDS							
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-unknown14.01	690 90	JB J	U		3.54 14.01	ug/Kg ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-06	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	10
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067460.D	1	11/19/10	11/19/10	PB52550

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	370	U	19	185	370	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	370	U	18	185	370	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	370	U	15	185	370	ug/Kg
98-86-2	Acetophenone	370	U	11	185	370	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	370	U	19	185	370	ug/Kg
67-72-1	Hexachloroethane	370	U	17	185	370	ug/Kg
98-95-3	Nitrobenzene	370	U	14	185	370	ug/Kg
78-59-1	Isophorone	370	U	12	185	370	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	370	U	21	185	370	ug/Kg
91-20-3	Naphthalene	2800		13	185	370	ug/Kg
106-47-8	4-Chloroaniline	370	U	26	185	370	ug/Kg
87-68-3	Hexachlorobutadiene	370	U	13	185	370	ug/Kg
105-60-2	Caprolactam	370	U	17	185	370	ug/Kg
91-57-6	2-Methylnaphthalene	20000	E	9.3	185	370	ug/Kg
77-47-4	Hexachlorocyclopentadiene	370	U	9	185	370	ug/Kg
92-52-4	1,1-Biphenyl	1100		14	185	370	ug/Kg
91-58-7	2-Chloronaphthalene	370	U	8.4	185	370	ug/Kg
88-74-4	2-Nitroaniline	370	U	16	185	370	ug/Kg
131-11-3	Dimethylphthalate	300 U	JB	10	185	370	ug/Kg
208-96-8	Acenaphthylene	370	U	9.3	185	370	ug/Kg
606-20-2	2,6-Dinitrotoluene	370	U	15	185	370	ug/Kg
99-09-2	3-Nitroaniline	370	U	24	185	370	ug/Kg
83-32-9	Acenaphthene	890		10	185	370	ug/Kg
132-64-9	Dibenzofuran	370	U	14	185	370	ug/Kg
121-14-2	2,4-Dinitrotoluene	370	U	11	185	370	ug/Kg
84-66-2	Diethylphthalate	370	U	5.8	185	370	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	370	U	20	185	370	ug/Kg
86-73-7	Fluorene	2200		14	185	370	ug/Kg
100-01-6	4-Nitroaniline	370	U	48	185	370	ug/Kg
86-30-6	N-Nitrosodiphenylamine	370	U	8.9	185	370	ug/Kg
101-55-3	4-Bromophenyl-phenylether	370	U	7.2	185	370	ug/Kg
118-74-1	Hexachlorobenzene	370	U	15	185	370	ug/Kg
1912-24-9	Atrazine	370	U	20	185	370	ug/Kg
85-01-8	Phenanthrene	7800	E	10	185	370	ug/Kg
120-12-7	Anthracene	610		7.5	185	370	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-06	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	10
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067460.D	1	11/19/10	11/19/10	PB52550

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	370	U	8.1	185	370	ug/Kg
84-74-2	Di-n-butylphthalate	370	U	29	185	370	ug/Kg
206-44-0	Fluoranthene	450		7.4	185	370	ug/Kg
129-00-0	Pyrene	1200		8.9	185	370	ug/Kg
85-68-7	Butylbenzylphthalate	370	U	18	185	370	ug/Kg
91-94-1	3,3-Dichlorobenzidine	370	U	24	185	370	ug/Kg
56-55-3	Benzo(a)anthracene	100	J	18	185	370	ug/Kg
218-01-9	Chrysene	140	J	17	185	370	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	5500	E	13	185	370	ug/Kg
117-84-0	Di-n-octyl phthalate	370	U	4.2	185	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	82	J	12	185	370	ug/Kg
207-08-9	Benzo(k)fluoranthene	370	U	17	185	370	ug/Kg
50-32-8	Benzo(a)pyrene	58	J	8	185	370	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	370	U	12	185	370	ug/Kg
53-70-3	Dibenz(a,h)anthracene	370	U	11	185	370	ug/Kg
191-24-2	Benzo(g,h,i)perylene	47	J	15	185	370	ug/Kg

SURROGATES

4165-60-0	Nitrobenzene-d5	84.4		30 - 150		84%	SPK:
321-60-8	2-Fluorobiphenyl	53.1		19 - 182		53%	SPK:
1718-51-0	Terphenyl-d14	92.5		24 - 191		92%	SPK:

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	66002	6.13				
1146-65-2	Naphthalene-d8	286466	8				
15067-26-2	Acenaphthene-d10	258343	9.97				
1517-22-2	Phenanthrene-d10	323170	12				
1719-03-5	Chrysene-d12	267546	16.07				
1520-96-3	Perylene-d12	241890	18.22				

TENTATIVE IDENTIFIED COMPOUNDS

526-73-8	Benzene, 1,2,3-trimethyl-	800	J			5.84	ug/Kg
17302-28-2	Nonane, 2,6-dimethyl-	740	J			6.23	ug/Kg
3333-13-9	Benzene, 1-methyl-4-(2-propenyl)-	860	J			7.71	ug/Kg
4489-84-3	Benzene, (3-methyl-2-butenyl)-	1100	J			8.08	ug/Kg
3877-19-8	Naphthalene, 1,2,3,4-tetrahydro-2-unknown8.54	890	J			8.24	ug/Kg
		1000	J			8.54	ug/Kg
1680-51-9	Naphthalene, 1,2,3,4-tetrahydro-6-	930	J			8.57	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)	SDG No.:	B4275
Lab Sample ID:	B4275-06	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	10
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067460.D	1	11/19/10	11/19/10	PB52550

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
90-12-0	Naphthalene, 1-methyl-	1300	J			8.89	ug/Kg
1127-76-0	Naphthalene, 1-ethyl-	960	J			9.4	ug/Kg
581-42-0	Naphthalene, 2,6-dimethyl-	1300	J			9.5	ug/Kg
581-40-8	Naphthalene, 2,3-dimethyl-	1400	J			9.59	ug/Kg
2027-17-0	Naphthalene, 2-(1-methylethyl)-	1000	J			10.13	ug/Kg
829-26-5	Naphthalene, 2,3,6-trimethyl-	860	J			10.31	ug/Kg
112-40-3	Dodecane	920	J			10.91	ug/Kg
1921-70-6	Pentadecane, 2,6,10,14-tetramethyl	1700	J			11.3	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-06DL	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	10
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041600.D	5	11/19/10	11/22/10	PB52550

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	1800	UD	97	900	1800	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	1800	UD	89	900	1800	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	1800	UD	77	900	1800	ug/Kg
98-86-2	Acetophenone	1800	UD	57	900	1800	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	1800	UD	93	900	1800	ug/Kg
67-72-1	Hexachloroethane	1800	UD	83	900	1800	ug/Kg
98-95-3	Nitrobenzene	1800	UD	70	900	1800	ug/Kg
78-59-1	Isophorone	1800	UD	61	900	1800	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	1800	UD	110	900	1800	ug/Kg
91-20-3	Naphthalene	1900	D	64	900	1800	ug/Kg
106-47-8	4-Chloroaniline	1800	UD	130	900	1800	ug/Kg
87-68-3	Hexachlorobutadiene	1800	UD	67	900	1800	ug/Kg
105-60-2	Caprolactam	1800	UD	86	900	1800	ug/Kg
91-57-6	2-Methylnaphthalene	27000	ED	47	900	1800	ug/Kg
77-47-4	Hexachlorocyclopentadiene	1800	UD	45	900	1800	ug/Kg
92-52-4	1,1-Biphenyl	1600	JD	70	900	1800	ug/Kg
91-58-7	2-Chloronaphthalene	1800	UD	42	900	1800	ug/Kg
88-74-4	2-Nitroaniline	1800	UD	82	900	1800	ug/Kg
131-11-3	Dimethylphthalate	820	JDB	50	900	1800	ug/Kg
208-96-8	Acenaphthylene	1800	UD	47	900	1800	ug/Kg
606-20-2	2,6-Dinitrotoluene	1800	UD	75	900	1800	ug/Kg
99-09-2	3-Nitroaniline	1800	UD	120	900	1800	ug/Kg
83-32-9	Acenaphthene	1700	JD	52	900	1800	ug/Kg
132-64-9	Dibenzofuran	1800	UD	72	900	1800	ug/Kg
121-14-2	2,4-Dinitrotoluene	1800	UD	56	900	1800	ug/Kg
84-66-2	Diethylphthalate	1800	UD	29	900	1800	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	1800	UD	100	900	1800	ug/Kg
86-73-7	Fluorene	3700	D	70	900	1800	ug/Kg
100-01-6	4-Nitroaniline	1800	UD	240	900	1800	ug/Kg
86-30-6	N-Nitrosodiphenylamine	1800	UD	44	900	1800	ug/Kg
101-55-3	4-Bromophenyl-phenylether	1800	UD	36	900	1800	ug/Kg
118-74-1	Hexachlorobenzene	1800	UD	75	900	1800	ug/Kg
1912-24-9	Atrazine	1800	UD	98	900	1800	ug/Kg
85-01-8	Phenanthrene	8900	D	50	900	1800	ug/Kg
120-12-7	Anthracene	1200	JD	38	900	1800	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)DL	SDG No.:	B4275
Lab Sample ID:	B4275-06DL	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	10
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041600.D	5	11/19/10	11/22/10	PB52550

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	1800	UD	41	900	1800	ug/Kg
84-74-2	Di-n-butylphthalate	1800	UD	150	900	1800	ug/Kg
206-44-0	Fluoranthene	570	JD	37	900	1800	ug/Kg
129-00-0	Pyrene	860	JD	44	900	1800	ug/Kg
85-68-7	Butylbenzylphthalate	1800	UD	89	900	1800	ug/Kg
91-94-1	3,3-Dichlorobenzidine	1800	UD	120	900	1800	ug/Kg
56-55-3	Benzo(a)anthracene	1800	UD	88	900	1800	ug/Kg
218-01-9	Chrysene	1800	UD	84	900	1800	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	6100	D	65	900	1800	ug/Kg
117-84-0	Di-n-octyl phthalate	1800	UD	21	900	1800	ug/Kg
205-99-2	Benzo(b)fluoranthene	1800	UD	60	900	1800	ug/Kg
207-08-9	Benzo(k)fluoranthene	1800	UD	87	900	1800	ug/Kg
50-32-8	Benzo(a)pyrene	1800	UD	40	900	1800	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	1800	UD	62	900	1800	ug/Kg
53-70-3	Dibenz(a,h)anthracene	1800	UD	53	900	1800	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1800	UD	75	900	1800	ug/Kg
SURROGATES							
4165-60-0	Nitrobenzene-d5	125		30 - 150		126%	SPK:
321-60-8	2-Fluorobiphenyl	85.5		19 - 182		86%	SPK:
1718-51-0	Terphenyl-d14	79.8		24 - 191		80%	SPK:
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	44975	5.62				
1146-65-2	Naphthalene-d8	146652	6.96				
15067-26-2	Acenaphthene-d10	82806	8.74				
1517-22-2	Phenanthrene-d10	123155	10.42				
1719-03-5	Chrysene-d12	126334	13.6				
1520-96-3	Perylene-d12	114962	15.53				

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)DL2	SDG No.:	B4275
Lab Sample ID:	B4275-06DL2	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	10
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041601.D	25	11/19/10	11/22/10	PB52550

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	9200	UD	480	4600	9200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	9200	UD	440	4600	9200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	9200	UD	380	4600	9200	ug/Kg
98-86-2	Acetophenone	9200	UD	280	4600	9200	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	9200	UD	470	4600	9200	ug/Kg
67-72-1	Hexachloroethane	9200	UD	410	4600	9200	ug/Kg
98-95-3	Nitrobenzene	9200	UD	350	4600	9200	ug/Kg
78-59-1	Isophorone	9200	UD	310	4600	9200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	9200	UD	530	4600	9200	ug/Kg
91-20-3	Naphthalene	1800	JD	320	4600	9200	ug/Kg
106-47-8	4-Chloroaniline	9200	UD	650	4600	9200	ug/Kg
87-68-3	Hexachlorobutadiene	9200	UD	340	4600	9200	ug/Kg
105-60-2	Caprolactam	9200	UD	430	4600	9200	ug/Kg
91-57-6	2-Methylnaphthalene	27000	D	230	4600	9200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	9200	UD	220	4600	9200	ug/Kg
92-52-4	1,1-Biphenyl	1900	JD	350	4600	9200	ug/Kg
91-58-7	2-Chloronaphthalene	9200	UD	210	4600	9200	ug/Kg
88-74-4	2-Nitroaniline	9200	UD	410	4600	9200	ug/Kg
131-11-3	Dimethylphthalate	9200	UD	250	4600	9200	ug/Kg
208-96-8	Acenaphthylene	9200	UD	230	4600	9200	ug/Kg
606-20-2	2,6-Dinitrotoluene	9200	UD	380	4600	9200	ug/Kg
99-09-2	3-Nitroaniline	9200	UD	590	4600	9200	ug/Kg
83-32-9	Acenaphthene	1700	JD	260	4600	9200	ug/Kg
132-64-9	Dibenzofuran	9200	UD	360	4600	9200	ug/Kg
121-14-2	2,4-Dinitrotoluene	9200	UD	280	4600	9200	ug/Kg
84-66-2	Diethylphthalate	9200	UD	140	4600	9200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	9200	UD	500	4600	9200	ug/Kg
86-73-7	Fluorene	4000	JD	350	4600	9200	ug/Kg
100-01-6	4-Nitroaniline	9200	UD	1200	4600	9200	ug/Kg
86-30-6	N-Nitrosodiphenylamine	9200	UD	220	4600	9200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	9200	UD	180	4600	9200	ug/Kg
118-74-1	Hexachlorobenzene	9200	UD	380	4600	9200	ug/Kg
1912-24-9	Atrazine	9200	UD	490	4600	9200	ug/Kg
85-01-8	Phenanthrene	9100	JD	250	4600	9200	ug/Kg
120-12-7	Anthracene	1300	JD	190	4600	9200	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/18/10
Project:	Provan	Date Received:	11/19/10
Client Sample ID:	WR-S-9(16.5-17.0)DL2	SDG No.:	B4275
Lab Sample ID:	B4275-06DL2	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	10
Sample Wt/Vol:	30.04 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF041601.D	25	11/19/10	11/22/10	PB52550

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	9200	UD	200	4600	9200	ug/Kg
84-74-2	Di-n-butylphthalate	9200	UD	730	4600	9200	ug/Kg
206-44-0	Fluoranthene	9200	UD	190	4600	9200	ug/Kg
129-00-0	Pyrene	9200	UD	220	4600	9200	ug/Kg
85-68-7	Butylbenzylphthalate	9200	UD	440	4600	9200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	9200	UD	590	4600	9200	ug/Kg
56-55-3	Benzo(a)anthracene	9200	UD	440	4600	9200	ug/Kg
218-01-9	Chrysene	9200	UD	420	4600	9200	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	5600	JD	330	4600	9200	ug/Kg
117-84-0	Di-n-octyl phthalate	9200	UD	110	4600	9200	ug/Kg
205-99-2	Benzo(b)fluoranthene	9200	UD	300	4600	9200	ug/Kg
207-08-9	Benzo(k)fluoranthene	9200	UD	440	4600	9200	ug/Kg
50-32-8	Benzo(a)pyrene	9200	UD	200	4600	9200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	9200	UD	310	4600	9200	ug/Kg
53-70-3	Dibenz(a,h)anthracene	9200	UD	270	4600	9200	ug/Kg
191-24-2	Benzo(g,h,i)perylene	9200	UD	370	4600	9200	ug/Kg
SURROGATES							
4165-60-0	Nitrobenzene-d5	119		30 - 150		120%	SPK:
321-60-8	2-Fluorobiphenyl	85		19 - 182		85%	SPK:
1718-51-0	Terphenyl-d14	77.2		24 - 191		77%	SPK:
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	48367	5.62				
1146-65-2	Naphthalene-d8	160581	6.96				
15067-26-2	Acenaphthene-d10	85345	8.73				
1517-22-2	Phenanthrene-d10	131981	10.41				
1719-03-5	Chrysene-d12	138259	13.6				
1520-96-3	Perylene-d12	123368	15.53				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

APPENDIX C

B4275

Page 1 of 1[illegible]

LABORATORY COPY

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B4275

Page 1 of 1

LD ALL-
SVOC
analysis

[illegible]

LABORATORY COPY

34275

CHAIN OF CUSTODY

Page 4 of 7

LABORATORY COPY

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34275

CHAIN OF CUSTODY

Page 2 of 2

LABORATORY COPY

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From: Michael Richardson [MSR@firstenvironment.com]
Sent: Wednesday, November 24, 2010 4:43 PM
To: Christopher Wolski
Subject: RE: samples received today 11-24-10
Ok, so if the others said: MS, MSD and Beta then yes you are right.

Thanks

Michael

Michael S. Richardson P.E.
Senior Engineer
First Environment, Inc.
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Boonton, NJ 07005
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f (973) 334 0928
www.firstenvironment.com

From: Christopher Wolski [mailto:C.Wolski@chemtech.net]
Sent: Wednesday, November 24, 2010 4:40 PM
To: Michael Richardson
Subject: RE: samples received today 11-24-10

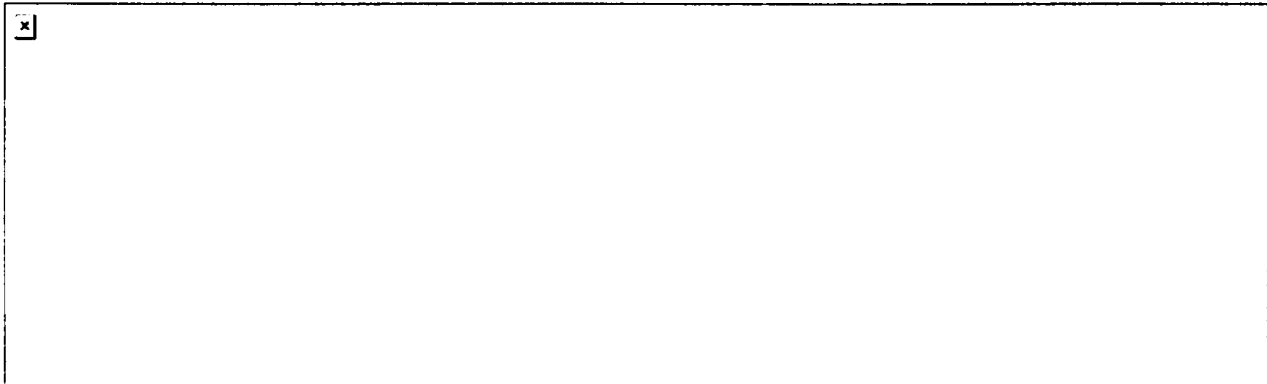
It just said WR-S-12 on the label.

Regards,

Chris Wolski

Tel. 908 728 3149

Fax: 908-789-8514



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From: Michael Richardson [mailto:MSR@firstenvironment.com]
Sent: Wednesday, November 24, 2010 4:38 PM
To: Christopher Wolski
Subject: RE: samples received today 11-24-10

Chirs.

Regarding the sample jar without a depth doesn't it have a sample ID on the label?

Thanks

Michael

Michael S. Richardson P.E.
Senior Engineer
First Environment, Inc.
91 Fulton St
Boonton, NJ 07005
p (973) 334 0003
f (973) 334 0928

www.firstenvironment.com

From: Christopher Wolski [mailto:C.Wolski@chemtech.net]
Sent: Wednesday, November 24, 2010 4:35 PM
To: Michael Richardson
Subject: samples received today 11-24-10

Hi Michael,

Per our phone discussion we took the WR-S-12BETA off hold, and the MS/MSD is associated with this.

As far as the WR-S-12 (12.5-13.0) goes, we have kept it on hold; however we received a jar that did not have a depth on it. By process of elimination we assumed the non-depth jar was this sample.

Regards,

Chris Wolski

Tel. 908 728 3149

Fax: 908-789-8514

From: Michael Richardson [MSR@firstenvironment.com]
Sent: Friday, November 19, 2010 9:39 AM
To: Christopher Wolski
Subject: Provan samples
Hi Chris,

The samples just got picked up from our office. On the Chain I wrote to put all SVOC analysis on hold because I needed to check something before I could pick the one that is to be run for SVOCs. I decided to run sample WR-S-9 (16.5-17.0) for BN+15 on a 24hr turn. Please leave the other three BN samples on hold.

Thank you,

Michael

Michael S. Richardson P.E.
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First Environment, Inc.
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Premier Environmental Services

DATA VALIDATION SUMMARY

FORMER PROVAN FORD SITE

VOLATILE ORGANIC ANALYSES
(EPA METHOD 8260B)
IN NON-AQUEOUS SAMPLES

CHEMTECH
MOUNTAINSIDE, NEW JERSEY

PROJECT NUMBER:

B4372

April, 2011

Prepared for
First Environment, Incorporated
Boonton, New Jersey

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

NYS DEC Data Usability Summary Report

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

SITE: Former Provan Ford Site

CONTRACT LAB: Chemtech
Mountainside, New Jersey

PROJECT NO.: B4372

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: April, 2011

MATRIX: Non-Aqueous

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary Review. In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. 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 seven (7) non-aqueous samples. The samples in this data set were collected November 30, 2010, December 2, 2010 and December 3, 2010. The sample was received at Chemtech located in Mountainside, NJ on December 1, 2010, December 3, 2010 and December 6, 2010. The samples in this data set were analyzed for Volatile Organic Analytes (VOA) as marked on the Chain of Custody documents that accompanied the samples to the laboratory.

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 Test Methods for the Evaluation of Solid Waste (SW846) as well as the NYSDC ASP methodologies. Data validation will utilize the validation guidelines listed above, however, QA/QC requirements of the NYS DEC ASP (12/95) will supersede CLP requirements in terms of calibration (where applicable) and holding time. Chemtech generated a stand-alone report for the VOA fraction in compliance with the NYS DEC ASP Category B deliverables. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report B4372 consists of seven (7) non-aqueous samples. The laboratory sample ID and field sample ID's are summarized in Table 1 of this report.

A copy of the COC documents associated with this data set is located in Appendix C of this report.

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 NYS DEC ASP criteria specifies holding times for solid and soil samples. These holding times are based on Validated Time of Sample Receipt (VTSR). The holding times cited in the NY ASP were reviewed. EPA SW846 methods cite holding times based on collection date. The technical holding time for properly preserved aqueous and non aqueous Volatile Organic samples is fourteen (14) days.

Proper preservation of a soil sample is refrigeration at 4 degrees C until analysis. The holding time criteria for volatile organic sample analysis is that properly preserved samples be analyzed within ten (10) days of VTSR. The holding time criteria for semivolatile organic samples is that the extraction is to be completed within five (5) days of VTSR and that analysis of the extract is be completed within forty (40) days. The technical holding time for the extraction of non-aqueous samples for semivolatile organic analytes is fourteen (14) days from collection.

Volatile Organic Analyses (EPA Method 8260B) - The sample in this data set was collected November 30, 2010, December 2, 2010 and December 3, 2010 and were received at the laboratory December 1, 2010, December 3, 2010 and December 6, 2010. All analyses associated with this data set were completed by December 7, 2010. The samples in this data set were analyzed within the method holding time.

ORGANIC DATA ASSESSMENT

3. SURROGATES:

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with four (4) method recommended surrogate compounds. These include 1,2-Dichloroethane-d4, Dibromofluoromethane, Toluene-d8 and 4-Bromofluorobenzene prior to analysis to evaluate the overall laboratory performance and the efficiency of the analytical technique. The samples to be analyzed for Semivolatile Organic Analytes (SVOA) are fortified with the surrogate compounds 2-Fluorophenol, Phenol-d5, 2,4,6-Tribromophenol, Nitrobenzene-d5, 2-Fluorobiphenyl and Terphenyl-d14 prior to sample extraction to evaluate the overall laboratory performance and the efficiency of the analytical technique.

Volatile Organic Analyses (EPA Method 8260B) – The laboratory reported in-house limits for the surrogate recovery limits. The surrogate recoveries met QC criteria in all low level soil sample analyses reported with this data set. The surrogate recoveries exceeded QC criteria in dilution analysis of samples WR-S-13(14.0-14.5)DL (B4372-02DL) and WR-S-6RE(16-16.5)DL (B4372-03DL) due to the dilution utilized to report the target analytes at these sample points. Target analytes in these dilution analyses have been qualified “UJ/J” estimated.

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.

Volatile Organic Analyses (EPA Method 8260B) –Batch QC MS/MSD analysis is reported with the low level soil sample analysis reported with this data set. All percent recoveries and RPD's met QC criteria in this Batch QC analysis.

The laboratory prepared and analyzed a one (1) Laboratory Control Sample/Laboratory Control Sample duplicate (LCS/LCSD) with both the low level soil and medium level soil sample batches in this data set. The laboratory fortified each with a full component spike solution. Chemtech used a “CLP Like” QC summary form to report the data results. In-house QC limits were applied for each analyte. The percent recovery and RPD of each target analytes met QC criteria in each of the LCS/LCSD sample sets.

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.

A) Method Blank contamination

Volatile Organic Analyses (EPA Method 8260B) – Three (3) non-aqueous method blank samples are associated with this data set. Two (2) medium level non-aqueous method blank samples are associated with this data set. Each of the method blank samples was free from contamination of target and non-target analytes.

B) Field or Equipment Rinse Blank (ERB) contamination

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

C) Trip Blank contamination

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

ORGANIC DATA ASSESSMENT

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. Region USEPA and Region II criteria is the sample for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses is the same, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Two (2) initial calibration curve analyses are associated with this data set. The laboratory performed a low level non-aqueous initial multilevel calibration on November 27, 2010 (Inst. VOAK). 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. Three (3) continuing calibration verification (CCV) standards are associated with this data set. The CCV standards were analyzed December 1, 2010, December 3, 2010 and December 7, 2010. The RRF of all target analytes met QC criteria in each of these CCV standard analyses.

One (1) medium level soil initial multilevel calibration on November 23, 2010 (Inst. VOAF). 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. Two (2) continuing calibration verification (CCV) standards are associated with this data set. The CCV standards were analyzed December 2, 2010 and December 6, 2010. The RRF of all target analytes met QC criteria in each of these CCV standard analyses.

ORGANIC DATA ASSESSMENT

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

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

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. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. 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. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Two (2) initial calibration curves are associated with the samples in this data set. The laboratory performed a multilevel calibration on November 27, 2010 (Inst. VOAK). 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 in this initial calibration curve analysis met QC criteria. Three (3) continuing calibration verification (CCV) standards associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria.

The laboratory performed a medium level soil multilevel calibration on November 23, 2010 (Inst. VOAF). 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 in this initial calibration curve analysis met QC criteria. Two (2) continuing calibration verification (CCV) standards are associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria with the exception of the following:

Date	File ID	Analyte	%Difference
12/2/10	VF120210	1,1,2-Trichlorofluoroethane	26.2
12/6/10	VF120610	Trichlorofluoromethane	27.7
		Dichlorodifluoromethane	34.2
		Carbon Tetrachloride	38.4

These target analytes have been qualified "UJ/J" estimated in the samples associated with these medium level continuing calibration standard analyses.

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

ORGANIC DATA ASSESSMENT

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 tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses - 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.

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.

Volatile Organic Analyses (EPA Method 8260B) - All samples were spiked with the internal standards Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 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 with the exception of the following:

Sample ID	Internal Standard
WR-S-6RE(16-16.5)	Chlorobenzene-d5, 1,4-Dichlorobenzene-d4
WR-S-6RE(16-16.5)DL	Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5, 1,4-Dichlorobenzene-d4

A review of these outlier indicates matrix interference at this sample point. The target analytes associated with these internal standards have been qualified "UJ/J" estimated.

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

ORGANIC DATA ASSESSMENT

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.

Volatile Organic Analyses (EPA Method 8260B) – This data set reports the analysis of sample seven (7) non-aqueous samples. The sample was analyzed via Method 8260B. Tentatively Identified Compounds (TIC's) were analyzed for and reported when detected at each sample point. Each sample was initially analyzed and reported as a low level soil sample with the exception of sample WR-S-6RE(16-16.5) (B4372-03). When target analytes were detected above the concentration range, medium level soil sample analysis (Methanol extraction procedure) was performed and reported. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

Sample WR-S-13 (14.0-14.5) (B4372-02) was initially analyzed as a low level soil sample. The concentration of cis 1,2-Dichloroethene and 1,2-Dichlorethene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample to report the concentration of cis 1,2-Dichloroethene (12000 D ug/kg) and 1,2-Dichlorethene (11000 D ug/kg) detected at this sample point.

Sample WR-S-6RE (16-16.5) (B4372-03) was initially prepared and analyzed as a medium level soil sample. The initial analysis was done using the minimum methanol extraction procedure resulting in a dilution factor of 1:100. This sample chromatogram exhibited a large number of TIC compound peaks and a rise in the baseline. The concentration of Cyclohexane, Methylcyclohexane and Ethyl Benzene exceeded the concentration range. This sample was reanalyzed an additional factor of 1:10 to report the concentration of Cyclohexane (32000 D ug/kg), Methylcyclohexane (37000 D ug/kg) and Ethyl Benzene (17000 D ug/kg) detected at this sample point.

Sample WR-B-6 (14-14.5) (B4372-04) was initially analyzed as a low level soil sample. The concentration of cis 1,2-Dichloroethene, Benzene, 1,2-Dichlorethane and Trichloroethene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample with an additional 1:5 dilution to report the concentration of cis 1,2-Dichloroethene (33000 D ug/kg), Benzene (780 JD ug/kg), 1,2-Dichlorethane (1500 JD ug/kg) and Trichloroethene (6100 D ug/l) detected at this sample point.

Sample WR-S-14 (10-10.5) (B4372-05) was initially analyzed as a low level soil sample using one (1) gram of soil. An initial 1:5 dilution was utilized. This sample chromatogram exhibited a large number of TIC compound peaks and a rise in the baseline. Sample reporting limits reflect this 1:5 dilution factor.

Sample WR-B-7 (14.0-14.5) (B4372-06) was initially analyzed as a low level soil sample. The concentration of cis 1,2-Dichloroethene and Trichloroethene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample to report the concentration of cis 1,2-Dichloroethene (7100 D ug/kg) and Trichloroethene (3600 D 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. These results are expected to have more variability than laboratory duplicate samples. Soil samples have a greater variability than aqueous samples. Percent moisture and reported dilution factors also tend to lead to greater variability in RPD. Analytes reported above the reporting limit are listed. Data was not qualified based on the calculated RPD of field duplicate sample analyses.

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 DUSR 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. Soil sample results are reported on a dry weight basis. 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.

TABLE 1

FIELD SAMPLE ID**LABORATORY ID**

WR-B-5 (14.5-15.0)
WR-S-13 (14.0-14.5)
WR-S-6RE (16-16.5)
WR-B-6 (14-14.5)
WR-S-14 (10-10.5)
WR-B-7 (14.0-14.5)
WR-S-15 (10.5-11.0)

B4372-01
B4372-02
B4372-03
B4372-04
B4372-05
B4372-06
B4372-07

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



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Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-B-5 (14.5-15.0)	SDG No.:	B4372
Lab Sample ID:	B4372-01	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	20
Sample Wt/Vol:	5.03	Units:	g
Soil Aliquot Vol:			uL
		Final Vol:	5000
		Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VK042137.D	1		12/01/10
			Prep Batch ID
			VK120110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.2	U	0.81	3.1	6.2	ug/Kg
74-87-3	Chloromethane	6.2	U	1.1	3.1	6.2	ug/Kg
75-01-4	Vinyl Chloride	6.2	U	1.5	3.1	6.2	ug/Kg
74-83-9	Bromomethane	6.2	U	3	3.1	6.2	ug/Kg
75-00-3	Chloroethane	6.2	U	1.7	3.1	6.2	ug/Kg
75-69-4	Trichlorofluoromethane	6.2	U	1.6	3.1	6.2	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.2	U	1.7	3.1	6.2	ug/Kg
75-35-4	1,1-Dichloroethene	6.2	U	1.8	3.1	6.2	ug/Kg
67-64-1	Acetone	31	U	3.8	15.5	31	ug/Kg
75-15-0	Carbon Disulfide	6.2	U	1.3	3.1	6.2	ug/Kg
1634-04-4	Methyl tert-butyl Ether	4.2	J	1.2	3.1	6.2	ug/Kg
79-20-9	Methyl Acetate	6.2	U	1.9	3.1	6.2	ug/Kg
75-09-2	Methylene Chloride	6.2		1.8	3.1	6.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.2	U	0.86	3.1	6.2	ug/Kg
75-34-3	1,1-Dichloroethane	6.2	U	1.2	3.1	6.2	ug/Kg
110-82-7	Cyclohexane	6.2	U	1.3	3.1	6.2	ug/Kg
78-93-3	2-Butanone	31	U	3.9	15.5	31	ug/Kg
56-23-5	Carbon Tetrachloride	6.2	U	1.2	3.1	6.2	ug/Kg
156-59-2	cis-1,2-Dichloroethene	36		1.1	3.1	6.2	ug/Kg
67-66-3	Chloroform	6.2	U	0.92	3.1	6.2	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.2	U	1.1	3.1	6.2	ug/Kg
108-87-2	Methylcyclohexane	6.2	U	1.3	3.1	6.2	ug/Kg
71-43-2	Benzene	6.2	U	0.47	3.1	6.2	ug/Kg
107-06-2	1,2-Dichloroethane	37		0.8	3.1	6.2	ug/Kg
79-01-6	Trichloroethene	6.2	U	1.1	3.1	6.2	ug/Kg
78-87-5	1,2-Dichloropropane	6.2	U	0.32	3.1	6.2	ug/Kg
75-27-4	Bromodichloromethane	6.2	U	0.77	3.1	6.2	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12	J	3.6	15.5	31	ug/Kg
108-88-3	Toluene	6.2	U	0.8	3.1	6.2	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.2	U	0.98	3.1	6.2	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.2	U	0.89	3.1	6.2	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.2	U	1.1	3.1	6.2	ug/Kg
591-78-6	2-Hexanone	31	U	4.9	15.5	31	ug/Kg
124-48-1	Dibromochloromethane	6.2	U	0.67	3.1	6.2	ug/Kg
106-93-4	1,2-Dibromoethane	6.2	U	0.8	3.1	6.2	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-B-5 (14.5-15.0)	SDG No.:	B4372
Lab Sample ID:	B4372-01	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	20
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042137.D	1		12/01/10	VK120110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.2	U	1.3	3.1	6.2	ug/Kg
108-90-7	Chlorobenzene	6.2	U	0.62	3.1	6.2	ug/Kg
100-41-4	Ethyl Benzene	6.2	U	0.77	3.1	6.2	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.89	6	12	ug/Kg
95-47-6	o-Xylene	6.2	U	0.84	3.1	6.2	ug/Kg
100-42-5	Styrene	6.2	U	0.56	3.1	6.2	ug/Kg
75-25-2	Bromoform	6.2	U	0.92	3.1	6.2	ug/Kg
98-82-8	Isopropylbenzene	6.2	U	0.6	3.1	6.2	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.2	U	0.57	3.1	6.2	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.2	U	0.46	3.1	6.2	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.2	U	0.51	3.1	6.2	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.2	U	0.77	3.1	6.2	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.2	U	1.1	3.1	6.2	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.2	U	0.87	3.1	6.2	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	46.2		55 - 158		92%	SPK: 50
1868-53-7	Dibromofluoromethane	46.9		53 - 156		94%	SPK: 50
2037-26-5	Toluene-d8	48.2		68 - 122		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	47		25 - 144		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	399443	3.2				
540-36-3	1,4-Difluorobenzene	628397	3.58				
3114-55-4	Chlorobenzene-d5	661072	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	376211	8.59				
TENTATIVE IDENTIFIED COMPOUNDS							
75-65-0	Tert butyl alcohol	200	J			2.09	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-S-13(14.0-14.5)	SDG No.:	B4372
Lab Sample ID:	B4372-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	25
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042139.D	1		12/01/10	VK120110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.7	U	0.86	3.35	6.7	ug/Kg
74-87-3	Chloromethane	6.7	U	1.1	3.35	6.7	ug/Kg
75-01-4	Vinyl Chloride	2000	E	1.6	3.35	6.7	ug/Kg
74-83-9	Bromomethane	6.7	U	3.3	3.35	6.7	ug/Kg
75-00-3	Chloroethane	6.7	U	1.9	3.35	6.7	ug/Kg
75-69-4	Trichlorofluoromethane	6.7	U	1.8	3.35	6.7	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.7	U	1.8	3.35	6.7	ug/Kg
75-35-4	1,1-Dichloroethene	6.7	U	2	3.35	6.7	ug/Kg
67-64-1	Acetone	12	J	4	16.5	33	ug/Kg
75-15-0	Carbon Disulfide	6.7	U	1.4	3.35	6.7	ug/Kg
1634-04-4	Methyl tert-butyl Ether	37		1.3	3.35	6.7	ug/Kg
79-20-9	Methyl Acetate	6.7	U	2	3.35	6.7	ug/Kg
75-09-2	Methylene Chloride	6.7	U	1.9	3.35	6.7	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.7	U	0.92	3.35	6.7	ug/Kg
75-34-3	1,1-Dichloroethane	88		1.3	3.35	6.7	ug/Kg
110-82-7	Cyclohexane	6.7	U	1.3	3.35	6.7	ug/Kg
78-93-3	2-Butanone	33	U	4.1	16.5	33	ug/Kg
56-23-5	Carbon Tetrachloride	6.7	U	1.3	3.35	6.7	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2500	E	1.2	3.35	6.7	ug/Kg
67-66-3	Chloroform	6.7	U	0.98	3.35	6.7	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.7	U	1.2	3.35	6.7	ug/Kg
108-87-2	Methylcyclohexane	6.7	U	1.4	3.35	6.7	ug/Kg
71-43-2	Benzene	3.9	J	0.51	3.35	6.7	ug/Kg
107-06-2	1,2-Dichloroethane	1300	E	0.85	3.35	6.7	ug/Kg
79-01-6	Trichloroethene	6.7	U	1.1	3.35	6.7	ug/Kg
78-87-5	1,2-Dichloropropane	6.7	U	0.35	3.35	6.7	ug/Kg
75-27-4	Bromodichloromethane	6.7	U	0.83	3.35	6.7	ug/Kg
108-10-1	4-Methyl-2-Pentanone	33	U	3.9	16.5	33	ug/Kg
108-88-3	Toluene	6.7	U	0.85	3.35	6.7	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.7	U	1.1	3.35	6.7	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.7	U	0.96	3.35	6.7	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.7	U	1.2	3.35	6.7	ug/Kg
591-78-6	2-Hexanone	33	U	5.2	16.5	33	ug/Kg
124-48-1	Dibromochloromethane	6.7	U	0.72	3.35	6.7	ug/Kg
106-93-4	1,2-Dibromoethane	6.7	U	0.85	3.35	6.7	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-S-13(14.0-14.5)	SDG No.:	B4372
Lab Sample ID:	B4372-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	25
Sample Wt/Vol:	5.01 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042139.D	1		12/01/10	VK120110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.7	U	1.3	3.35	6.7	ug/Kg
108-90-7	Chlorobenzene	6.7	U	0.67	3.35	6.7	ug/Kg
100-41-4	Ethyl Benzene	6.7	U	0.83	3.35	6.7	ug/Kg
179601-23-1	m/p-Xylenes	13	U	0.96	6.5	13	ug/Kg
95-47-6	o-Xylene	6.7	U	0.9	3.35	6.7	ug/Kg
100-42-5	Styrene	6.7	U	0.6	3.35	6.7	ug/Kg
75-25-2	Bromoform	6.7	U	0.98	3.35	6.7	ug/Kg
98-82-8	Isopropylbenzene	6.7	U	0.64	3.35	6.7	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.7	U	0.61	3.35	6.7	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.7	U	0.49	3.35	6.7	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.7	U	0.55	3.35	6.7	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.7	U	0.83	3.35	6.7	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.7	U	1.2	3.35	6.7	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.7	U	0.93	3.35	6.7	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49		55 - 158		98%	SPK: 50
1868-53-7	Dibromofluoromethane	48.8		53 - 156		98%	SPK: 50
2037-26-5	Toluene-d8	48.2		68 - 122		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.5		25 - 144		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	382038	3.2				
540-36-3	1,4-Difluorobenzene	597600	3.58				
3114-55-4	Chlorobenzene-d5	615170	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	335101	8.59				
TENTATIVE IDENTIFIED COMPOUNDS							
75-65-0	Tert butyl alcohol	58	J			2.08	ug/Kg
000565-80-0	3-Pentanone, 2,4-dimethyl-	50	J			5.84	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-S-13(14.0-14.5)DL	SDG No.:	B4372
Lab Sample ID:	B4372-02DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	25
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024888.D	1		12/02/10	vf120210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	660 UJ	U	73	330	660	ug/Kg
74-87-3	Chloromethane	660 ↓	U	72	330	660	ug/Kg
75-01-4	Vinyl Chloride	3900 J	D	45	330	660	ug/Kg
74-83-9	Bromomethane	660 UJ	U	82	330	660	ug/Kg
75-00-3	Chloroethane	660 ↓	U	87	330	660	ug/Kg
75-69-4	Trichlorofluoromethane	660 ↓	U	46	330	660	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	660 UJ	U	60	330	660	ug/Kg
75-35-4	1,1-Dichloroethene	660	U	62	330	660	ug/Kg
67-64-1	Acetone	3300	U	360	1650	3300	ug/Kg
75-15-0	Carbon Disulfide	660	U	72	330	660	ug/Kg
1634-04-4	Methyl tert-butyl Ether	660	U	46	330	660	ug/Kg
79-20-9	Methyl Acetate	660	U	110	330	660	ug/Kg
75-09-2	Methylene Chloride	660	U	54	330	660	ug/Kg
156-60-5	trans-1,2-Dichloroethene	660	U	54	330	660	ug/Kg
75-34-3	1,1-Dichloroethane	660	U	48	330	660	ug/Kg
110-82-7	Cyclohexane	660	U	73	330	660	ug/Kg
78-93-3	2-Butanone	3300	U	170	1650	3300	ug/Kg
56-23-5	Carbon Tetrachloride	660 ↓	U	82	330	660	ug/Kg
156-59-2	cis-1,2-Dichloroethene	12000 J	D	46	330	660	ug/Kg
67-66-3	Chloroform	660 UJ	U	45	330	660	ug/Kg
71-55-6	1,1,1-Trichloroethane	660	U	53	330	660	ug/Kg
108-87-2	Methylcyclohexane	660	U	90	330	660	ug/Kg
71-43-2	Benzene	660 ↓	U	42	330	660	ug/Kg
107-06-2	1,2-Dichloroethane	11000 J	D	64	330	660	ug/Kg
79-01-6	Trichloroethene	660 UJ	U	37	330	660	ug/Kg
78-87-5	1,2-Dichloropropane	660	U	61	330	660	ug/Kg
75-27-4	Bromodichloromethane	660	U	48	330	660	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3300	U	280	1650	3300	ug/Kg
108-88-3	Toluene	660	U	49	330	660	ug/Kg
10061-02-6	t-1,3-Dichloropropene	660	U	38	330	660	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	660	U	41	330	660	ug/Kg
79-00-5	1,1,2-Trichloroethane	660	U	50	330	660	ug/Kg
591-78-6	2-Hexanone	3300	U	260	1650	3300	ug/Kg
124-48-1	Dibromochloromethane	660	U	69	330	660	ug/Kg
106-93-4	1,2-Dibromoethane	660 ↓	U	54	330	660	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-S-13(14.0-14.5)DL	SDG No.:	B4372
Lab Sample ID:	B4372-02DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	25
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024888.D	1		12/02/10	vf120210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	660	U	36	330	660	ug/Kg
108-90-7	Chlorobenzene	660	U	65	330	660	ug/Kg
100-41-4	Ethyl Benzene	660	U	70	330	660	ug/Kg
179601-23-1	m/p-Xylenes	1300	U	130	650	1300	ug/Kg
95-47-6	o-Xylene	660	U	57	330	660	ug/Kg
100-42-5	Styrene	660	U	48	330	660	ug/Kg
75-25-2	Bromoform	660	U	62	330	660	ug/Kg
98-82-8	Isopropylbenzene	660	U	60	330	660	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	660	U	41	330	660	ug/Kg
541-73-1	1,3-Dichlorobenzene	660	U	57	330	660	ug/Kg
106-46-7	1,4-Dichlorobenzene	660	U	42	330	660	ug/Kg
95-50-1	1,2-Dichlorobenzene	660	U	60	330	660	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	660	U	61	330	660	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	660	U	82	330	660	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	26.9	*	55 - 158		54%	SPK: 50
1868-53-7	Dibromofluoromethane	17	*	53 - 156		34%	SPK: 50
2037-26-5	Toluene-d8	21.5	*	68 - 122		43%	SPK: 50
460-00-4	4-Bromofluorobenzene	22.7		25 - 144		45%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	905950	3.23				
540-36-3	1,4-Difluorobenzene	1724330	3.64				
3114-55-4	Chlorobenzene-d5	1688530	6.54				
3855-82-1	1,4-Dichlorobenzene-d4	952132	8.97				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-S-6RE(16-16.5)	SDG No.:	B4372
Lab Sample ID:	B4372-03	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024892.D	1		12/02/10	vf120210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	560	U	62	280	560	ug/Kg
74-87-3	Chloromethane	560	U	61	280	560	ug/Kg
75-01-4	Vinyl Chloride	560	U	38	280	560	ug/Kg
74-83-9	Bromomethane	560	U	70	280	560	ug/Kg
75-00-3	Chloroethane	560	U	74	280	560	ug/Kg
75-69-4	Trichlorofluoromethane	560	U	39	280	560	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	560 <i>UJ</i>	U	51	280	560	ug/Kg
75-35-4	1,1-Dichloroethene	560	U	53	280	560	ug/Kg
67-64-1	Acetone	2800	U	310	1400	2800	ug/Kg
75-15-0	Carbon Disulfide	560	U	61	280	560	ug/Kg
1634-04-4	Methyl tert-butyl Ether	560	U	39	280	560	ug/Kg
79-20-9	Methyl Acetate	560	U	93	280	560	ug/Kg
75-09-2	Methylene Chloride	560	U	46	280	560	ug/Kg
156-60-5	trans-1,2-Dichloroethene	560	U	46	280	560	ug/Kg
75-34-3	1,1-Dichloroethane	560	U	40	280	560	ug/Kg
110-82-7	Cyclohexane	22000	E	62	280	560	ug/Kg
78-93-3	2-Butanone	2800	U	150	1400	2800	ug/Kg
56-23-5	Carbon Tetrachloride	560	U	70	280	560	ug/Kg
156-59-2	cis-1,2-Dichloroethene	96	J	39	280	560	ug/Kg
67-66-3	Chloroform	560	U	38	280	560	ug/Kg
71-55-6	1,1,1-Trichloroethane	560	U	45	280	560	ug/Kg
108-87-2	Methylcyclohexane	32000	E	76	280	560	ug/Kg
71-43-2	Benzene	560	U	36	280	560	ug/Kg
107-06-2	1,2-Dichloroethane	560	U	54	280	560	ug/Kg
79-01-6	Trichloroethene	560	U	31	280	560	ug/Kg
78-87-5	1,2-Dichloropropane	560	U	52	280	560	ug/Kg
75-27-4	Bromodichloromethane	560	U	40	280	560	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2800	U	240	1400	2800	ug/Kg
108-88-3	Toluene	560	U	42	280	560	ug/Kg
10061-02-6	t-1,3-Dichloropropene	560	U	33	280	560	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	560	U	35	280	560	ug/Kg
79-00-5	1,1,2-Trichloroethane	560	U	43	280	560	ug/Kg
591-78-6	2-Hexanone	2800	U	220	1400	2800	ug/Kg
124-48-1	Dibromochloromethane	560	U	58	280	560	ug/Kg
106-93-4	1,2-Dibromoethane	560	U	46	280	560	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-S-6RE(16-16.5)	SDG No.:	B4372
Lab Sample ID:	B4372-03	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VF024892.D	1		12/02/10
			Prep Batch ID
			vf120210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	560	U	30	280	560	ug/Kg
108-90-7	Chlorobenzene	560	U	55	280	560	ug/Kg
100-41-4	Ethyl Benzene	16000	E	60	280	560	ug/Kg
179601-23-1	m/p-Xylenes	7000		110	550	1100	ug/Kg
95-47-6	o-Xylene	170	J	48	280	560	ug/Kg
100-42-5	Styrene	560	U	40	280	560	ug/Kg
75-25-2	Bromoform	560	U	53	280	560	ug/Kg
98-82-8	Isopropylbenzene	5500		51	280	560	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	560	U	35	280	560	ug/Kg
541-73-1	1,3-Dichlorobenzene	560	U	48	280	560	ug/Kg
106-46-7	1,4-Dichlorobenzene	560	U	36	280	560	ug/Kg
95-50-1	1,2-Dichlorobenzene	560	U	51	280	560	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	560	U	52	280	560	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	560	U	70	280	560	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	75.6		55 - 158		151%	SPK: 50
1868-53-7	Dibromofluoromethane	39.5		53 - 156		79%	SPK: 50
2037-26-5	Toluene-d8	58.5		68 - 122		117%	SPK: 50
460-00-4	4-Bromofluorobenzene	63.5		25 - 144		127%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	781684	3.24				
540-36-3	1,4-Difluorobenzene	1655470	3.65				
3114-55-4	Chlorobenzene-d5	1400340	6.55				
3855-82-1	1,4-Dichlorobenzene-d4	615365	8.98				
TENTATIVE IDENTIFIED COMPOUNDS							
103-65-1	n-propylbenzene	18000	J			8.09	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	30000	J			8.3	ug/Kg
000526-73-8	Benzene, 1,2,3-trimethyl-	11000	J			8.482	ug/Kg
98-06-6	tert-Butylbenzene	370	J			8.58	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	60000	J			8.66	ug/Kg
135-98-8	sec-Butylbenzene	4100	J			8.75	ug/Kg
99-87-6	p-Isopropyltoluene	3200	J			8.89	ug/Kg
000620-14-4	Benzene, 1-ethyl-3-methyl-	18000	J			9.035	ug/Kg
000496-11-7	Indane	11000	J			9.143	ug/Kg
104-51-8	n-Butylbenzene	12000	J			9.25	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	11/30/10	
Project:	Provan	Date Received:	12/01/10	
Client Sample ID:	WR-S-6RE(16-16.5)	SDG No.:	B4372	
Lab Sample ID:	B4372-03	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	11	
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 ul	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024892.D	1		12/02/10	vfl20210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl)	13000	J			9.552	ug/Kg
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	13000	J			9.924	ug/Kg
000824-90-8	1-Phenyl-1-butene	14000	J			10.086	ug/Kg
000768-49-0	Benzene, (2-methyl-1-propenyl)-	20000	J			10.231	ug/Kg
87-68-3	Hexachlorobutadiene	160	J			10.55	ug/Kg
91-20-3	Naphthalene	10000	J			10.81	ug/Kg
006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethy	11000	J			11.09	ug/Kg
000091-57-6	Naphthalene, 2-methyl-	22000	J			11.613	ug/Kg
000090-12-0	Naphthalene, 1-methyl-	11000	J			11.727	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-S-6RE(16-16.5)DL	SDG No.:	B4372
Lab Sample ID:	B4372-03DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024891.D	10		12/02/10	vf120210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5600 U J	U	620	2800	5600	ug/Kg
74-87-3	Chloromethane	5600	U	610	2800	5600	ug/Kg
75-01-4	Vinyl Chloride	5600	U	380	2800	5600	ug/Kg
74-83-9	Bromomethane	5600	U	700	2800	5600	ug/Kg
75-00-3	Chloroethane	5600	U	740	2800	5600	ug/Kg
75-69-4	Trichlorofluoromethane	5600	U	390	2800	5600	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5600 U J	U	510	2800	5600	ug/Kg
75-35-4	1,1-Dichloroethene	5600 U J	U	530	2800	5600	ug/Kg
67-64-1	Acetone	28000	U	3100	14000	28000	ug/Kg
75-15-0	Carbon Disulfide	5600	U	610	2800	5600	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5600	U	390	2800	5600	ug/Kg
79-20-9	Methyl Acetate	5600	U	930	2800	5600	ug/Kg
75-09-2	Methylene Chloride	5600	U	460	2800	5600	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5600	U	460	2800	5600	ug/Kg
75-34-3	1,1-Dichloroethane	5600	U	400	2800	5600	ug/Kg
110-82-7	Cyclohexane	32000 J	D	620	2800	5600	ug/Kg
78-93-3	2-Butanone	28000 U J	U	1500	14000	28000	ug/Kg
56-23-5	Carbon Tetrachloride	5600	U	700	2800	5600	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5600	U	390	2800	5600	ug/Kg
67-66-3	Chloroform	5600	U	380	2800	5600	ug/Kg
71-55-6	1,1,1-Trichloroethane	5600	U	450	2800	5600	ug/Kg
108-87-2	Methylcyclohexane	37000 J	D	760	2800	5600	ug/Kg
71-43-2	Benzene	5600 U J	U	360	2800	5600	ug/Kg
107-06-2	1,2-Dichloroethane	5600	U	540	2800	5600	ug/Kg
79-01-6	Trichloroethene	5600	U	310	2800	5600	ug/Kg
78-87-5	1,2-Dichloropropane	5600	U	520	2800	5600	ug/Kg
75-27-4	Bromodichloromethane	5600	U	400	2800	5600	ug/Kg
108-10-1	4-Methyl-2-Pentanone	28000	U	2400	14000	28000	ug/Kg
108-88-3	Toluene	5600	U	420	2800	5600	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5600	U	330	2800	5600	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5600	U	350	2800	5600	ug/Kg
79-00-5	1,1,2-Trichloroethane	5600	U	430	2800	5600	ug/Kg
591-78-6	2-Hexanone	28000	U	2200	14000	28000	ug/Kg
124-48-1	Dibromochloromethane	5600	U	580	2800	5600	ug/Kg
106-93-4	1,2-Dibromoethane	5600	U	460	2800	5600	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	11/30/10
Project:	Provan	Date Received:	12/01/10
Client Sample ID:	WR-S-6RE(16-16.5)DL	SDG No.:	B4372
Lab Sample ID:	B4372-03DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024891.D	10		12/02/10	vf120210

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5600	U	300	2800	5600	ug/Kg
108-90-7	Chlorobenzene	5600	U	550	2800	5600	ug/Kg
100-41-4	Ethyl Benzene	17000	J	600	2800	5600	ug/Kg
179601-23-1	m/p-Xylenes	7900	J	1100	5500	11000	ug/Kg
95-47-6	o-Xylene	5600	U	480	2800	5600	ug/Kg
100-42-5	Styrene	5600	U	400	2800	5600	ug/Kg
75-25-2	Bromoform	5600	U	530	2800	5600	ug/Kg
98-82-8	Isopropylbenzene	5100	J	510	2800	5600	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5600	U	350	2800	5600	ug/Kg
541-73-1	1,3-Dichlorobenzene	5600	U	480	2800	5600	ug/Kg
106-46-7	1,4-Dichlorobenzene	5600	U	360	2800	5600	ug/Kg
95-50-1	1,2-Dichlorobenzene	5600	U	510	2800	5600	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5600	U	520	2800	5600	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5600	U	700	2800	5600	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	1115	*	55 - 158		223%	SPK: 50
1868-53-7	Dibromofluoromethane	1026	*	53 - 156		205%	SPK: 50
2037-26-5	Toluene-d8	902	*	68 - 122		181%	SPK: 50
460-00-4	4-Bromofluorobenzene	952	*	25 - 144		191%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	693234	3.24				
540-36-3	1,4-Difluorobenzene	1399570	3.65				
3114-55-4	Chlorobenzene-d5	1251100	6.55				
3855-82-1	1,4-Dichlorobenzene-d4	663588	8.98				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

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B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	12/02/10
Project:	Provan	Date Received:	12/03/10
Client Sample ID:	WR-B-6(14-14.5)	SDG No.:	B4372
Lab Sample ID:	B4372-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042184.D	1		12/03/10	VK120310

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.5	U	0.84	3.25	6.5	ug/Kg
74-87-3	Chloromethane	6.5	U	1.1	3.25	6.5	ug/Kg
75-01-4	Vinyl Chloride	170		1.6	3.25	6.5	ug/Kg
74-83-9	Bromomethane	6.5	U	3.2	3.25	6.5	ug/Kg
75-00-3	Chloroethane	6.5	U	1.8	3.25	6.5	ug/Kg
75-69-4	Trichlorofluoromethane	6.5	U	1.7	3.25	6.5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.5	U	1.7	3.25	6.5	ug/Kg
75-35-4	1,1-Dichloroethene	41		1.9	3.25	6.5	ug/Kg
67-64-1	Acetone	8.2	J	3.9	16	32	ug/Kg
75-15-0	Carbon Disulfide	6.5	U	1.4	3.25	6.5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	7.3		1.2	3.25	6.5	ug/Kg
79-20-9	Methyl Acetate	6.5	U	1.9	3.25	6.5	ug/Kg
75-09-2	Methylene Chloride	4	J	1.8	3.25	6.5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	25		0.89	3.25	6.5	ug/Kg
75-34-3	1,1-Dichloroethane	91		1.2	3.25	6.5	ug/Kg
110-82-7	Cyclohexane	3.7	J	1.3	3.25	6.5	ug/Kg
78-93-3	2-Butanone	32	U	4	16	32	ug/Kg
56-23-5	Carbon Tetrachloride	6.5	U	1.3	3.25	6.5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	8800	E	1.1	3.25	6.5	ug/Kg
67-66-3	Chloroform	6.5	U	0.96	3.25	6.5	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.5	U	1.1	3.25	6.5	ug/Kg
108-87-2	Methylcyclohexane	6.5	U	1.4	3.25	6.5	ug/Kg
71-43-2	Benzene	310	E	0.49	3.25	6.5	ug/Kg
107-06-2	1,2-Dichloroethane	780	E	0.83	3.25	6.5	ug/Kg
79-01-6	Trichloroethene	1900	E	1.1	3.25	6.5	ug/Kg
78-87-5	1,2-Dichloropropane	8.1		0.34	3.25	6.5	ug/Kg
75-27-4	Bromodichloromethane	6.5	U	0.8	3.25	6.5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	32	U	3.8	16	32	ug/Kg
108-88-3	Toluene	3.7	J	0.83	3.25	6.5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.5	U	1	3.25	6.5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.5	U	0.93	3.25	6.5	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.5	U	1.2	3.25	6.5	ug/Kg
591-78-6	2-Hexanone	32	U	5.1	16	32	ug/Kg
124-48-1	Dibromochloromethane	6.5	U	0.7	3.25	6.5	ug/Kg
106-93-4	1,2-Dibromoethane	6.5	U	0.83	3.25	6.5	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/02/10
Project:	Provan	Date Received:	12/03/10
Client Sample ID:	WR-B-6(14-14.5)	SDG No.:	B4372
Lab Sample ID:	B4372-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042184.D	1		12/03/10	VK120310

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.5	U	1.3	3.25	6.5	ug/Kg
108-90-7	Chlorobenzene	6.5	U	0.65	3.25	6.5	ug/Kg
100-41-4	Ethyl Benzene	0.96	J	0.8	3.25	6.5	ug/Kg
179601-23-1	m/p-Xylenes	2.9	J	0.93	6.5	13	ug/Kg
95-47-6	o-Xylene	4.1	J	0.88	3.25	6.5	ug/Kg
100-42-5	Styrene	6.5	U	0.58	3.25	6.5	ug/Kg
75-25-2	Bromoform	6.5	U	0.96	3.25	6.5	ug/Kg
98-82-8	Isopropylbenzene	6.5	U	0.62	3.25	6.5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.5	U	0.59	3.25	6.5	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.5	U	0.48	3.25	6.5	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.5	U	0.53	3.25	6.5	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.5	U	0.8	3.25	6.5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.5	U	1.1	3.25	6.5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.5	U	0.9	3.25	6.5	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.5		55 - 158		91%	SPK: 50
1868-53-7	Dibromofluoromethane	48.4		53 - 156		97%	SPK: 50
2037-26-5	Toluene-d8	47.8		68 - 122		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	39.4		25 - 144		79%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	363668	3.19				
540-36-3	1,4-Difluorobenzene	569620	3.58				
3114-55-4	Chlorobenzene-d5	562634	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	243786	8.59				
TENTATIVE IDENTIFIED COMPOUNDS							
108-67-8	1,3,5-Trimethylbenzene	1.7	J			7.95	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	4.3	J			8.29	ug/Kg
91-20-3	Naphthalene	2.0	J			10.26	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/02/10
Project:	Provan	Date Received:	12/03/10
Client Sample ID:	WR-B-6(14-14.5)DL	SDG No.:	B4372
Lab Sample ID:	B4372-04DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024940.D	5		12/06/10	VF120610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	3200 UJ	U	360	1600	3200	ug/Kg
74-87-3	Chloromethane	3200	U	350	1600	3200	ug/Kg
75-01-4	Vinyl Chloride	3200	U	220	1600	3200	ug/Kg
74-83-9	Bromomethane	3200	U	400	1600	3200	ug/Kg
75-00-3	Chloroethane	3200	U	430	1600	3200	ug/Kg
75-69-4	Trichlorofluoromethane	3200 UJ	U	230	1600	3200	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	3200	U	290	1600	3200	ug/Kg
75-35-4	1,1-Dichloroethene	3200	U	310	1600	3200	ug/Kg
67-64-1	Acetone	16000	U	1800	8000	16000	ug/Kg
75-15-0	Carbon Disulfide	3200	U	350	1600	3200	ug/Kg
1634-04-4	Methyl tert-butyl Ether	3200	U	230	1600	3200	ug/Kg
79-20-9	Methyl Acetate	3200	U	540	1600	3200	ug/Kg
75-09-2	Methylene Chloride	3200	U	270	1600	3200	ug/Kg
156-60-5	trans-1,2-Dichloroethene	3200	U	270	1600	3200	ug/Kg
75-34-3	1,1-Dichloroethane	3200	U	230	1600	3200	ug/Kg
110-82-7	Cyclohexane	3200	U	360	1600	3200	ug/Kg
78-93-3	2-Butanone	16000	U	860	8000	16000	ug/Kg
56-23-5	Carbon Tetrachloride	3200 UJ	U	400	1600	3200	ug/Kg
156-59-2	cis-1,2-Dichloroethene	33000	D	230	1600	3200	ug/Kg
67-66-3	Chloroform	3200	U	220	1600	3200	ug/Kg
71-55-6	1,1,1-Trichloroethane	3200	U	260	1600	3200	ug/Kg
108-87-2	Methylcyclohexane	3200	U	440	1600	3200	ug/Kg
71-43-2	Benzene	780	JD	210	1600	3200	ug/Kg
107-06-2	1,2-Dichloroethane	1500	JD	310	1600	3200	ug/Kg
79-01-6	Trichloroethene	6100	D	180	1600	3200	ug/Kg
78-87-5	1,2-Dichloropropane	3200	U	300	1600	3200	ug/Kg
75-27-4	Bromodichloromethane	3200	U	230	1600	3200	ug/Kg
108-10-1	4-Methyl-2-Pentanone	16000	U	1400	8000	16000	ug/Kg
108-88-3	Toluene	3200	U	240	1600	3200	ug/Kg
10061-02-6	t-1,3-Dichloropropene	3200	U	190	1600	3200	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	3200	U	200	1600	3200	ug/Kg
79-00-5	1,1,2-Trichloroethane	3200	U	250	1600	3200	ug/Kg
591-78-6	2-Hexanone	16000	U	1300	8000	16000	ug/Kg
124-48-1	Dibromochloromethane	3200	U	340	1600	3200	ug/Kg
106-93-4	1,2-Dibromoethane	3200	U	270	1600	3200	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/02/10
Project:	Provan	Date Received:	12/03/10
Client Sample ID:	WR-B-6(14-14.5)DL	SDG No.:	B4372
Lab Sample ID:	B4372-04DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024940.D	5		12/06/10	VF120610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	3200	U	180	1600	3200	ug/Kg
108-90-7	Chlorobenzene	3200	U	320	1600	3200	ug/Kg
100-41-4	Ethyl Benzene	3200	U	340	1600	3200	ug/Kg
179601-23-1	m/p-Xylenes	6500	U	620	3250	6500	ug/Kg
95-47-6	o-Xylene	3200	U	280	1600	3200	ug/Kg
100-42-5	Styrene	3200	U	230	1600	3200	ug/Kg
75-25-2	Bromoform	3200	U	310	1600	3200	ug/Kg
98-82-8	Isopropylbenzene	3200	U	290	1600	3200	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	3200	U	200	1600	3200	ug/Kg
541-73-1	1,3-Dichlorobenzene	3200	U	280	1600	3200	ug/Kg
106-46-7	1,4-Dichlorobenzene	3200	U	210	1600	3200	ug/Kg
95-50-1	1,2-Dichlorobenzene	3200	U	290	1600	3200	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	3200	U	300	1600	3200	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3200	U	400	1600	3200	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	268		55 - 158		107%	SPK: 50
1868-53-7	Dibromofluoromethane	222		53 - 156		89%	SPK: 50
2037-26-5	Toluene-d8	254		68 - 122		102%	SPK: 50
460-00-4	4-Bromofluorobenzene	263		25 - 144		105%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1448080	3.25				
540-36-3	1,4-Difluorobenzene	2777620	3.66				
3114-55-4	Chlorobenzene-d5	2641660	6.56				
3855-82-1	1,4-Dichlorobenzene-d4	1500240	8.99				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	12/02/10
Project:	Provan	Date Received:	12/03/10
Client Sample ID:	WR-S-14(10-10.5)	SDG No.:	B4372
Lab Sample ID:	B4372-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	21
Sample Wt/Vol:	0.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VK042186.D	1		12/03/10
			Prep Batch ID
			VK120310

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	33	U	4.2	16.5	33	ug/Kg
74-87-3	Chloromethane	33	U	5.6	16.5	33	ug/Kg
75-01-4	Vinyl Chloride	33	U	8	16.5	33	ug/Kg
74-83-9	Bromomethane	33	U	16	16.5	33	ug/Kg
75-00-3	Chloroethane	33	U	9.1	16.5	33	ug/Kg
75-69-4	Trichlorofluoromethane	33	U	8.6	16.5	33	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	33	U	8.7	16.5	33	ug/Kg
75-35-4	1,1-Dichloroethene	33	U	9.6	16.5	33	ug/Kg
67-64-1	Acetone	160	U	20	80	160	ug/Kg
75-15-0	Carbon Disulfide	33	U	6.9	16.5	33	ug/Kg
1634-04-4	Methyl tert-butyl Ether	33	U	6.3	16.5	33	ug/Kg
79-20-9	Methyl Acetate	33	U	9.9	16.5	33	ug/Kg
75-09-2	Methylene Chloride	33	U	9.3	16.5	33	ug/Kg
156-60-5	trans-1,2-Dichloroethene	33	U	4.5	16.5	33	ug/Kg
75-34-3	1,1-Dichloroethane	33	U	6.1	16.5	33	ug/Kg
110-82-7	Cyclohexane	33	U	6.6	16.5	33	ug/Kg
78-93-3	2-Butanone	160	U	20	80	160	ug/Kg
56-23-5	Carbon Tetrachloride	33	U	6.5	16.5	33	ug/Kg
156-59-2	cis-1,2-Dichloroethene	11	J	5.8	16.5	33	ug/Kg
67-66-3	Chloroform	33	U	4.8	16.5	33	ug/Kg
71-55-6	1,1,1-Trichloroethane	33	U	5.7	16.5	33	ug/Kg
108-87-2	Methylcyclohexane	150		6.9	16.5	33	ug/Kg
71-43-2	Benzene	33	U	2.5	16.5	33	ug/Kg
107-06-2	1,2-Dichloroethane	33	U	4.2	16.5	33	ug/Kg
79-01-6	Trichloroethene	33	U	5.6	16.5	33	ug/Kg
78-87-5	1,2-Dichloropropane	33	U	1.7	16.5	33	ug/Kg
75-27-4	Bromodichloromethane	33	U	4	16.5	33	ug/Kg
108-10-1	4-Methyl-2-Pentanone	160	U	19	80	160	ug/Kg
108-88-3	Toluene	36		4.2	16.5	33	ug/Kg
10061-02-6	t-1,3-Dichloropropene	33	U	5.2	16.5	33	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	33	U	4.7	16.5	33	ug/Kg
79-00-5	1,1,2-Trichloroethane	33	U	5.9	16.5	33	ug/Kg
591-78-6	2-Hexanone	160	U	26	80	160	ug/Kg
124-48-1	Dibromochloromethane	33	U	3.5	16.5	33	ug/Kg
106-93-4	1,2-Dibromoethane	33	U	4.2	16.5	33	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/02/10
Project:	Provan	Date Received:	12/03/10
Client Sample ID:	WR-S-14(10-10.5)	SDG No.:	B4372
Lab Sample ID:	B4372-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	21
Sample Wt/Vol:	0.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042186.D	1		12/03/10	VK120310

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	33	U	6.6	16.5	33	ug/Kg
108-90-7	Chlorobenzene	33	U	3.3	16.5	33	ug/Kg
100-41-4	Ethyl Benzene	210		4	16.5	33	ug/Kg
179601-23-1	m/p-Xylenes	520		4.7	32.5	65	ug/Kg
95-47-6	o-Xylene	270		4.4	16.5	33	ug/Kg
100-42-5	Styrene	33	U	2.9	16.5	33	ug/Kg
75-25-2	Bromoform	33	U	4.8	16.5	33	ug/Kg
98-82-8	Isopropylbenzene	190		3.1	16.5	33	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	33	U	3	16.5	33	ug/Kg
541-73-1	1,3-Dichlorobenzene	33	U	2.4	16.5	33	ug/Kg
106-46-7	1,4-Dichlorobenzene	33	U	2.7	16.5	33	ug/Kg
95-50-1	1,2-Dichlorobenzene	33	U	4	16.5	33	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	33	U	5.7	16.5	33	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	33	U	4.6	16.5	33	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	43.7		55 - 158	87%	SPK: 50
1868-53-7	Dibromofluoromethane	46.8		53 - 156	94%	SPK: 50
2037-26-5	Toluene-d8	49		68 - 122	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.8		25 - 144	108%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	375474	3.19			
540-36-3	1,4-Difluorobenzene	590559	3.58			
3114-55-4	Chlorobenzene-d5	614739	6.26			
3855-82-1	1,4-Dichlorobenzene-d4	361486	8.59			

TENTITVE IDENTIFIED COMPOUNDS

103-65-1	n-propylbenzene	420	J		7.75	ug/Kg
622-96-8	p-ethyltoluene	1400	J		7.86	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	580	J		7.95	ug/Kg
002847-72-5	Decane, 4-methyl-	750	J		8.1	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	2300	J		8.29	ug/Kg
135-98-8	sec-Butylbenzene	350	J		8.37	ug/Kg
99-87-6	p-Isopropyltoluene	200	J		8.51	ug/Kg
104-51-8	n-Butylbenzene	510	J		8.84	ug/Kg
000933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	660	J		9.06	ug/Kg
95-93-2	1,2,4,5-tetramethylbenzene	650	J		9.43	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/02/10	
Project:	Provan	Date Received:	12/03/10	
Client Sample ID:	WR-S-14(10-10.5)	SDG No.:	B4372	
Lab Sample ID:	B4372-05	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	21	
Sample Wt/Vol:	0.97 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042186.D	1		12/03/10	VK120310

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
000112-40-3	Dodecane	2500	J			9.63	ug/Kg
017301-23-4	Undecane, 2,6-dimethyl-	2100	J			9.76	ug/Kg
056253-64-6	Benzene, (2-methyl-1-butenyl)-	1700	J			10.01	ug/Kg
91-20-3	Naphthalene	970	J			10.26	ug/Kg
052161-57-6	Benzene, 1-methyl-3-(1-methyl-2-pr	660	J			10.4	ug/Kg
002809-64-5	Naphthalene, 1,2,3,4-tetrahydro-5-	1100	J			10.52	ug/Kg
054340-86-2	Benzene, 4-(2-butenyl)-1,2-dimethy	860	J			10.65	ug/Kg
000091-57-6	Naphthalene, 2-methyl-	860	J			11	ug/Kg
000090-12-0	Naphthalene, 1-methyl-	690	J			11.1	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	12/03/10
Project:	Provan	Date Received:	12/06/10
Client Sample ID:	WR-B-7(14.0-14.5)	SDG No.:	B4372
Lab Sample ID:	B4372-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042216.D	1		12/07/10	VK120710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.1	U	0.8	3.05	6.1	ug/Kg
74-87-3	Chloromethane	6.1	U	1.1	3.05	6.1	ug/Kg
75-01-4	Vinyl Chloride	35		1.5	3.05	6.1	ug/Kg
74-83-9	Bromomethane	6.1	U	3	3.05	6.1	ug/Kg
75-00-3	Chloroethane	6.1	U	1.7	3.05	6.1	ug/Kg
75-69-4	Trichlorofluoromethane	6.1	U	1.6	3.05	6.1	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.1	U	1.6	3.05	6.1	ug/Kg
75-35-4	1,1-Dichloroethene	11		1.8	3.05	6.1	ug/Kg
67-64-1	Acetone	10	J	3.7	15.5	31	ug/Kg
75-15-0	Carbon Disulfide	4	J	1.3	3.05	6.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	3	J	1.2	3.05	6.1	ug/Kg
79-20-9	Methyl Acetate	6.1	U	1.8	3.05	6.1	ug/Kg
75-09-2	Methylene Chloride	6.1	U	1.7	3.05	6.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.5	J	0.85	3.05	6.1	ug/Kg
75-34-3	1,1-Dichloroethane	34		1.2	3.05	6.1	ug/Kg
110-82-7	Cyclohexane	6.1	U	1.2	3.05	6.1	ug/Kg
78-93-3	2-Butanone	31	U	3.8	15.5	31	ug/Kg
56-23-5	Carbon Tetrachloride	6.1	U	1.2	3.05	6.1	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5600	E	1.1	3.05	6.1	ug/Kg
67-66-3	Chloroform	6.1	U	0.91	3.05	6.1	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.1	U	1.1	3.05	6.1	ug/Kg
108-87-2	Methylcyclohexane	6.1	U	1.3	3.05	6.1	ug/Kg
71-43-2	Benzene	20		0.47	3.05	6.1	ug/Kg
107-06-2	1,2-Dichloroethane	220		0.78	3.05	6.1	ug/Kg
79-01-6	Trichloroethene	1500	E	1.1	3.05	6.1	ug/Kg
78-87-5	1,2-Dichloropropane	6.1	U	0.32	3.05	6.1	ug/Kg
75-27-4	Bromodichloromethane	6.1	U	0.76	3.05	6.1	ug/Kg
108-10-1	4-Methyl-2-Pentanone	31	U	3.6	15.5	31	ug/Kg
108-88-3	Toluene	6.6		0.78	3.05	6.1	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.1	U	0.97	3.05	6.1	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.1	U	0.88	3.05	6.1	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.1	U	1.1	3.05	6.1	ug/Kg
591-78-6	2-Hexanone	31	U	4.8	15.5	31	ug/Kg
124-48-1	Dibromochloromethane	6.1	U	0.66	3.05	6.1	ug/Kg
106-93-4	1,2-Dibromoethane	6.1	U	0.78	3.05	6.1	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/03/10
Project:	Provan	Date Received:	12/06/10
Client Sample ID:	WR-B-7(14.0-14.5)	SDG No.:	B4372
Lab Sample ID:	B4372-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VK042216.D	1		12/07/10
			Prep Batch ID
			VK120710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.1	U	1.2	3.05	6.1	ug/Kg
108-90-7	Chlorobenzene	6.1	U	0.61	3.05	6.1	ug/Kg
100-41-4	Ethyl Benzene	6.1	U	0.76	3.05	6.1	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.88	6	12	ug/Kg
95-47-6	o-Xylene	5.5	J	0.83	3.05	6.1	ug/Kg
100-42-5	Styrene	6.1	U	0.55	3.05	6.1	ug/Kg
75-25-2	Bromoform	6.1	U	0.91	3.05	6.1	ug/Kg
98-82-8	Isopropylbenzene	1.6	J	0.59	3.05	6.1	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.1	U	0.56	3.05	6.1	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.1	U	0.45	3.05	6.1	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.1	U	0.5	3.05	6.1	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.1	U	0.76	3.05	6.1	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.1	U	1.1	3.05	6.1	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.1	U	0.86	3.05	6.1	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53		55 - 158		106%	SPK: 50
1868-53-7	Dibromofluoromethane	47.5		53 - 156		95%	SPK: 50
2037-26-5	Toluene-d8	48.3		68 - 122		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.8		25 - 144		94%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	406220	3.2				
540-36-3	1,4-Difluorobenzene	663305	3.59				
3114-55-4	Chlorobenzene-d5	690476	6.28				
3855-82-1	1,4-Dichlorobenzene-d4	383057	8.6				
TENTITIVE IDENTIFIED COMPOUNDS							
135-98-8	sec-Butylbenzene	1.2	J			8.39	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/03/10
Project:	Provan	Date Received:	12/06/10
Client Sample ID:	WR-B-7(14.0-14.5)DL	SDG No.:	B4372
Lab Sample ID:	B4372-06DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024941.D	1		12/06/10	vf120610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	620 UJ	U	68	310	620	ug/Kg
74-87-3	Chloromethane	620	U	67	310	620	ug/Kg
75-01-4	Vinyl Chloride	620	U	42	310	620	ug/Kg
74-83-9	Bromomethane	620	U	77	310	620	ug/Kg
75-00-3	Chloroethane	620	U	81	310	620	ug/Kg
75-69-4	Trichlorofluoromethane	620 UJ	U	43	310	620	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	620	U	56	310	620	ug/Kg
75-35-4	1,1-Dichloroethene	620	U	58	310	620	ug/Kg
67-64-1	Acetone	3100	U	340	1550	3100	ug/Kg
75-15-0	Carbon Disulfide	620	U	67	310	620	ug/Kg
1634-04-4	Methyl tert-butyl Ether	620	U	43	310	620	ug/Kg
79-20-9	Methyl Acetate	620	U	100	310	620	ug/Kg
75-09-2	Methylene Chloride	620	U	51	310	620	ug/Kg
156-60-5	trans-1,2-Dichloroethene	620	U	51	310	620	ug/Kg
75-34-3	1,1-Dichloroethane	620	U	44	310	620	ug/Kg
110-82-7	Cyclohexane	620	U	68	310	620	ug/Kg
78-93-3	2-Butanone	3100	U	160	1550	3100	ug/Kg
56-23-5	Carbon Tetrachloride	620 UJ	U	77	310	620	ug/Kg
156-59-2	cis-1,2-Dichloroethene	7100	D	43	310	620	ug/Kg
67-66-3	Chloroform	620	U	42	310	620	ug/Kg
71-55-6	1,1,1-Trichloroethane	620	U	49	310	620	ug/Kg
108-87-2	Methylcyclohexane	620	U	84	310	620	ug/Kg
71-43-2	Benzene	620	U	40	310	620	ug/Kg
107-06-2	1,2-Dichloroethane	330	JD	59	310	620	ug/Kg
79-01-6	Trichloroethene	3600	D	35	310	620	ug/Kg
78-87-5	1,2-Dichloropropane	620	U	57	310	620	ug/Kg
75-27-4	Bromodichloromethane	620	U	44	310	620	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3100	U	260	1550	3100	ug/Kg
108-88-3	Toluene	620	U	46	310	620	ug/Kg
10061-02-6	t-1,3-Dichloropropene	620	U	36	310	620	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	620	U	38	310	620	ug/Kg
79-00-5	1,1,2-Trichloroethane	620	U	47	310	620	ug/Kg
591-78-6	2-Hexanone	3100	U	240	1550	3100	ug/Kg
124-48-1	Dibromochloromethane	620	U	64	310	620	ug/Kg
106-93-4	1,2-Dibromoethane	620	U	51	310	620	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/03/10
Project:	Provan	Date Received:	12/06/10
Client Sample ID:	WR-B-7(14.0-14.5)DL	SDG No.:	B4372
Lab Sample ID:	B4372-06DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	5 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF024941.D	1		12/06/10	vf120610

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	620	U	33	310	620	ug/Kg
108-90-7	Chlorobenzene	620	U	60	310	620	ug/Kg
100-41-4	Ethyl Benzene	620	U	65	310	620	ug/Kg
179601-23-1	m/p-Xylenes	1200	U	120	600	1200	ug/Kg
95-47-6	o-Xylene	620	U	53	310	620	ug/Kg
100-42-5	Styrene	620	U	44	310	620	ug/Kg
75-25-2	Bromoform	620	U	58	310	620	ug/Kg
98-82-8	Isopropylbenzene	620	U	56	310	620	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	620	U	38	310	620	ug/Kg
541-73-1	1,3-Dichlorobenzene	620	U	53	310	620	ug/Kg
106-46-7	1,4-Dichlorobenzene	620	U	40	310	620	ug/Kg
95-50-1	1,2-Dichlorobenzene	620	U	56	310	620	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	620	U	57	310	620	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	620	U	77	310	620	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.7		55 - 158		107%	SPK: 50
1868-53-7	Dibromofluoromethane	37.7		53 - 156		75%	SPK: 50
2037-26-5	Toluene-d8	51.7		68 - 122		103%	SPK: 50
460-00-4	4-Bromofluorobenzene	53.1		25 - 144		106%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1386530	3.24				
540-36-3	1,4-Difluorobenzene	2669590	3.66				
3114-55-4	Chlorobenzene-d5	2594570	6.56				
3855-82-1	1,4-Dichlorobenzene-d4	1467510	8.99				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

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N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	12/03/10
Project:	Provan	Date Received:	12/06/10
Client Sample ID:	WR-S-15(10.5-11.0)	SDG No.:	B4372
Lab Sample ID:	B4372-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	18
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042218.D	1		12/07/10	VK120710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.1	U	0.79	3.05	6.1	ug/Kg
74-87-3	Chloromethane	6.1	U	1	3.05	6.1	ug/Kg
75-01-4	Vinyl Chloride	6.1	U	1.5	3.05	6.1	ug/Kg
74-83-9	Bromomethane	6.1	U	3	3.05	6.1	ug/Kg
75-00-3	Chloroethane	6.1	U	1.7	3.05	6.1	ug/Kg
75-69-4	Trichlorofluoromethane	6.1	U	1.6	3.05	6.1	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.1	U	1.6	3.05	6.1	ug/Kg
75-35-4	1,1-Dichloroethene	6.1	U	1.8	3.05	6.1	ug/Kg
67-64-1	Acetone	15	J	3.7	15	30	ug/Kg
75-15-0	Carbon Disulfide	6.1	U	1.3	3.05	6.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.1	U	1.2	3.05	6.1	ug/Kg
79-20-9	Methyl Acetate	6.1	U	1.8	3.05	6.1	ug/Kg
75-09-2	Methylene Chloride	6.1	U	1.7	3.05	6.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.1	U	0.84	3.05	6.1	ug/Kg
75-34-3	1,1-Dichloroethane	2	J	1.1	3.05	6.1	ug/Kg
110-82-7	Cyclohexane	9.6		1.2	3.05	6.1	ug/Kg
78-93-3	2-Butanone	30	U	3.8	15	30	ug/Kg
56-23-5	Carbon Tetrachloride	6.1	U	1.2	3.05	6.1	ug/Kg
156-59-2	cis-1,2-Dichloroethene	12		1.1	3.05	6.1	ug/Kg
67-66-3	Chloroform	6.1	U	0.9	3.05	6.1	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.1	U	1.1	3.05	6.1	ug/Kg
108-87-2	Methylcyclohexane	42		1.3	3.05	6.1	ug/Kg
71-43-2	Benzene	2.4	J	0.46	3.05	6.1	ug/Kg
107-06-2	1,2-Dichloroethane	6.1	U	0.78	3.05	6.1	ug/Kg
79-01-6	Trichloroethene	3	J	1	3.05	6.1	ug/Kg
78-87-5	1,2-Dichloropropane	6.1	U	0.32	3.05	6.1	ug/Kg
75-27-4	Bromodichloromethane	6.1	U	0.76	3.05	6.1	ug/Kg
108-10-1	4-Methyl-2-Pentanone	30	U	3.6	15	30	ug/Kg
108-88-3	Toluene	1.6	J	0.78	3.05	6.1	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.1	U	0.96	3.05	6.1	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.1	U	0.88	3.05	6.1	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.1	U	1.1	3.05	6.1	ug/Kg
591-78-6	2-Hexanone	30	U	4.8	15	30	ug/Kg
124-48-1	Dibromochloromethane	6.1	U	0.66	3.05	6.1	ug/Kg
106-93-4	1,2-Dibromoethane	6.1	U	0.78	3.05	6.1	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/03/10
Project:	Provan	Date Received:	12/06/10
Client Sample ID:	WR-S-15(10.5-11.0)	SDG No.:	B4372
Lab Sample ID:	B4372-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	18
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042218.D	1		12/07/10	VK120710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.1	U	1.2	3.05	6.1	ug/Kg
108-90-7	Chlorobenzene	6.1	U	0.61	3.05	6.1	ug/Kg
100-41-4	Ethyl Benzene	26		0.76	3.05	6.1	ug/Kg
179601-23-1	m/p-Xylenes	15		0.88	6	12	ug/Kg
95-47-6	o-Xylene	33		0.83	3.05	6.1	ug/Kg
100-42-5	Styrene	6.1	U	0.55	3.05	6.1	ug/Kg
75-25-2	Bromoform	6.1	U	0.9	3.05	6.1	ug/Kg
98-82-8	Isopropylbenzene	36		0.59	3.05	6.1	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.1	U	0.56	3.05	6.1	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.1	U	0.45	3.05	6.1	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.1	U	0.5	3.05	6.1	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.1	U	0.76	3.05	6.1	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.1	U	1.1	3.05	6.1	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.1	U	0.85	3.05	6.1	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	42.7		55 - 158	85%	SPK: 50
1868-53-7	Dibromofluoromethane	44.8		53 - 156	90%	SPK: 50
2037-26-5	Toluene-d8	49.2		68 - 122	98%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.8		25 - 144	106%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	385678	3.2			
540-36-3	1,4-Difluorobenzene	613293	3.59			
3114-55-4	Chlorobenzene-d5	630952	6.27			
3855-82-1	1,4-Dichlorobenzene-d4	359615	8.6			

TENTITVE IDENTIFIED COMPOUNDS

103-65-1	n-propylbenzene	61	J		7.76	ug/Kg
622-96-8	p-ethyltoluene	100	J		7.87	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	51	J		7.96	ug/Kg
002847-72-5	Decane, 4-methyl-	140	J		8.11	ug/Kg
98-06-6	tert-Butylbenzene	2.2	J		8.23	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	180	J		8.3	ug/Kg
133-98-8	sec-Butylbenzene	82	J		8.38	ug/Kg
99-87-6	p-Isopropyltoluene	33	J		8.52	ug/Kg
104-51-8	n-Butylbenzene	90	J		8.86	ug/Kg
95-93-2	1,2,4,5-tetramethylbenzene	110	J		9.43	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/03/10	
Project:	Provan	Date Received:	12/06/10	
Client Sample ID:	WR-S-15(10.5-11.0)	SDG No.:	B4372	
Lab Sample ID:	B4372-07	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	18	
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042218.D	1		12/07/10	VK120710

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
000112-40-3	Dodecane	580	J			9.64	ug/Kg
	unknown9.76	360	J			9.76	ug/Kg
056253-64-6	Benzene, (2-methyl-1-butenyl)-	140	J			9.95	ug/Kg
053172-84-2	Benzene, (1-methyl-1-butenyl)-	350	J			10.02	ug/Kg
000629-50-5	Tridecane	280	J			10.32	ug/Kg
017059-48-2	1H-Indene, 2,3-dihydro-1,6-dimethy	150	J			10.41	ug/Kg
002809-64-5	Naphthalene, 1,2,3,4-tetrahydro-5-	330	J			10.54	ug/Kg
000769-25-5	Benzene, 2-ethenyl-1,3,5-trimethyl	220	J			10.66	ug/Kg
004175-54-6	Naphthalene, 1,2,3,4-tetrahydro-1,	210	J			10.86	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

APPENDIX C

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Page ____ of ____

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[illegible]

LABORATORY COPY

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[illegible]

564

From: Michael Richardson [MSR@firstenvironment.com]

Sent: Wednesday, December 01, 2010 6:40 PM

To: Christopher Wolski

Cc: Gary B. Fields; Ron Tai

Subject: RE: today's coc

Chris, I got clarification from Gary and there was an adjustment. please re-label the samples as below:

WR-B-5 (14.5' - 15.0')

WR-S-13 (14.0' - 14.5')

WR-S-6re(16.0' - 16.5') **I am changing the suffix on this sample to "re" because it is a resample due to the extension of the excavation. It is shorter then "beta" and the meaning is more clear**

Thanks Chris,

Michael

Michael S. Richardson, P.E.

First Environment, Inc.

91 Fulton Street

Boonton, NJ 07005

firstenvironment.com

pf (973) 334 0003

fp (973) 334 0928

From: Michael Richardson

Sent: Wednesday, December 01, 2010 6:27 PM

To: Gary B. Fields

Cc: 'Christopher Wolski'

Subject: FW: today's coc

Hello Gary,

I need you to confirm the sample depths on the samples listed in the attached pdf, which are all to be run for TCL List VOC+10. This is what we think they are:

WR-B-5 (19.5' - 20.0')

WR-S-13 (19.0' - 19.5')

WR-S-6re(16.0' - 16.5') **I am changing the suffix on this sample to "re" because it is a resample due to the extension of the excavation. It is shorter then "beta" and the meaning is more clear**

Please confirm or clarify that the depths I have listed are correct for where you sampled.

Thanks.

Michael

Michael S. Richardson, P.E.

First Environment, Inc.

91 Fulton Street

Boonton, NJ 07005

firstenvironment.com

pf (973) 334 0003

fp (973) 334 0928

From: Christopher Wolski [mailto:C.Wolski@chemtech.net]

Sent: Wednesday, December 01, 2010 6:04 PM

To: Michael Richardson

Subject: today's coc

Regards,

Chris Wolski

Tel. 908 728 3149

Fax: 908-789-8514



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Premier Environmental Services

DATA VALIDATION SUMMARY

FORMER PROVAN FORD SITE

VOLATILE ORGANIC ANALYSES/BASE NEUTRAL
SEMIVOLATILE ORGANIC ANALYSES
(EPA METHOD 8260B/8270B)

IN NON-AQUEOUS SAMPLES

CHEMTECH
MOUNTAINSIDE, NEW JERSEY

PROJECT NUMBER:

B4450

April, 2011

Prepared for
First Environment, Incorporated
Boonton, New Jersey

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566
(516) 223-9761 • FAX (516) 223-0983

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Compounds (VOC's)
Base Neutral Semivolatile
Organic Compounds (BN-SVOA's)

SITE: Former Provan Ford Site

CONTRACT LAB: Chemtech
Mountainside, New Jersey

PROJECT NO.: B4450

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: April, 2011

MATRIX: Non-Aqueous

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary Review. In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. 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 nineteen (19) non-aqueous samples. The samples in this data set were collected December 2, 2010 through December 15, 2010 and received at Chemtech located in Mountainside, NJ on December 3, 2010 through December 16, 2010. Samples were collected and shipped to the laboratory for the analyses on the COC documents that accompanied the samples to the laboratory. The samples were analyzed for Volatile Organic Analytes (VOA) and Base Neutral Semivolatile Organic Analytes (SVOA) as marked on the Chain of Custody documents that accompanied the samples to the laboratory.

ORGANIC DATA ASSESSMENT

1. OVERVIEW:

Samples associated with this data set were analyzed for Volatile Organic Analytes (VOA), Semivolatile Organic Analytes as noted by the COC documentation that accompanied the sample set to the laboratory. All analyses were performed in accordance with USEPA Test Methods for the Evaluation of Solid Waste (SW846) as well as the NYSDC ASP methodologies. Data validation will utilize the validation guidelines listed above, however, QA/QC requirements of the NYS DEC ASP (12/95) will supersede CLP requirements in terms of calibration (where applicable) and holding time. Chemtech generated a stand-alone report for each fraction in compliance with the NYS DEC ASP Category B deliverables. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report B4450 consists of nineteen (19) non-aqueous samples. A number of samples were marked "Hold" on the COC documents. Documentation between First Environment and the laboratory determined which samples were removed from the "Hold" status and analyzed. The laboratory sample ID and field sample ID's are summarized in Table 1 of this report.

A copy of the COC documents associated with this data set is located in Appendix C of this report.

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 NYS DEC ASP criteria specifies holding times for solid and soil samples. These holding times are based on Validated Time of Sample Receipt (VTSR). The holding times cited in the NY ASP were reviewed. EPA SW846 methods cite holding times based on collection date. The technical holding time for properly preserved aqueous and non aqueous Volatile Organic samples is fourteen (14) days.

Proper preservation of a soil sample is refrigeration at 4 degrees C until analysis. The holding time criteria for volatile organic sample analysis is that properly preserved samples be analyzed within ten (10) days of VTSR. The holding time criteria for semivolatile organic samples is that the extraction is to be completed within five (5) days of VTSR and that analysis of the extract is be completed within forty (40) days. The technical holding time for the extraction of non-aqueous samples for semivolatile organic analytes is fourteen (14) days from collection.

The sample in this data set were collected December 2, 2010 through December 15, 2010 and received at the laboratory between December 3, 2010 and December 16, 2010.

Volatile Organic Analyses (EPA Method 8260B) - All Volatile Organic sample analyses and dilution analyses associated with this data set were completed by December 17, 2010. All holding times were met in this data set.

Semivolatile Organic Analyses (EPA Method 8270C) – The samples in laboratory report B4450 were analyzed for Base Neutral SVOA's. Two (2) samples were marked for Base Neutral SVOA analyses. The samples were extracted in one (1) batch on December 8, 2010 and one (1) batch on December 10, 2010. All sample extract analyses were completed by December 17, 2010. The samples and associated QC were extracted and analyzed within the method holding time.

ORGANIC DATA ASSESSMENT

3. SURROGATES:

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with four (4) method recommended surrogate compounds. These include 1,2-Dichloroethane-d4, Dibromofluoromethane, Toluene-d8 and 4-Bromofluorobenzene prior to analysis to evaluate the overall laboratory performance and the efficiency of the analytical technique. The samples to be analyzed for Semivolatile Organic Analytes (SVOA) are fortified with the surrogate compounds 2-Fluorophenol, Phenol-d5, 2,4,6-Tribromophenol, Nitrobenzene-d5, 2-Fluorobiphenyl and Terphenyl-d14 prior to sample extraction to evaluate the overall laboratory performance and the efficiency of the analytical technique.

Volatile Organic Analyses (EPA Method 8260B) – Each of the samples in this data set was fortified with the method specified surrogate compounds. The laboratory reported in-house limits for the surrogate recovery limits. The surrogate percent recoveries met QC criteria in all low level soil sample analyses associated with this data set with the exception of 1,2-Dichloroethane-d4 in the low level soil sample analysis of sample PT-S-4 (14.5-15) (B4450-10). The recovery of this surrogate was above QC limits. Target analytes in this sample have been qualified “UJ/J” estimated. The sample was reanalyzed as a medium level soil. All surrogate recoveries met QC criteria in this medium level soil sample analysis. The surrogate recovery of Toluene-d8 in the medium level soil sample analysis of PT-S-8 (13.0-13.5) MS (B4450-21) exceeded QC criteria. All surrogate recoveries met QC criteria in the un-spiked sample as well as the MSD sample. No action was taken based on this QC outlier.

Semivolatile Organic Analyses (EPA Method 8270C) - The percent recovery of each surrogate met QC criteria in each of the initial sample analyses, sample reanalyses and QC samples associated with this data set.

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.

Volatile Organic Analyses (EPA Method 8260B) – MS/MSD analysis was noted on the COC document to be performed on sample PT-S-(12.0-12.5) (B4450-17). All percent recoveries and the relative percent difference of each target analyte met QC criteria. In addition site specific MS/MSD was performed on medium level soil sample PT-S-2 (8.5-9) (B4450-13). All percent recoveries and relative percent difference criteria were met in this MS/MSD analysis. Medium level site specific MS/MSD was also performed on sample PT-S-8 (13.0-13.5) (B4450-21). All percent recoveries and all relative percent difference criteria were met with the exception of the RPD of Dichlorodifluoromethane, Cyclohexane and Methylcyclohexane in this MS/MSD analysis. Sample data is not qualified based on the results of MS/MSD data alone.

The laboratory prepared and analyzed a one (1) Laboratory Control Sample with each of the sample batch in this data set. The laboratory fortified each with a full component spike solution. Chemtech used a “CLP Like” QC summary form to report the data results. In-house QC limits were applied for each analyte. The percent recovery and RPD of each target analytes met QC criteria in each of the LCS samples.

ORGANIC DATA ASSESSMENT

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD (cont'd):

Semivolatile Organic Analyses (EPA Method 8270C) – Site specific MS/MSD was performed on sample RU-WRSV-1 (B4450-03). The MS and MSD sample were fortified with all target analytes. All percent recoveries and RPD's met QC criteria with the exception of the percent recovery of Benzaldehyde in both the MS and MSD sample and the RPD of 3,3'-Dichlorobenzidene. Sample data was not qualified based on the results of the MS/MSD data alone.

Batch QC MS/MSD analysis was reported with sample RU-WOTSV-1. Sample data was not qualified based on the results of the MS/MSD data alone.

The laboratory prepared and analyzed one (1) Laboratory Control Sample (LCS) with each sample batch. The laboratory fortified the LCS using a full component (Base Neutral compound) spike solution. Chemtech used a "CLP Like" QC summary form to report the LCS data results. In-house QC limits were utilized. All percent recoveries met QC criteria with the exception of Benzaldehyde in the LCS sample associated with this data set. Benzaldehyde has been qualified "UJ/J" estimated in each of the sample analyses and reanalyses reported in this data set.

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

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.

A) Method Blank contamination

Volatile Organic Analyses (EPA Method 8260B) – Five (5) low level soil method blanks are associated with this data set. Each of these method blank samples was free from contamination of target analytes. Two (2) medium level soil method blanks are associated with this data set. Each of these method blank samples was free from contamination of target analytes.

ORGANIC DATA ASSESSMENT

5. BLANK CONTAMINATION (cont'd):

A) Method Blank contamination

Semivolatile Organic Analyses (EPA Method 8270C) – Two (2) method blank samples are associated with this data set. Each was free from contamination of target and non target analytes with the exception of that listed below:

Sample ID	Date of Extraction	Analyte	Conc (Retention Time)
PB52795B	12/8/10	Dimethylphthalate	75 J ug/kg
		ACP	3.28
		Unknown	17.39
PB52829B	12/10/10	Dimethylphthalate	76 J ug/kg
		ACP	3.25
		Unknown	16.51

When these analytes were detected in the associated field samples they have been negated and qualified "U".

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

B) Field or Equipment Rinse Blank (ERB) contamination

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

C) Trip Blank contamination

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

ORGANIC DATA ASSESSMENT

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. Region USEPA and Region II criteria is the sample for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses is the same, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Two (2) low level soil initial calibration curve analyses are associated with the samples in this data set. The laboratory performed a multilevel calibration on November 27, 2010 (Inst. VOAK). The laboratory summarized the relative response factor (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.

One (1) continuing calibration standard analysis is associated with this curve analysis. The RRF of all target compounds met QC criteria in this CCV standard analysis.

An additional low level initial calibration curve analysis is associated with this data set. This curve analysis was performed December 13, 2010 (Inst. K). The laboratory summarized the relative response factor (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.

Four (4) continuing calibration standard analyses are associated with this curve analysis. The RRF of all target compounds met QC criteria in each of these low level CCV standard analyses.

One (1) medium level soil sample initial calibration curve is associated with the sample in this data set. The laboratory performed a multilevel calibration on December 14, 2010 (Inst. VOA). The laboratory summarized the relative response factor (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.

Two (2) continuing calibration standard analyses are associated with this curve analysis. The RRF of all target compounds met QC criteria in each of these medium level CCV standard analyses.

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

A) RESPONSE FACTOR (cont'd):

Semivolatile Organic Analyses (EPA Method 8270C) – Five (5) initial calibration curve analyses are associated with the samples in this data set. Initial calibration curve analyses were performed:

Date	Instrument ID
12/8/10	BNAE
12/10/10	BNAE
12/14/10	BNAE
12/15/10	BNAE
12/15/10	BNAF

Three (3) continuing calibration standards are associated with these curve analyses. The RRF of all Base Neutral target analytes met QC criteria in each of these initial calibration curve analyses and continuing calibration curve analyses.

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

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. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. 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. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Two (2) low level soil sample initial calibration curve analysis is associated with the sample in this data set. The laboratory performed a multilevel calibration on November 27, 2010 (Inst. VOAK). 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 the initial calibration curve analysis.

One (1) continuing calibration verification (CCV) standard is associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria in this CCV standard analysis.

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D) (cont'd)

An additional low level multilevel calibration curve was analyzed on December 13, 2010 (Inst. VOAK). 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 the initial calibration curve analysis.

Four (4) continuing calibration verification (CCV) standards are associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria in each of these CCV standard analyses with the exception of Trichlorofluoromethane (27.%) in the standard analyzed December 14, 2010 (File ID: VK042432.D. Trichlorofluoromethane has been qualified "UJ/J" estimated in each of the samples associated with this curve analysis.

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

One (1) medium level soil sample initial calibration curve analysis is associated with the samples in this data set. This calibration curve was analyzed December 14, 2010 (Inst. H). 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 the initial calibration curve analysis.

Two (2) continuing calibration verification (CCV) standards are associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria in each of these CCV standard analyses.

Semivolatile Organic Analyses (EPA Method 8270C) – Five (5) initial calibration curve analyses are associated with the samples in this data set. Initial calibration curves were analyzed:

Date	Instrument ID
12/8/10	BNAE
12/10/10	BNAE
12/14/10	BNAE
12/15/10	BNAE
12/15/10	BNAF

The %RSD of all target compounds met QC criteria in each of these initial calibration curve analyses with the exception of the following:

Date	Field ID	Analyte	RSD (%)
12/8/10	Curve BNAE	Hexachlorocyclopentadiene	32.87

This curve analysis is associated with the initial analysis of sample RU-WRSV-1 (B4450-03). Hexachlorocyclopentadiene has been qualified "UJ/J" estimated in this sample.

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

Three (3) continuing calibration standard analyses are associated with this curve analysis. All %Difference criteria for all Base Neutral target analytes were met in these continuing calibration standard analyses.

ORGANIC DATA ASSESSMENT

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 tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses/Semivolatile Organic analyses - 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.

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.

Volatile Organic Analyses (EPA Method 8260B) - All samples were spiked with the internal standards Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 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 with the exception of the following:

Sample ID	Internal Standard
PT-B-1 (14.5-15) (B4450-11)	1,4-Dichlorobenzene-d4
PT-S-4 (14.5-15) (B4450-10)	1,4-Dichlorobenzene-d4

The target analytes associated with these internal standards have been qualified "UJ/J" estimated.

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

Semivolatile Organic Analyses (EPA Method 8270C) - All samples were spiked with the internal standards 1,4-Dichlorobenzene-d4, Naphthalene-d8, Acenaphthene-d10, Phenanthrene-d10, Chrysene-d12 and Perylene-d12 prior to sample analysis. The area counts and retention time shift of each internal standard was reported. All Internal Standard criteria were met in the samples associated with this data set.

ORGANIC DATA ASSESSMENT

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.

Volatile Organic Analyses (EPA Method 8260B) – Seventeen (17) non-aqueous samples are associated with this data set. The sample was analyzed via Method 8260B. Tentatively Identified Compounds (TIC's) when detected are reported for each sample. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

The sample chromatograms associated with this sample set indicated a hump as well as the presence of non target compounds at each sample point. If dilution analysis was performed this dilution analysis was able to reduce the matrix interference. The dilution analysis was necessary to report the target analytes within the concentration of the GC/MS.

Samples WR-S-14 (10.5-11), PT-S-2 (8.5-9), PT-S-7 (13.0-13.5) and PT-S-8 (13.0-13.5) were initially prepared and analyzed as medium level soil samples due to the presence of target and non-target compounds detected at these sample points.

Sample PT-S-4 (14.5-15) (B4450-10) was initially analyzed as a low level soil sample. The concentration of cis 1,2-Dichloroethene, 1,2-Dichloroethane and Trichloroethene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample with an additional 1:4 dilution to report the concentration of cis 1,2-Dichloroethene (4800 D ug/kg), 1,2-Dichloroethane (8300 D ug/kg) and Trichloroethene (910 J D ug/kg) detected at this sample point.

Sample PT-B-1 (14.5-15) (B4450-11) was initially analyzed as a low level soil sample. The concentration of Methyl tert-butyl Ether, Benzene and Toluene exceeded the concentration range. This sample was reanalyzed as a medium level soil sample with an additional 1:4 dilution to report the concentration of Methyl tert-butyl Ether (1100 J D ug/kg), Benzene (2100 J D ug/kg) and Toluene (11000 D ug/kg) detected at this sample point.

Semivolatile Organic Analyses (SW846 Method 8270C) – Two (2) non-aqueous samples were marked for the analysis of Base Neutral SVOA analytes. The samples were analyzed in accordance with Method 8270C and reported the Base Neutral compound list. Tentatively Identified Compounds (TIC's) when detected were reported with this data set. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

Sample RU-WRSV-1 was initially prepared and analyzed without dilution. This extract analysis is associated with the calibration in which one target analyte %RSD did not meet QC criteria. The sample extract was reanalyzed. Both analyses are reported in the data report. Comparable data was obtained in this sample extract re-analysis.

Sample RU-WOTSV-1 was initially analyzed using a 1:10 dilution factor due to sample matrix. The sample extract was reanalyzed. Both analyses are reported in the data report. Comparable data was obtained in this sample extract re-analysis.

ORGANIC DATA ASSESSMENT

10. FIELD DUPLICATE ANALYSES:

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. Soil samples have a greater variability than aqueous samples. Percent moisture and reported dilution factors also tend to lead to greater variability in RPD. Analytes reported above the reporting limit are listed. Data was not qualified based on the calculated RPD of field duplicate sample analyses.

Sample PT-B-2 (10-10.5) was collected in duplicate. Below is a summary of the field duplicate sample results collected at this sample point.

PT-B-2 (10-10.5) (B4450-06)/DUP (B4450-07)

Analyte	Result (ug/kg)	Result (ug/kg)	RPD (%)
Volatile Organic Analytes			
Acetone	6.7 J	7.6 J	12.6
cis 1,2-Dichloroethene	17	4.3 J	>100
1,2-Dichloroethane	4.5 J	2.2 J	68.7

Sample data has not been qualified based on the results of the field duplicate sample analyses reported in this data set.

Field duplicate samples are not associated with the Base Neutral Semivolatile Organic analyses reported in 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 DUSR 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. Soil sample results are reported on a dry weight basis. 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.

TABLE 1

FIELD SAMPLE ID**LABORATORY ID**

RU-WOTV-1	B4450-01
RU-WRV-3	B4450-02
RU-WRSV-1	B4450-03
PT-S-2 (10-10.5)	B4450-04
RU-WOTSV-1	B4450-05
PT-B-2 (15-15.5)	B4450-06
DUP	B4450-07
WR-S-14 (10.5-11)	B4450-08
PT-S-3 (14.5-15)	B4450-09
PT-S-4 (14.5-15)	B4450-10
PT-B-1 (14.5-15)	B4450-11
PT-S-1 (14.5-15)	B4450-12
PT-S-2 (8.5-9)	B4450-13
PT-B-3 (14.5-15)	B4450-14
PT-S-5 (14.5-15)	B4450-15
PT-B-4 (15.0-15.5)	B4450-16
PT-S-6 (12.0-12.5)	B4450-17
B4450-17 MS	B4450-18
B4450-17 MSD	B4450-19
PT-S-7 (13.0-13.5)	B4450-20
PT-S-8 (13.0-13.5)	B4450-21

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

Report of Analysis

Client:	First Environment	Date Collected:	12/09/10
Project:	Provan	Date Received:	12/10/10
Client Sample ID:	PT-B-2(15-15.5)	SDG No.:	B4450
Lab Sample ID:	B4450-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042446.D	1		12/15/10	VK121410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.6	U	0.72	2.8	5.6	ug/Kg
74-87-3	Chloromethane	5.6	U	0.96	2.8	5.6	ug/Kg
75-01-4	Vinyl Chloride	5.6	U	1.4	2.8	5.6	ug/Kg
74-83-9	Bromomethane	5.6	U	2.7	2.8	5.6	ug/Kg
75-00-3	Chloroethane	5.6	U	1.6	2.8	5.6	ug/Kg
75-69-4	Trichlorofluoromethane	5.6 UJ	U	1.5	2.8	5.6	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.6	U	1.5	2.8	5.6	ug/Kg
75-35-4	1,1-Dichloroethene	5.6	U	1.6	2.8	5.6	ug/Kg
67-64-1	Acetone	6.7	J	3.4	14	28	ug/Kg
75-15-0	Carbon Disulfide	5.6	U	1.2	2.8	5.6	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.6	U	1.1	2.8	5.6	ug/Kg
79-20-9	Methyl Acetate	5.6	U	1.7	2.8	5.6	ug/Kg
75-09-2	Methylene Chloride	5.6	U	1.6	2.8	5.6	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.6	U	0.77	2.8	5.6	ug/Kg
75-34-3	1,1-Dichloroethane	5.6	U	1	2.8	5.6	ug/Kg
110-82-7	Cyclohexane	5.6	U	1.1	2.8	5.6	ug/Kg
78-93-3	2-Butanone	28	U	3.5	14	28	ug/Kg
56-23-5	Carbon Tetrachloride	5.6	U	1.1	2.8	5.6	ug/Kg
156-59-2	cis-1,2-Dichloroethene	17		0.99	2.8	5.6	ug/Kg
67-66-3	Chloroform	5.6	U	0.82	2.8	5.6	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.6	U	0.98	2.8	5.6	ug/Kg
108-87-2	Methylcyclohexane	5.6	U	1.2	2.8	5.6	ug/Kg
71-43-2	Benzene	5.6	U	0.42	2.8	5.6	ug/Kg
107-06-2	1,2-Dichloroethane	4.5	J	0.71	2.8	5.6	ug/Kg
79-01-6	Trichloroethene	5.6	U	0.96	2.8	5.6	ug/Kg
78-87-5	1,2-Dichloropropane	5.6	U	0.29	2.8	5.6	ug/Kg
75-27-4	Bromodichloromethane	5.6	U	0.69	2.8	5.6	ug/Kg
108-10-1	4-Methyl-2-Pentanone	28	U	3.3	14	28	ug/Kg
108-88-3	Toluene	5.6	U	0.71	2.8	5.6	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.6	U	0.88	2.8	5.6	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.6	U	0.8	2.8	5.6	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.6	U	1	2.8	5.6	ug/Kg
591-78-6	2-Hexanone	28	U	4.4	14	28	ug/Kg
124-48-1	Dibromochloromethane	5.6	U	0.6	2.8	5.6	ug/Kg
106-93-4	1,2-Dibromoethane	5.6	U	0.71	2.8	5.6	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/09/10
Project:	Provan	Date Received:	12/10/10
Client Sample ID:	PT-B-2(15-15.5)	SDG No.:	B4450
Lab Sample ID:	B4450-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	11
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042446.D	1		12/15/10	VK121410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.6	U	1.1	2.8	5.6	ug/Kg
108-90-7	Chlorobenzene	5.6	U	0.56	2.8	5.6	ug/Kg
100-41-4	Ethyl Benzene	5.6	U	0.69	2.8	5.6	ug/Kg
179601-23-1	m/p-Xylenes	11	U	0.8	5.5	11	ug/Kg
95-47-6	o-Xylene	5.6	U	0.76	2.8	5.6	ug/Kg
100-42-5	Styrene	5.6	U	0.5	2.8	5.6	ug/Kg
75-25-2	Bromoform	5.6	U	0.82	2.8	5.6	ug/Kg
98-82-8	Isopropylbenzene	5.6	U	0.54	2.8	5.6	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.6	U	0.51	2.8	5.6	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.6	U	0.41	2.8	5.6	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.6	U	0.46	2.8	5.6	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.6	U	0.69	2.8	5.6	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.6	U	0.97	2.8	5.6	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.6	U	0.78	2.8	5.6	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.6		55 - 158		95%	SPK: 50
1868-53-7	Dibromofluoromethane	52.3		53 - 156		105%	SPK: 50
2037-26-5	Toluene-d8	49.6		68 - 122		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.2		25 - 144		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	293358	3.2				
540-36-3	1,4-Difluorobenzene	442440	3.59				
3114-55-4	Chlorobenzene-d5	455523	6.27				
3855-82-1	1,4-Dichlorobenzene-d4	263705	8.6				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/09/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-S-3(14.5-15)	SDG No.:	B4450
Lab Sample ID:	B4450-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	7
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042448.D	1		12/15/10	VK121410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.3	U	0.69	2.65	5.3	ug/Kg
74-87-3	Chloromethane	5.3	U	0.92	2.65	5.3	ug/Kg
75-01-4	Vinyl Chloride	5.3	U	1.3	2.65	5.3	ug/Kg
74-83-9	Bromomethane	5.3	U	2.6	2.65	5.3	ug/Kg
75-00-3	Chloroethane	5.3	U	1.5	2.65	5.3	ug/Kg
75-69-4	Trichlorofluoromethane	5.3	U	1.4	2.65	5.3	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.3	U	1.4	2.65	5.3	ug/Kg
75-35-4	1,1-Dichloroethene	5.3	U	1.6	2.65	5.3	ug/Kg
67-64-1	Acetone	27	U	3.2	13.5	27	ug/Kg
75-15-0	Carbon Disulfide	5.3	U	1.1	2.65	5.3	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.3	U	1	2.65	5.3	ug/Kg
79-20-9	Methyl Acetate	5.3	U	1.6	2.65	5.3	ug/Kg
75-09-2	Methylene Chloride	5.3	U	1.5	2.65	5.3	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.3	U	0.74	2.65	5.3	ug/Kg
75-34-3	1,1-Dichloroethane	5.3	U	1	2.65	5.3	ug/Kg
110-82-7	Cyclohexane	5.3	U	1.1	2.65	5.3	ug/Kg
78-93-3	2-Butanone	27	U	3.3	13.5	27	ug/Kg
56-23-5	Carbon Tetrachloride	5.3	U	1.1	2.65	5.3	ug/Kg
156-59-2	cis-1,2-Dichloroethene	8.9		0.95	2.65	5.3	ug/Kg
67-66-3	Chloroform	5.3	U	0.79	2.65	5.3	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.3	U	0.94	2.65	5.3	ug/Kg
108-87-2	Methylcyclohexane	5.3	U	1.1	2.65	5.3	ug/Kg
71-43-2	Benzene	5.3	U	0.41	2.65	5.3	ug/Kg
107-06-2	1,2-Dichloroethane	1.2	J	0.68	2.65	5.3	ug/Kg
79-01-6	Trichloroethene	5.3	U	0.92	2.65	5.3	ug/Kg
78-87-5	1,2-Dichloropropane	5.3	U	0.28	2.65	5.3	ug/Kg
75-27-4	Bromodichloromethane	5.3	U	0.66	2.65	5.3	ug/Kg
108-10-1	4-Methyl-2-Pentanone	27	U	3.1	13.5	27	ug/Kg
108-88-3	Toluene	5.3	U	0.68	2.65	5.3	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.3	U	0.84	2.65	5.3	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.3	U	0.77	2.65	5.3	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.3	U	0.96	2.65	5.3	ug/Kg
591-78-6	2-Hexanone	27	U	4.2	13.5	27	ug/Kg
124-48-1	Dibromochloromethane	5.3	U	0.58	2.65	5.3	ug/Kg
106-93-4	1,2-Dibromoethane	5.3	U	0.68	2.65	5.3	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/09/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-S-3(14.5-15)	SDG No.:	B4450
Lab Sample ID:	B4450-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	7
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042448.D	1		12/15/10	VK121410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.3	U	1.1	2.65	5.3	ug/Kg
108-90-7	Chlorobenzene	5.3	U	0.53	2.65	5.3	ug/Kg
100-41-4	Ethyl Benzene	5.3	U	0.66	2.65	5.3	ug/Kg
179601-23-1	m/p-Xylenes	11	U	0.77	5.5	11	ug/Kg
95-47-6	o-Xylene	5.3	U	0.73	2.65	5.3	ug/Kg
100-42-5	Styrene	5.3	U	0.48	2.65	5.3	ug/Kg
75-25-2	Bromoform	5.3	U	0.79	2.65	5.3	ug/Kg
98-82-8	Isopropylbenzene	5.3	U	0.51	2.65	5.3	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U	0.49	2.65	5.3	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.3	U	0.4	2.65	5.3	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.3	U	0.44	2.65	5.3	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.3	U	0.66	2.65	5.3	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.3	U	0.93	2.65	5.3	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.3	U	0.75	2.65	5.3	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.8		55 - 158		96%	SPK: 50
1868-53-7	Dibromofluoromethane	52.5		53 - 156		105%	SPK: 50
2037-26-5	Toluene-d8	49.4		68 - 122		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.4		25 - 144		97%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	295981	3.2				
540-36-3	1,4-Difluorobenzene	461822	3.59				
3114-55-4	Chlorobenzene-d5	469183	6.27				
3855-82-1	1,4-Dichlorobenzene-d4	265929	8.6				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/09/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-S-4(14.5-15)	SDG No.:	B4450
Lab Sample ID:	B4450-10	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042483.D	1		12/15/10	VK121510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.5 UJ	U	0.84	3.25	6.5	ug/Kg
74-87-3	Chloromethane	6.5 UJ	U	1.1	3.25	6.5	ug/Kg
75-01-4	Vinyl Chloride	18 J		1.6	3.25	6.5	ug/Kg
74-83-9	Bromomethane	6.5 UJ	U	3.2	3.25	6.5	ug/Kg
75-00-3	Chloroethane	6.5	U	1.8	3.25	6.5	ug/Kg
75-69-4	Trichlorofluoromethane	6.5	U	1.7	3.25	6.5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.5	U	1.7	3.25	6.5	ug/Kg
75-35-4	1,1-Dichloroethene	110 J		1.9	3.25	6.5	ug/Kg
67-64-1	Acetone	17 J	J	3.9	16	32	ug/Kg
75-15-0	Carbon Disulfide	6.5 UJ	U	1.4	3.25	6.5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	9.1 J		1.2	3.25	6.5	ug/Kg
79-20-9	Methyl Acetate	6.5 UJ	U	1.9	3.25	6.5	ug/Kg
75-09-2	Methylene Chloride	6.5	U	1.8	3.25	6.5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.5	U	0.89	3.25	6.5	ug/Kg
75-34-3	1,1-Dichloroethane	110 J		1.2	3.25	6.5	ug/Kg
110-82-7	Cyclohexane	6.5 UJ	U	1.3	3.25	6.5	ug/Kg
78-93-3	2-Butanone	32 UJ	U	4	16	32	ug/Kg
56-23-5	Carbon Tetrachloride	6.5 UJ	U	1.3	3.25	6.5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	4700 J	E	1.1	3.25	6.5	ug/Kg
67-66-3	Chloroform	6.5 UJ	U	0.96	3.25	6.5	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.5	U	1.1	3.25	6.5	ug/Kg
108-87-2	Methylcyclohexane	6.5	U	1.4	3.25	6.5	ug/Kg
71-43-2	Benzene	6.5	U	0.49	3.25	6.5	ug/Kg
107-06-2	1,2-Dichloroethane	4200 J	E	0.83	3.25	6.5	ug/Kg
79-01-6	Trichloroethene	540 J	E	1.1	3.25	6.5	ug/Kg
78-87-5	1,2-Dichloropropane	6.5 UJ	U	0.34	3.25	6.5	ug/Kg
75-27-4	Bromodichloromethane	6.5 UJ	U	0.8	3.25	6.5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	14 J	J	3.8	16	32	ug/Kg
108-88-3	Toluene	6.5 UJ	U	0.83	3.25	6.5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.5	U	1	3.25	6.5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.5	U	0.93	3.25	6.5	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.5	U	1.2	3.25	6.5	ug/Kg
591-78-6	2-Hexanone	32	U	5.1	16	32	ug/Kg
124-48-1	Dibromochloromethane	6.5	U	0.7	3.25	6.5	ug/Kg
106-93-4	1,2-Dibromoethane	6.5	U	0.83	3.25	6.5	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/09/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-S-4(14.5-15)	SDG No.:	B4450
Lab Sample ID:	B4450-10	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042483.D	1		12/15/10	VK121510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.5	U	1.3	3.25	6.5	ug/Kg
108-90-7	Chlorobenzene	6.5	U	0.65	3.25	6.5	ug/Kg
100-41-4	Ethyl Benzene	6.5	U	0.8	3.25	6.5	ug/Kg
179601-23-1	m/p-Xylenes	13	U	0.93	6.5	13	ug/Kg
95-47-6	o-Xylene	6.5	U	0.88	3.25	6.5	ug/Kg
100-42-5	Styrene	6.5	U	0.58	3.25	6.5	ug/Kg
75-25-2	Bromoform	6.5	U	0.96	3.25	6.5	ug/Kg
98-82-8	Isopropylbenzene	6.5	U	0.62	3.25	6.5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.5	U	0.59	3.25	6.5	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.5	U	0.48	3.25	6.5	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.5	U	0.53	3.25	6.5	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.5	U	0.8	3.25	6.5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.5	U	1.1	3.25	6.5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.5	U	0.9	3.25	6.5	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	293	*	55 - 158		587%	SPK: 50
1868-53-7	Dibromofluoromethane	55.4		53 - 156		111%	SPK: 50
2037-26-5	Toluene-d8	46.2		68 - 122		92%	SPK: 50
460-00-4	4-Bromofluorobenzene	30.5		25 - 144		61%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	267887	3.2				
540-36-3	1,4-Difluorobenzene	415033	3.58				
3114-55-4	Chlorobenzene-d5	340796	6.27				
3855-82-1	1,4-Dichlorobenzene-d4	122354	8.6				
TENTATIVE IDENTIFIED COMPOUNDS							
75-65-0	Tert butyl alcohol	190	J			2.08	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/09/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-S-4(14.5-15)DL	SDG No.:	B4450
Lab Sample ID:	B4450-10DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	23
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VH038920.D	4		12/15/10
			Prep Batch ID
			VH121510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	2600	U	290	1300	2600	ug/Kg
74-87-3	Chloromethane	2600	U	280	1300	2600	ug/Kg
75-01-4	Vinyl Chloride	2600	U	180	1300	2600	ug/Kg
74-83-9	Bromomethane	2600	U	320	1300	2600	ug/Kg
75-00-3	Chloroethane	2600	U	340	1300	2600	ug/Kg
75-69-4	Trichlorofluoromethane	2600	U	180	1300	2600	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2600	U	230	1300	2600	ug/Kg
75-35-4	1,1-Dichloroethene	2600	U	240	1300	2600	ug/Kg
67-64-1	Acetone	13000	U	1400	6500	13000	ug/Kg
75-15-0	Carbon Disulfide	2600	U	280	1300	2600	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2600	U	180	1300	2600	ug/Kg
79-20-9	Methyl Acetate	2600	U	430	1300	2600	ug/Kg
75-09-2	Methylene Chloride	2600	U	210	1300	2600	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2600	U	210	1300	2600	ug/Kg
75-34-3	1,1-Dichloroethane	2600	U	190	1300	2600	ug/Kg
110-82-7	Cyclohexane	2600	U	290	1300	2600	ug/Kg
78-93-3	2-Butanone	13000	U	680	6500	13000	ug/Kg
56-23-5	Carbon Tetrachloride	2600	U	320	1300	2600	ug/Kg
156-59-2	cis-1,2-Dichloroethene	4800	D	180	1300	2600	ug/Kg
67-66-3	Chloroform	2600	U	180	1300	2600	ug/Kg
71-55-6	1,1,1-Trichloroethane	2600	U	210	1300	2600	ug/Kg
108-87-2	Methylcyclohexane	2600	U	350	1300	2600	ug/Kg
71-43-2	Benzene	2600	U	170	1300	2600	ug/Kg
107-06-2	1,2-Dichloroethane	8300	D	250	1300	2600	ug/Kg
79-01-6	Trichloroethene	910	JD	150	1300	2600	ug/Kg
78-87-5	1,2-Dichloropropane	2600	U	240	1300	2600	ug/Kg
75-27-4	Bromodichloromethane	2600	U	190	1300	2600	ug/Kg
108-10-1	4-Methyl-2-Pentanone	13000	U	1100	6500	13000	ug/Kg
108-88-3	Toluene	2600	U	190	1300	2600	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2600	U	150	1300	2600	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2600	U	160	1300	2600	ug/Kg
79-00-5	1,1,2-Trichloroethane	2600	U	200	1300	2600	ug/Kg
591-78-6	2-Hexanone	13000	U	1000	6500	13000	ug/Kg
124-48-1	Dibromochloromethane	2600	U	270	1300	2600	ug/Kg
106-93-4	1,2-Dibromoethane	2600	U	210	1300	2600	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	12/09/10	
Project:	Provan	Date Received:	12/13/10	
Client Sample ID:	PT-S-4(14.5-15)DL	SDG No.:	B4450	
Lab Sample ID:	B4450-10DL	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	23	
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH038920.D	4		12/15/10	VH121510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	2600	U	140	1300	2600	ug/Kg
108-90-7	Chlorobenzene	2600	U	250	1300	2600	ug/Kg
100-41-4	Ethyl Benzene	2600	U	270	1300	2600	ug/Kg
179601-23-1	m/p-Xylenes	5200	U	490	2600	5200	ug/Kg
95-47-6	o-Xylene	2600	U	220	1300	2600	ug/Kg
100-42-5	Styrene	2600	U	190	1300	2600	ug/Kg
75-25-2	Bromoform	2600	U	240	1300	2600	ug/Kg
98-82-8	Isopropylbenzene	2600	U	230	1300	2600	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2600	U	160	1300	2600	ug/Kg
541-73-1	1,3-Dichlorobenzene	2600	U	220	1300	2600	ug/Kg
106-46-7	1,4-Dichlorobenzene	2600	U	170	1300	2600	ug/Kg
95-50-1	1,2-Dichlorobenzene	2600	U	230	1300	2600	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2600	U	240	1300	2600	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2600	U	320	1300	2600	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	181		55 - 158		91%	SPK: 50
1868-53-7	Dibromofluoromethane	153		53 - 156		77%	SPK: 50
2037-26-5	Toluene-d8	158		68 - 122		79%	SPK: 50
460-00-4	4-Bromofluorobenzene	158		25 - 144		79%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	2036490	4.1				
540-36-3	1,4-Difluorobenzene	3335540	4.61				
3114-55-4	Chlorobenzene-d5	2643310	7.96				
3855-82-1	1,4-Dichlorobenzene-d4	1205880	10.44				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/10/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-B-1(14.5-15)	SDG No.:	B4450
Lab Sample ID:	B4450-11	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	18
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042450.D	1		12/15/10	VK121410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6	U	0.79	3	6	ug/Kg
74-87-3	Chloromethane	6	U	1	3	6	ug/Kg
75-01-4	Vinyl Chloride	6	U	1.5	3	6	ug/Kg
74-83-9	Bromomethane	6	U	3	3	6	ug/Kg
75-00-3	Chloroethane	6	U	1.7	3	6	ug/Kg
75-69-4	Trichlorofluoromethane	6 UJ	U	1.6	3	6	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6	U	1.6	3	6	ug/Kg
75-35-4	1,1-Dichloroethene	6	U	1.8	3	6	ug/Kg
67-64-1	Acetone	470		3.7	15	30	ug/Kg
75-15-0	Carbon Disulfide	6	U	1.3	3	6	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1500	E	1.2	3	6	ug/Kg
79-20-9	Methyl Acetate	6	U	1.8	3	6	ug/Kg
75-09-2	Methylene Chloride	6	U	1.7	3	6	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6	U	0.83	3	6	ug/Kg
75-34-3	1,1-Dichloroethane	6	U	1.1	3	6	ug/Kg
110-82-7	Cyclohexane	6	U	1.2	3	6	ug/Kg
78-93-3	2-Butanone	30	U	3.8	15	30	ug/Kg
56-23-5	Carbon Tetrachloride	6	U	1.2	3	6	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6	U	1.1	3	6	ug/Kg
67-66-3	Chloroform	6	U	0.9	3	6	ug/Kg
71-55-6	1,1,1-Trichloroethane	6	U	1.1	3	6	ug/Kg
108-87-2	Methylcyclohexane	6	U	1.3	3	6	ug/Kg
71-43-2	Benzene	2000	E	0.46	3	6	ug/Kg
107-06-2	1,2-Dichloroethane	6.4		0.77	3	6	ug/Kg
79-01-6	Trichloroethene	6	U	1	3	6	ug/Kg
78-87-5	1,2-Dichloropropane	6	U	0.31	3	6	ug/Kg
75-27-4	Bromodichloromethane	6	U	0.75	3	6	ug/Kg
108-10-1	4-Methyl-2-Pentanone	36		3.5	15	30	ug/Kg
108-88-3	Toluene	3600	E	0.77	3	6	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6	U	0.96	3	6	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6	U	0.87	3	6	ug/Kg
79-00-5	1,1,2-Trichloroethane	6	U	1.1	3	6	ug/Kg
591-78-6	2-Hexanone	30	U	4.7	15	30	ug/Kg
124-48-1	Dibromochloromethane	6	U	0.65	3	6	ug/Kg
106-93-4	1,2-Dibromoethane	6	U	0.77	3	6	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/10/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-B-1(14.5-15)	SDG No.:	B4450
Lab Sample ID:	B4450-11	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	18
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042450.D	1		12/15/10	VK121410

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6	U	1.2	3	6	ug/Kg
108-90-7	Chlorobenzene	6	U	0.6	3	6	ug/Kg
100-41-4	Ethyl Benzene	6	U	0.75	3	6	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.87	6	12	ug/Kg
95-47-6	o-Xylene	6	U	0.82	3	6	ug/Kg
100-42-5	Styrene	6	U	0.54	3	6	ug/Kg
75-25-2	Bromoform	6	U	0.9	3	6	ug/Kg
98-82-8	Isopropylbenzene	6	U	0.58	3	6	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6 U J	U	0.56	3	6	ug/Kg
541-73-1	1,3-Dichlorobenzene	6 U J	U	0.45	3	6	ug/Kg
106-46-7	1,4-Dichlorobenzene	6 U J	U	0.5	3	6	ug/Kg
95-50-1	1,2-Dichlorobenzene	6 U J	U	0.75	3	6	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6 U J	U	1.1	3	6	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6 U J	U	0.85	3	6	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	53.7		55 - 158		107%	SPK: 50
1868-53-7	Dibromofluoromethane	51.4		53 - 156		103%	SPK: 50
2037-26-5	Toluene-d8	48.4		68 - 122		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	35.6		25 - 144		71%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	245884	3.2				
540-36-3	1,4-Difluorobenzene	417519	3.59				
3114-55-4	Chlorobenzene-d5	396513	6.27				
3855-82-1	1,4-Dichlorobenzene-d4	131058	8.6				
TENTITIVE IDENTIFIED COMPOUNDS							
75-65-0	Tert butyl alcohol	30000	J			2.08	ug/Kg
108-20-3	Diisopropyl ether	130	J			2.21	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/10/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-B-1(14.5-15)DL	SDG No.:	B4450
Lab Sample ID:	B4450-11DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	18
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH038921.D	4		12/15/10	VH121510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	2400	U	270	1200	2400	ug/Kg
74-87-3	Chloromethane	2400	U	260	1200	2400	ug/Kg
75-01-4	Vinyl Chloride	2400	U	170	1200	2400	ug/Kg
74-83-9	Bromomethane	2400	U	300	1200	2400	ug/Kg
75-00-3	Chloroethane	2400	U	320	1200	2400	ug/Kg
75-69-4	Trichlorofluoromethane	2400	U	170	1200	2400	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2400	U	220	1200	2400	ug/Kg
75-35-4	1,1-Dichloroethene	2400	U	230	1200	2400	ug/Kg
67-64-1	Acetone	12000	U	1300	6000	12000	ug/Kg
75-15-0	Carbon Disulfide	2400	U	260	1200	2400	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1100	JD	170	1200	2400	ug/Kg
79-20-9	Methyl Acetate	2400	U	400	1200	2400	ug/Kg
75-09-2	Methylene Chloride	2400	U	200	1200	2400	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2400	U	200	1200	2400	ug/Kg
75-34-3	1,1-Dichloroethane	2400	U	180	1200	2400	ug/Kg
110-82-7	Cyclohexane	2400	U	270	1200	2400	ug/Kg
78-93-3	2-Butanone	12000	U	640	6000	12000	ug/Kg
56-23-5	Carbon Tetrachloride	2400	U	300	1200	2400	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2400	U	170	1200	2400	ug/Kg
67-66-3	Chloroform	2400	U	170	1200	2400	ug/Kg
71-55-6	1,1,1-Trichloroethane	2400	U	190	1200	2400	ug/Kg
108-87-2	Methylcyclohexane	2400	U	330	1200	2400	ug/Kg
71-43-2	Benzene	2100	JD	160	1200	2400	ug/Kg
107-06-2	1,2-Dichloroethane	2400	U	230	1200	2400	ug/Kg
79-01-6	Trichloroethene	2400	U	140	1200	2400	ug/Kg
78-87-5	1,2-Dichloropropane	2400	U	220	1200	2400	ug/Kg
75-27-4	Bromodichloromethane	2400	U	180	1200	2400	ug/Kg
108-10-1	4-Methyl-2-Pentanone	12000	U	1000	6000	12000	ug/Kg
108-88-3	Toluene	11000	D	180	1200	2400	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2400	U	140	1200	2400	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2400	U	150	1200	2400	ug/Kg
79-00-5	1,1,2-Trichloroethane	2400	U	180	1200	2400	ug/Kg
591-78-6	2-Hexanone	12000	U	940	6000	12000	ug/Kg
124-48-1	Dibromochloromethane	2400	U	250	1200	2400	ug/Kg
106-93-4	1,2-Dibromoethane	2400	U	200	1200	2400	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/10/10
Project:	Provan	Date Received:	12/13/10
Client Sample ID:	PT-B-1(14.5-15)DL	SDG No.:	B4450
Lab Sample ID:	B4450-11DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	18
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH038921.D	4		12/15/10	VH121510

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	2400	U	130	1200	2400	ug/Kg
108-90-7	Chlorobenzene	2400	U	240	1200	2400	ug/Kg
100-41-4	Ethyl Benzene	2400	U	260	1200	2400	ug/Kg
179601-23-1	m/p-Xylenes	4900	U	460	2450	4900	ug/Kg
95-47-6	o-Xylene	2400	U	210	1200	2400	ug/Kg
100-42-5	Styrene	2400	U	180	1200	2400	ug/Kg
75-25-2	Bromoform	2400	U	230	1200	2400	ug/Kg
98-82-8	Isopropylbenzene	2400	U	220	1200	2400	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2400	U	150	1200	2400	ug/Kg
541-73-1	1,3-Dichlorobenzene	2400	U	210	1200	2400	ug/Kg
106-46-7	1,4-Dichlorobenzene	2400	U	160	1200	2400	ug/Kg
95-50-1	1,2-Dichlorobenzene	2400	U	220	1200	2400	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	2400	U	220	1200	2400	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2400	U	300	1200	2400	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	171		55 - 158		86%	SPK: 50
1868-53-7	Dibromofluoromethane	153		53 - 156		77%	SPK: 50
2037-26-5	Toluene-d8	157		68 - 122		79%	SPK: 50
460-00-4	4-Bromofluorobenzene	167		25 - 144		84%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	2175420	4.09				
540-36-3	1,4-Difluorobenzene	3543420	4.61				
3114-55-4	Chlorobenzene-d5	2809160	7.95				
3855-82-1	1,4-Dichlorobenzene-d4	1335700	10.45				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/07/10
Project:	Provan	Date Received:	12/08/10
Client Sample ID:	RU-WRSV-1	SDG No.:	B4450
Lab Sample ID:	B4450-03	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	15
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067772.D	1	12/08/10	12/09/10	PB52795

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	390	UJ	U	20	195	390 ug/Kg
111-44-4	bis(2-Chloroethyl)ether	390	U	U	19	195	390 ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	390	U	U	16	195	390 ug/Kg
98-86-2	Acetophenone	390	U	U	12	195	390 ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	390	U	U	20	195	390 ug/Kg
67-72-1	Hexachloroethane	390	U	U	18	195	390 ug/Kg
98-95-3	Nitrobenzene	390	U	U	15	195	390 ug/Kg
78-59-1	Isophorone	390	U	U	13	195	390 ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	390	U	U	23	195	390 ug/Kg
91-20-3	Naphthalene	390	U	U	14	195	390 ug/Kg
106-47-8	4-Chloroaniline	390	U	U	28	195	390 ug/Kg
87-68-3	Hexachlorobutadiene	390	U	U	14	195	390 ug/Kg
105-60-2	Caprolactam	390	U	U	18	195	390 ug/Kg
91-57-6	2-Methylnaphthalene	390	U	U	9.9	195	390 ug/Kg
77-47-4	Hexachlorocyclopentadiene	390	UJ	U	9.5	195	390 ug/Kg
92-52-4	1,1-Biphenyl	390	U	U	15	195	390 ug/Kg
91-58-7	2-Chloronaphthalene	390	U	U	8.9	195	390 ug/Kg
88-74-4	2-Nitroaniline	390	U	U	17	195	390 ug/Kg
131-11-3	Dimethylphthalate	240	U	JB	11	195	390 ug/Kg
208-96-8	Acenaphthylene	390	U	U	9.9	195	390 ug/Kg
606-20-2	2,6-Dinitrotoluene	390	U	U	16	195	390 ug/Kg
99-09-2	3-Nitroaniline	390	U	U	25	195	390 ug/Kg
83-32-9	Acenaphthene	390	U	U	11	195	390 ug/Kg
132-64-9	Dibenzofuran	390	U	U	15	195	390 ug/Kg
121-14-2	2,4-Dinitrotoluene	390	U	U	12	195	390 ug/Kg
84-66-2	Diethylphthalate	390	U	U	6.1	195	390 ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	390	U	U	21	195	390 ug/Kg
86-73-7	Fluorene	390	U	U	15	195	390 ug/Kg
100-01-6	4-Nitroaniline	390	U	U	51	195	390 ug/Kg
86-30-6	N-Nitrosodiphenylamine	390	U	U	9.4	195	390 ug/Kg
101-55-3	4-Bromophenyl-phenylether	390	U	U	7.6	195	390 ug/Kg
118-74-1	Hexachlorobenzene	390	U	U	16	195	390 ug/Kg
1912-24-9	Atrazine	390	U	U	21	195	390 ug/Kg
85-01-8	Phenanthrene	390	U	U	11	195	390 ug/Kg
120-12-7	Anthracene	390	U	U	8	195	390 ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/07/10
Project:	Provan	Date Received:	12/08/10
Client Sample ID:	RU-WRSV-1	SDG No.:	B4450
Lab Sample ID:	B4450-03	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	15
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067772.D	1	12/08/10	12/09/10	PB52795

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	390	U	8.6	195	390	ug/Kg
84-74-2	Di-n-butylphthalate	390	U	31	195	390	ug/Kg
206-44-0	Fluoranthene	390	U	7.9	195	390	ug/Kg
129-00-0	Pyrene	390	U	9.4	195	390	ug/Kg
85-68-7	Butylbenzylphthalate	390	U	19	195	390	ug/Kg
91-94-1	3,3-Dichlorobenzidine	390	U	25	195	390	ug/Kg
56-55-3	Benzo(a)anthracene	390	U	19	195	390	ug/Kg
218-01-9	Chrysene	390	U	18	195	390	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	54	J	14	195	390	ug/Kg
117-84-0	Di-n-octyl phthalate	390	U	4.5	195	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	390	U	13	195	390	ug/Kg
207-08-9	Benzo(k)fluoranthene	390	U	18	195	390	ug/Kg
50-32-8	Benzo(a)pyrene	390	U	8.5	195	390	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	390	U	13	195	390	ug/Kg
53-70-3	Dibenz(a,h)anthracene	390	U	11	195	390	ug/Kg
191-24-2	Benzo(g,h,i)perylene	390	U	16	195	390	ug/Kg
SURROGATES							
4165-60-0	Nitrobenzene-d5	83.6		30 - 150		84%	SPK: 100
321-60-8	2-Fluorobiphenyl	84.8		19 - 182		85%	SPK: 100
1718-51-0	Terphenyl-d14	87.5		24 - 191		88%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	76688	5.89				
1146-65-2	Naphthalene-d8	266780	8.38				
15067-26-2	Acenaphthene-d10	148572	12.35				
1517-22-2	Phenanthrene-d10	290954	15.34				
1719-03-5	Chrysene-d12	286048	19.8				
1520-96-3	Perylene-d12	265399	21.93				
TENTITIVE IDENTIFIED COMPOUNDS							
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	1200	AB			3.31	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/07/10
Project:	Provan	Date Received:	12/08/10
Client Sample ID:	RU-WRSV-1RE	SDG No.:	B4450
Lab Sample ID:	B4450-03RE	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	15
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067816.D	1	12/08/10	12/10/10	PB52795

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	390 UJ	U	20	195	390	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	390	U	19	195	390	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	390	U	16	195	390	ug/Kg
98-86-2	Acetophenone	390	U	12	195	390	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	390	U	20	195	390	ug/Kg
67-72-1	Hexachloroethane	390	U	18	195	390	ug/Kg
98-95-3	Nitrobenzene	390	U	15	195	390	ug/Kg
78-59-1	Isophorone	390	U	13	195	390	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	390	U	23	195	390	ug/Kg
91-20-3	Naphthalene	390	U	14	195	390	ug/Kg
106-47-8	4-Chloroaniline	390	U	28	195	390	ug/Kg
87-68-3	Hexachlorobutadiene	390	U	14	195	390	ug/Kg
105-60-2	Caprolactam	390	U	18	195	390	ug/Kg
91-57-6	2-Methylnaphthalene	390	U	9.9	195	390	ug/Kg
77-47-4	Hexachlorocyclopentadiene	390	U	9.5	195	390	ug/Kg
92-52-4	1,1-Biphenyl	390	U	15	195	390	ug/Kg
91-58-7	2-Chloronaphthalene	390	U	8.9	195	390	ug/Kg
88-74-4	2-Nitroaniline	390	U	17	195	390	ug/Kg
131-11-3	Dimethylphthalate	230 U	HB	11	195	390	ug/Kg
208-96-8	Acenaphthylene	390	U	9.9	195	390	ug/Kg
606-20-2	2,6-Dinitrotoluene	390	U	16	195	390	ug/Kg
99-09-2	3-Nitroaniline	390	U	25	195	390	ug/Kg
83-32-9	Acenaphthene	390	U	11	195	390	ug/Kg
132-64-9	Dibenzofuran	390	U	15	195	390	ug/Kg
121-14-2	2,4-Dinitrotoluene	390	U	12	195	390	ug/Kg
84-66-2	Diethylphthalate	390	U	6.1	195	390	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	390	U	21	195	390	ug/Kg
86-73-7	Fluorene	390	U	15	195	390	ug/Kg
100-01-6	4-Nitroaniline	390	U	51	195	390	ug/Kg
86-30-6	N-Nitrosodiphenylamine	390	U	9.4	195	390	ug/Kg
101-55-3	4-Bromophenyl-phenylether	390	U	7.6	195	390	ug/Kg
118-74-1	Hexachlorobenzene	390	U	16	195	390	ug/Kg
1912-24-9	Atrazine	390	U	21	195	390	ug/Kg
85-01-8	Phenanthrene	390	U	11	195	390	ug/Kg
120-12-7	Anthracene	390	U	8	195	390	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/07/10
Project:	Provan	Date Received:	12/08/10
Client Sample ID:	RU-WRSV-IRE	SDG No.:	B4450
Lab Sample ID:	B4450-03RE	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	15
Sample Wt/Vol:	30.05 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067816.D	1	12/08/10	12/10/10	PB52795

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	390	U	8.6	195	390	ug/Kg
84-74-2	Di-n-butylphthalate	390	U	31	195	390	ug/Kg
206-44-0	Fluoranthene	390	U	7.9	195	390	ug/Kg
129-00-0	Pyrene	390	U	9.4	195	390	ug/Kg
85-68-7	Butylbenzylphthalate	390	U	19	195	390	ug/Kg
91-94-1	3,3-Dichlorobenzidine	390	U	25	195	390	ug/Kg
56-55-3	Benzo(a)anthracene	390	U	19	195	390	ug/Kg
218-01-9	Chrysene	390	U	18	195	390	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	49	J	14	195	390	ug/Kg
117-84-0	Di-n-octyl phthalate	390	U	4.5	195	390	ug/Kg
205-99-2	Benzo(b)fluoranthene	390	U	13	195	390	ug/Kg
207-08-9	Benzo(k)fluoranthene	390	U	18	195	390	ug/Kg
50-32-8	Benzo(a)pyrene	390	U	8.5	195	390	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	390	U	13	195	390	ug/Kg
53-70-3	Dibenz(a,h)anthracene	390	U	11	195	390	ug/Kg
191-24-2	Benzo(g,h,i)perylene	390	U	16	195	390	ug/Kg
SURROGATES							
4165-60-0	Nitrobenzene-d5	80.6		30 - 150		81%	SPK: 100
321-60-8	2-Fluorobiphenyl	80.2		19 - 182		80%	SPK: 100
1718-51-0	Terphenyl-d14	88.3		24 - 191		88%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	60038	5.84				
1146-65-2	Naphthalene-d8	225564	8.32				
15067-26-2	Acenaphthene-d10	134584	12.29				
1517-22-2	Phenanthrene-d10	263865	15.3				
1719-03-5	Chrysene-d12	268632	19.76				
1520-96-3	Perylene-d12	244294	21.89				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/08/10
Project:	Provan	Date Received:	12/10/10
Client Sample ID:	RU-WOTSV-1	SDG No.:	B4450
Lab Sample ID:	B4450-05	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067874.D	10	12/10/10	12/14/10	PB52829

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	3700	UJ	200	1850	3700	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	3700	U	180	1850	3700	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	3700	U	150	1850	3700	ug/Kg
98-86-2	Acetophenone	3700	U	110	1850	3700	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	3700	U	190	1850	3700	ug/Kg
67-72-1	Hexachloroethane	3700	U	170	1850	3700	ug/Kg
98-95-3	Nitrobenzene	3700	U	140	1850	3700	ug/Kg
78-59-1	Isophorone	3700	U	120	1850	3700	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	3700	U	220	1850	3700	ug/Kg
91-20-3	Naphthalene	3700	U	130	1850	3700	ug/Kg
106-47-8	4-Chloroaniline	3700	U	260	1850	3700	ug/Kg
87-68-3	Hexachlorobutadiene	3700	U	140	1850	3700	ug/Kg
105-60-2	Caprolactam	3700	U	170	1850	3700	ug/Kg
91-57-6	2-Methylnaphthalene	3700	U	94	1850	3700	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3700	U	91	1850	3700	ug/Kg
92-52-4	1,1-Biphenyl	3700	U	140	1850	3700	ug/Kg
91-58-7	2-Chloronaphthalene	3700	U	85	1850	3700	ug/Kg
88-74-4	2-Nitroaniline	3700	U	170	1850	3700	ug/Kg
131-11-3	Dimethylphthalate	3700	U	100	1850	3700	ug/Kg
208-96-8	Acenaphthylene	2600	J	94	1850	3700	ug/Kg
606-20-2	2,6-Dinitrotoluene	3700	U	150	1850	3700	ug/Kg
99-09-2	3-Nitroaniline	3700	U	240	1850	3700	ug/Kg
83-32-9	Acenaphthene	3700	U	110	1850	3700	ug/Kg
132-64-9	Dibenzofuran	3700	U	150	1850	3700	ug/Kg
121-14-2	2,4-Dinitrotoluene	3700	U	110	1850	3700	ug/Kg
84-66-2	Diethylphthalate	3700	U	58	1850	3700	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	3700	U	200	1850	3700	ug/Kg
86-73-7	Fluorene	1100	J	140	1850	3700	ug/Kg
100-01-6	4-Nitroaniline	3700	U	490	1850	3700	ug/Kg
86-30-6	N-Nitrosodiphenylamine	3700	U	90	1850	3700	ug/Kg
101-55-3	4-Bromophenyl-phenylether	3700	U	73	1850	3700	ug/Kg
118-74-1	Hexachlorobenzene	3700	U	150	1850	3700	ug/Kg
1912-24-9	Atrazine	3700	U	200	1850	3700	ug/Kg
85-01-8	Phenanthrene	9100		100	1850	3700	ug/Kg
120-12-7	Anthracene	2400	J	76	1850	3700	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	12/08/10
Project:	Provan	Date Received:	12/10/10
Client Sample ID:	RU-WOTSV-1	SDG No.:	B4450
Lab Sample ID:	B4450-05	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067874.D	10	12/10/10	12/14/10	PB52829

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	3700	U	82	1850	3700	ug/Kg
84-74-2	Di-n-butylphthalate	3700	U	290	1850	3700	ug/Kg
206-44-0	Fluoranthene	17000		75	1850	3700	ug/Kg
129-00-0	Pyrene	16000		90	1850	3700	ug/Kg
85-68-7	Butylbenzylphthalate	3700	U	180	1850	3700	ug/Kg
91-94-1	3,3-Dichlorobenzidine	3700	U	240	1850	3700	ug/Kg
56-55-3	Benzo(a)anthracene	9000		180	1850	3700	ug/Kg
218-01-9	Chrysene	8500		170	1850	3700	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	3700	U	130	1850	3700	ug/Kg
117-84-0	Di-n-octyl phthalate	3700	U	43	1850	3700	ug/Kg
205-99-2	Benzo(b)fluoranthene	9600		120	1850	3700	ug/Kg
207-08-9	Benzo(k)fluoranthene	3700		180	1850	3700	ug/Kg
50-32-8	Benzo(a)pyrene	8000		81	1850	3700	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	4800		120	1850	3700	ug/Kg
53-70-3	Dibenz(a,h)anthracene	1100	J	110	1850	3700	ug/Kg
191-24-2	Benzo(g,h,i)perylene	5300		150	1850	3700	ug/Kg

SURROGATES

4165-60-0	Nitrobenzene-d5	73.2		30 - 150		73%	SPK: 100
321-60-8	2-Fluorobiphenyl	71.9		19 - 182		72%	SPK: 100
1718-51-0	Terphenyl-d14	69		24 - 191		69%	SPK: 100

INTERNAL STANDARDS

3855-82-1	1,4-Dichlorobenzene-d4	89251	5.79				
1146-65-2	Naphthalene-d8	313311	8.27				
15067-26-2	Acenaphthene-d10	180629	12.23				
1517-22-2	Phenanthrene-d10	354399	15.25				
1719-03-5	Chrysene-d12	340577	19.7				
1520-96-3	Perylene-d12	312643	21.84				

TENTATIVE IDENTIFIED COMPOUNDS

2531-84-2	Phenanthrene, 2-methyl-	2200	J			16.16	ug/Kg
832-69-9	Phenanthrene, 1-methyl-	2500	J			16.2	ug/Kg
203-64-5	4H-Cyclopenta[def]phenanthrene	3700	J			16.33	ug/Kg
779-02-2	Anthracene, 9-methyl-	1900	J			16.38	ug/Kg
612-94-2	Naphthalene, 2-phenyl-	2200	J			16.7	ug/Kg
781-43-1	9,10-Dimethylanthracene	2400	J			17.12	ug/Kg
	unknown	1400	J			17.16	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/08/10
Project:	Provan	Date Received:	12/10/10
Client Sample ID:	RU-WOTSV-I	SDG No.:	B4450
Lab Sample ID:	B4450-05	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067874.D	10	12/10/10	12/14/10	PB52829

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
1576-67-6	Phenanthrene, 3,6-dimethyl-	1200	J			17.25	ug/Kg
238-84-6	11H-Benzo[a]fluorene	1300	J			18.29	ug/Kg
192-97-2	Benzo[e]pyrene	2500	J			21.46	ug/Kg
111272-10-7	Pentacyclo[6.6.5.0(2,7).0(9,14).0(1400	J			21.53	ug/Kg
198-55-0	Perylene	5900	J			21.69	ug/Kg
1000151-82-0	Boroxin, ethyldiphenyl-	1400	J			22.48	ug/Kg
82-43-9	9,10-Anthracenedione, 1,8-dichloro	1400	J			23.37	ug/Kg
191-26-4	Dibenzo[def,mno]chrysene	1400	J			24.33	ug/Kg

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/08/10
Project:	Provan	Date Received:	12/10/10
Client Sample ID:	RU-WOTSV-IRE	SDG No.:	B4450
Lab Sample ID:	B4450-05RE	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067977.D	10	12/10/10	12/17/10	PB52829

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	3700	UJ	200	1850	3700	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	3700	U	180	1850	3700	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	3700	U	150	1850	3700	ug/Kg
98-86-2	Acetophenone	3700	U	110	1850	3700	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	3700	U	190	1850	3700	ug/Kg
67-72-1	Hexachloroethane	3700	U	170	1850	3700	ug/Kg
98-95-3	Nitrobenzene	3700	U	140	1850	3700	ug/Kg
78-59-1	Isophorone	3700	U	120	1850	3700	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	3700	U	220	1850	3700	ug/Kg
91-20-3	Naphthalene	3700	U	130	1850	3700	ug/Kg
106-47-8	4-Chloroaniline	3700	U	260	1850	3700	ug/Kg
87-68-3	Hexachlorobutadiene	3700	U	140	1850	3700	ug/Kg
105-60-2	Caprolactam	3700	U	170	1850	3700	ug/Kg
91-57-6	2-Methylnaphthalene	3700	U	94	1850	3700	ug/Kg
77-47-4	Hexachlorocyclopentadiene	3700	U	91	1850	3700	ug/Kg
92-52-4	1,1-Biphenyl	3700	U	140	1850	3700	ug/Kg
91-58-7	2-Chloronaphthalene	3700	U	85	1850	3700	ug/Kg
88-74-4	2-Nitroaniline	3700	U	170	1850	3700	ug/Kg
131-11-3	Dimethylphthalate	3700	U	100	1850	3700	ug/Kg
208-96-8	Acenaphthylene	3000	J	94	1850	3700	ug/Kg
606-20-2	2,6-Dinitrotoluene	3700	U	150	1850	3700	ug/Kg
99-09-2	3-Nitroaniline	3700	U	240	1850	3700	ug/Kg
83-32-9	Acenaphthene	490	J	110	1850	3700	ug/Kg
132-64-9	Dibenzofuran	3700	U	150	1850	3700	ug/Kg
121-14-2	2,4-Dinitrotoluene	3700	U	110	1850	3700	ug/Kg
84-66-2	Diethylphthalate	3700	U	58	1850	3700	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	3700	U	200	1850	3700	ug/Kg
86-73-7	Fluorene	1300	J	140	1850	3700	ug/Kg
100-01-6	4-Nitroaniline	3700	U	490	1850	3700	ug/Kg
86-30-6	N-Nitrosodiphenylamine	3700	U	90	1850	3700	ug/Kg
101-55-3	4-Bromophenyl-phenylether	3700	U	73	1850	3700	ug/Kg
118-74-1	Hexachlorobenzene	3700	U	150	1850	3700	ug/Kg
1912-24-9	Atrazine	3700	U	200	1850	3700	ug/Kg
85-01-8	Phenanthrene	10000		100	1850	3700	ug/Kg
120-12-7	Anthracene	2600	J	76	1850	3700	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/08/10
Project:	Provan	Date Received:	12/10/10
Client Sample ID:	RU-WOTSV-IRE	SDG No.:	B4450
Lab Sample ID:	B4450-05RE	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE067977.D	10	12/10/10	12/17/10	PB52829

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	3700	U	82	1850	3700	ug/Kg
84-74-2	Di-n-butylphthalate	3700	U	290	1850	3700	ug/Kg
206-44-0	Fluoranthene	19000		75	1850	3700	ug/Kg
129-00-0	Pyrene	18000		90	1850	3700	ug/Kg
85-68-7	Butylbenzylphthalate	3700	U	180	1850	3700	ug/Kg
91-94-1	3,3-Dichlorobenzidine	3700	U	240	1850	3700	ug/Kg
56-55-3	Benzo(a)anthracene	9800		180	1850	3700	ug/Kg
218-01-9	Chrysene	9800		170	1850	3700	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	3700	U	130	1850	3700	ug/Kg
117-84-0	Di-n-octyl phthalate	3700	U	43	1850	3700	ug/Kg
205-99-2	Benzo(b)fluoranthene	11000		120	1850	3700	ug/Kg
207-08-9	Benzo(k)fluoranthene	3800		180	1850	3700	ug/Kg
50-32-8	Benzo(a)pyrene	9000		81	1850	3700	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	5300		120	1850	3700	ug/Kg
53-70-3	Dibenz(a,h)anthracene	1200	J	110	1850	3700	ug/Kg
191-24-2	Benzo(g,h,i)perylene	5700		150	1850	3700	ug/Kg
SURROGATES							
4165-60-0	Nitrobenzene-d5	76.3		30 - 150		76%	SPK: 100
321-60-8	2-Fluorobiphenyl	77.3		19 - 182		77%	SPK: 100
1718-51-0	Terphenyl-d14	78		24 - 191		78%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	93939	5.72				
1146-65-2	Naphthalene-d8	349362	8.19				
15067-26-2	Acenaphthene-d10	204333	12.13				
1517-22-2	Phenanthrene-d10	409546	15.16				
1719-03-5	Chrysene-d12	408141	19.61				
1520-96-3	Perylene-d12	367703	21.74				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

APPENDIX C

91 Fulton Street, Boonton, NJ 07005 • (973) 334-0003

B4450
CHAIN OF CUSTODY
Page 1 of 1

[illegible]

LABORATORY COPY

898

* Samples are on hold.

FIRST ELECTRONICS ENVIRONMENT

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CHAIN OF CUSTODY

Page 7 of 7[illegible]

~~X~~ Samples are on hold.

998

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Page _____ of _____

LABORATORY COPY

900

* Samples are in B4372.

Premier Environmental Services

DATA VALIDATION SUMMARY

FORMER PROVAN FORD SITE

VOLATILE ORGANIC ANALYSES/BASE NEUTRAL
SEMIVOLATILE ORGANIC ANALYSES
(EPA METHOD 8260B/8270B)

IN NON-AQUEOUS SAMPLES

CHEMTECH
MOUNTAINSIDE, NEW JERSEY

PROJECT NUMBER:

B4601

April, 2011

Prepared for
First Environment, Incorporated
Boonton, New Jersey

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566
(516) 223-9761 • FAX (516) 223-0983

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	Volatile Organic Compounds (VOC's) Base Neutral Semivolatile Organic Compounds (BN-SVOA's)
SITE:	Former Provan Ford Site
CONTRACT LAB:	Chemtech Mountainside, New Jersey
PROJECT NO.:	B4401
REVIEWER:	Renee Cohen
DATE REVIEW COMPLETED:	April, 2011
MATRIX:	Non-Aqueous

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary Review. In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. 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 seventeen (17) non-aqueous samples. The samples in this data set were collected December 16, 2010, December 17, 2010 and December 22, 2010 and received at Chemtech located in Mountainside, NJ on December 20, 2010 and December 23, 2010. Samples were collected and shipped to the laboratory for the analyses on the COC documents that accompanied the samples to the laboratory. The samples were analyzed for Volatile Organic Analytes (VOA) and Base Neutral Semivolatile Organic Analytes (SVOA) as marked on the Chain of Custody documents that accompanied the samples to the laboratory.

ORGANIC DATA ASSESSMENT

1. OVERVIEW:

Samples associated with this data set were analyzed for Volatile Organic Analytes (VOA), Semivolatile Organic Analytes as noted by the COC documentation that accompanied the sample set to the laboratory. All analyses were performed in accordance with USEPA Test Methods for the Evaluation of Solid Waste (SW846) as well as the NYSDC ASP methodologies. Data validation will utilize the validation guidelines listed above, however, QA/QC requirements of the NYS DEC ASP (12/95) will supersede CLP requirements in terms of calibration (where applicable) and holding time. Chemtech generated a stand-alone report for each fraction in compliance with the NYS DEC ASP Category B deliverables. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report B4601 consists of seventeen (17) non-aqueous samples. The laboratory sample ID and field sample ID's are summarized in Table 1 of this report.

A copy of the COC documents associated with this data set is located in Appendix C of this report.

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 NYS DEC ASP criteria specifies holding times for solid and soil samples. These holding times are based on Validated Time of Sample Receipt (VTSR). The holding times cited in the NY ASP were reviewed. EPA SW846 methods cite holding times based on collection date. The technical holding time for properly preserved aqueous and non aqueous Volatile Organic samples is fourteen (14) days.

Proper preservation of a soil sample is refrigeration at 4 degrees C until analysis. The holding time criteria for volatile organic sample analysis is that properly preserved samples be analyzed within ten (10) days of VTSR. The holding time criteria for semivolatile organic samples is that the extraction is to be completed within five (5) days of VTSR and that analysis of the extract is be completed within forty (40) days. The technical holding time for the extraction of non-aqueous samples for semivolatile organic analytes is fourteen (14) days from collection.

The sample in this data set were collected December 16, 2010 through December 22, 2010 and received at the laboratory December 20, 2010 and December 23, 2010.

Volatile Organic Analyses (EPA Method 8260B) - All Volatile Organic sample analyses and dilution analyses associated with this data set were completed by December 29, 2010. All holding times were met in this data set.

Semivolatile Organic Analyses (EPA Method 8270C) – The samples in laboratory report B4450 were analyzed for Base Neutral SVOA's. One (1) sample was marked for Base Neutral SVOA analyses on the COC documents that accompanied the samples to the laboratory. The sample was extracted in one (1) batch on December 21, 2010. The sample extract analysis was completed on December 22, 2010. The sample and associated QC were extracted and analyzed within the method holding time.

ORGANIC DATA ASSESSMENT

3. SURROGATES:

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with four (4) method recommended surrogate compounds. These include 1,2-Dichloroethane-d4, Dibromofluoromethane, Toluene-d8 and 4-Bromofluorobenzene prior to analysis to evaluate the overall laboratory performance and the efficiency of the analytical technique. The samples to be analyzed for Semivolatile Organic Analytes (SVOA) are fortified with the surrogate compounds 2-Fluorophenol, Phenol-d5, 2,4,6-Tribromophenol, Nitrobenzene-d5, 2-Fluorobiphenyl and Terphenyl-d14 prior to sample extraction to evaluate the overall laboratory performance and the efficiency of the analytical technique.

Volatile Organic Analyses (EPA Method 8260B) – Each of the samples in this data set was fortified with the method specified surrogate compounds. The laboratory reported in-house limits for the surrogate recovery limits. The surrogate percent recoveries met QC criteria in all low level soil sample analyses and medium level soil sample analyses associated with this data set.

Semivolatile Organic Analyses (EPA Method 8270C) - The percent recovery of each surrogate met QC criteria in the sample and QC samples associated with this data set.

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.

Volatile Organic Analyses (EPA Method 8260B) – MS/MSD analysis was not marked on the COC documents that accompanied the samples to the laboratory. Site specific MS/MSD analysis was reported on sample WOT-S-2 (15-15.5) (B4601-09). All percent recoveries and the relative percent difference of each target analyte met QC criteria.

The laboratory prepared and analyzed a one (1) Laboratory Control Sample with each of the sample batch in this data set. The laboratory fortified each with a full component spike solution. Chemtech used a "CLP Like" QC summary form to report the data results. In-house QC limits were applied for each analyte. The percent recovery and RPD of each target analyte met QC criteria in each of the LCS samples with the exception of the following:

LCS ID	Analyte	Recovery
BSF1221M2	Methylcyclohexane	Low
	Dibromochloromethane	High
	Bromoform	High

Methylcyclohexane has been qualified "UJ/J" estimated in samples PS-S-9 (11.0-11.5) (B4601-04) and PS-S-10 (11.5-12.0) (B4601-05). Dibromochloromethane and Bromoform were not detected at these sample points therefore no action was taken. Qualified data result pages are located in Appendix B of this report.

ORGANIC DATA ASSESSMENT

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD (cont'd):

Semivolatile Organic Analyses (EPA Method 8270C) –Site specific MS/MSD was performed on sample RU-PTSV-1 (B4601-03). The MS and MSD sample were fortified with all target analytes. All percent recoveries and RPD's met QC criteria with the exception of the RPD of Phenanthrene. The percent recovery met QC criteria in both the MS and MSD sample. Sample data was not qualified based on the results of the MS/MSD data alone.

The laboratory prepared and analyzed one (1) Laboratory Control Sample (LCS) with each sample batch. The laboratory fortified the LCS using a full component (Base Neutral compound)spike solution. Chemtech used a "CLP Like" QC summary form to report the LCS data results. In-house QC limits were utilized. All percent recoveries met QC criteria in the LCS sample associated with this data set.

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.

A) Method Blank contamination

Volatile Organic Analyses (EPA Method 8260B) – Three (3) low level soil method blanks are associated with this data set. Each of these method blank samples was free from contamination of target analytes. Two (2) medium level soil method blanks are associated with this data set. Each of these method blank samples was free from contamination of target analytes.

Semivolatile Organic Analyses (EPA Method 8270C) – One (1) method blank sample is associated with this data set. The method blank sample was free from contamination of target and non target analytes with the exception Dimethylphthalate (68 J ug/kg) and two (2) TIC's at retention time 1.6 ad 3.13. of that listed below:

Sample ID	Date of Extraction	Analyte	Conc (Retention Time)
PB52795B	12/8/10	Dimethylphthalate	75 J ug/kg
		ACP	3.28
		Unknown	17.39
PB52829B	12/10/10	Dimethylphthalate	76 J ug/kg
		ACP	3.25
		Unknown	16.51

When these analytes were detected in the associated field samples they have been negated and qualified "U".

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

B) Field or Equipment Rinse Blank (ERB) contamination

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

C) Trip Blank contamination

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

ORGANIC DATA ASSESSMENT

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. Region USEPA and Region II criteria is the same for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses is the same, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Two (2) low level soil initial calibration curve analyses are associated with the samples in this data set. The laboratory performed a multilevel calibration on December 21, 2010 (Inst. VOAI). The laboratory summarized the relative response factor (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.

An additional low level initial calibration curve analysis is associated with this data set. This curve analysis was performed December 22, 2010 (Inst. K). The laboratory summarized the relative response factor (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.

Two (2) continuing calibration standard analyses are associated with this curve analysis. The RRF of all target compounds met QC criteria in each of these low level CCV standard analyses.

Two (2) medium level soil sample initial calibration curve analyses are associated with the sample in this data set. The laboratory performed a multilevel calibration on December 14, 2010 (Inst. VOAF). The laboratory summarized the relative response factor (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.

One (1) continuing calibration standard is associated with this curve analysis. The RRF of all target compounds met QC criteria in this medium level CCV standard analysis.

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

A) RESPONSE FACTOR (cont'd):

An additional medium level initial calibration curve analysis is associated with this data set. This curve analysis was performed December 14, 2010 (Inst. H). The laboratory summarized the relative response factor (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.

One (1) continuing calibration standard is associated with this curve analysis. The RRF of all target compounds met QC criteria in this medium level CCV standard analysis.

Semivolatile Organic Analyses (EPA Method 8270C) – One (1) initial calibration curve analysis is associated with the samples in this data set. Initial calibration curve analyses were performed on December 15, 2010 (Inst. BNAE). The laboratory summarized the relative response factor (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.

One (1) continuing calibration standard is associated with this curve analysis. The RRF of all target compounds met QC criteria in this CCV standard analysis.

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

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

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. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. 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. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Two (2) low level soil sample initial calibration curve analysis is associated with the sample in this data set. The laboratory performed a multilevel calibration on December 21, 2010 (Inst. VOAI). 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 the initial calibration curve analysis.

An additional low level multilevel calibration curve was analyzed on December 22, 2010 (Inst. VOAK). 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 the initial calibration curve analysis.

Two (2) continuing calibration verification (CCV) standards are associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria in this CCV standard analysis with the exception of that listed below.

Date	File ID	Analyte	%Difference
12/23/10	VK042667	Acetone	27.5
12/29/10	VK042737	Acetone	28.4

Acetone has been qualified "U/J" estimated in each of the samples associated with this CCV standard.

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

ORGANIC DATA ASSESSMENT

6. GC/MS CALIBRATION:

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D) (cont'd)

Two (2) medium level soil sample initial calibration curve analyses are associated with the samples in this data set. One (1) medium level initial calibration curve analysis was performed on December 14, 2010 (Inst. F). 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 with the exception of Methylcyclohexane (34.35%) met QC criteria in the initial calibration curve analysis.

One (1) continuing calibration verification (CCV) standard is associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria in this CCV standard analysis with the exception of that listed below.

Date	File ID	Analyte	%Difference
12/22/10	VF025200	Carbon Tetrachloride	28.8
		Methylcyclohexane	37.5
		Bromoform	30.3

Carbon Tetrachloride and Bromoform have been qualified "U/J" estimated in each of the samples associated with this CCV standard.

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

An additional medium level initial calibration curve analysis was performed on December 14, 2010 (Inst. H). 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 with the exception of Methylcyclohexane (34.35%) met QC criteria in the initial calibration curve analysis.

One (1) continuing calibration verification (CCV) standard is associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria in this CCV standard analysis.

Semivolatile Organic Analyses (EPA Method 8270C) – One (1) initial calibration curve analysis is associated with the sample in this data set. Initial calibration curve analysis was performed December 15, 2010 (Inst E). 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 the initial calibration curve analysis.

One (1) continuing calibration standard analyses are associated with this curve analysis. All %Difference criteria for all Base Neutral target analytes were met in these continuing calibration standard analyses.

ORGANIC DATA ASSESSMENT

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 tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses/Semivolatile Organic analyses - 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.

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.

Volatile Organic Analyses (EPA Method 8260B) - All samples were spiked with the internal standards Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 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.

Semivolatile Organic Analyses (EPA Method 8270C) - All samples were spiked with the internal standards 1,4-Dichlorobenzene-d4, Naphthalene-d8, Acenaphthene-d10, Phenanthrene-d10, Chrysene-d12 and Perylene-d12 prior to sample analysis. The area counts and retention time shift of each internal standard was reported. All Internal Standard criteria were met in the samples associated with this data set.

ORGANIC DATA ASSESSMENT

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.

Volatile Organic Analyses (EPA Method 8260B) – Sixteen (16) non-aqueous samples are associated with this data set. The sample was analyzed via Method 8260B. Tentatively Identified Compounds (TIC's) when detected are reported for each sample. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

The sample chromatograms associated with this sample set indicated a hump as well as the presence of non target compounds at each sample point. If dilution analysis was performed this dilution analysis was able to reduce the matrix interference. The dilution analysis was necessary to report the target analytes within the concentration of the GC/MS.

Sample PT-S-9 (11.0-11.5) (B4610-04) was prepared and analyzed as medium level soil samples due to the presence of target and non-target compounds detected at this sample point.

Sample PT-S-10 (11.5-12.0) (B4610-05) was prepared and analyzed as medium level soil samples due to the presence of target and non-target compounds detected at this sample point.

Sample WOT-S-1 (14.5-15) (B4601-07) was initially analyzed as a low level soil sample. The concentration of cis 1,2-Dichloroethene exceeded the concentration range of the GC/MS. This sample was reanalyzed as a medium level soil sample to report the concentration of cis 1,2-Dichloroethene (670 D ug/kg) detected at this sample point.

Sample WOT-S-3 (10-10.5) (B4601-11) was prepared and analyzed as a medium level soil sample. The concentration of Trichloroethene and Tetrachloroethene exceeded the concentration range of the GC/MS. This sample was reanalyzed with an additional 1:50 time dilution factor to report the concentration of Trichloroethene (74000 D ug/kg) and Tetrachloroethene (170000 D ug/kg) detected at this sample point.

Sample WOT-S-4 (13.5-14) (B4601-14) was initially analyzed as a low level soil sample. The concentration of cis 1,2-Dichloroethene and Trichloroethene exceeded the concentration range of the GC/MS. This sample was reanalyzed as a medium level soil sample to report the concentration of cis 1,2-Dichloroethene (2000 D ug/kg) and Trichloroethene (1300 D ug/kg) detected at this sample point.

Sample WOT-S-7 (15.5-16) (B4601-17) was prepared and analyzed as a medium level soil sample to report the concentration of target analytes detected at this sample point.

Semivolatile Organic Analyses (SW846 Method 8270C) – One (1) non-aqueous sample was marked for the analysis of Base Neutral SVOA analytes. The samples were analyzed in accordance with Method 8270C and reported the Base Neutral compound list. Tentatively Identified Compounds (TIC's) when detected were reported with this data set. All soil sample results are reported on a dry weight basis. Sample reporting limits are based on the sample weight/volume utilized to analyze the sample.

ORGANIC DATA ASSESSMENT

10. FIELD DUPLICATE ANALYSES:

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. Soil samples have a greater variability than aqueous samples. Percent moisture and reported dilution factors also tend to lead to greater variability in RPD. Analytes reported above the reporting limit are listed. Data was not qualified based on the calculated RPD of field duplicate sample analyses.

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 DUSR 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. Soil sample results are reported on a dry weight basis. 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.

TABLE 1

FIELD SAMPLE ID**LABORATORY ID**

PT-B-5 (15.0-15.5)
RU-PTV-1
RU-PTSV-1
PT-S-9 (11-11.5)
PT-S-10V-1 (11.5-12)
WOT-B-1 (15-15.5)
WOT-S-1 (14.5-15)
WOT-S-1 (10-10.5)
WOT-S-2 (15-15.5)
WOT-S-3 (14-14.5)
WOT-S-3 (10-10.5)
WOT-B-2 (15-15.5)
WOT-S-6 (5-5.5)
WOT-S-4 (13.5-14)
WOT-S-4 (11-11.5)
WOT-S-5 (12-12.5)
WOT-S-7 (15.5-16)

B4601-01
B4601-02
B4601-03
B4601-04
B4601-05
B4601-06
B4601-07
B4601-08
B4601-09
B4601-10
B4601-11
B4601-12
B4601-13
B4601-14
B4601-15
B4601-16
B4601-17

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

Report of Analysis

Client:	First Environment	Date Collected:	12/16/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	PT-B-5(15.0-15.5)	SDG No.:	B4601
Lab Sample ID:	B4601-01	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042681.D	1		12/23/10	VK122310

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.4	U	0.84	3.2	6.4	ug/Kg
74-87-3	Chloromethane	6.4	U	1.1	3.2	6.4	ug/Kg
75-01-4	Vinyl Chloride	6.4	U	1.6	3.2	6.4	ug/Kg
74-83-9	Bromomethane	6.4	U	3.1	3.2	6.4	ug/Kg
75-00-3	Chloroethane	6.4	U	1.8	3.2	6.4	ug/Kg
75-69-4	Trichlorofluoromethane	6.4	U	1.7	3.2	6.4	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.4	U	1.7	3.2	6.4	ug/Kg
75-35-4	1,1-Dichloroethene	6.4	U	1.9	3.2	6.4	ug/Kg
67-64-1	Acetone	32	U	3.9	16	32	ug/Kg
75-15-0	Carbon Disulfide	6.4	U	1.4	3.2	6.4	ug/Kg
1634-04-4	Methyl tert-butyl Ether	1.5	J	1.2	3.2	6.4	ug/Kg
79-20-9	Methyl Acetate	6.4	U	1.9	3.2	6.4	ug/Kg
75-09-2	Methylene Chloride	6.4	U	1.8	3.2	6.4	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.4	U	0.89	3.2	6.4	ug/Kg
75-34-3	1,1-Dichloroethane	6.4	U	1.2	3.2	6.4	ug/Kg
110-82-7	Cyclohexane	6.4	U	1.3	3.2	6.4	ug/Kg
78-93-3	2-Butanone	32	U	4	16	32	ug/Kg
56-23-5	Carbon Tetrachloride	6.4	U	1.3	3.2	6.4	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.4	U	1.1	3.2	6.4	ug/Kg
67-66-3	Chloroform	6.4	U	0.95	3.2	6.4	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.4	U	1.1	3.2	6.4	ug/Kg
108-87-2	Methylcyclohexane	6.4	U	1.4	3.2	6.4	ug/Kg
71-43-2	Benzene	6.4	U	0.49	3.2	6.4	ug/Kg
107-06-2	1,2-Dichloroethane	6.4	U	0.82	3.2	6.4	ug/Kg
79-01-6	Trichloroethene	6.4	U	1.1	3.2	6.4	ug/Kg
78-87-5	1,2-Dichloropropane	6.4	U	0.33	3.2	6.4	ug/Kg
75-27-4	Bromodichloromethane	6.4	U	0.8	3.2	6.4	ug/Kg
108-10-1	4-Methyl-2-Pentanone	32	U	3.8	16	32	ug/Kg
108-88-3	Toluene	6.4	U	0.82	3.2	6.4	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.4	U	1	3.2	6.4	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.4	U	0.92	3.2	6.4	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.4	U	1.2	3.2	6.4	ug/Kg
591-78-6	2-Hexanone	32	U	5	16	32	ug/Kg
124-48-1	Dibromochloromethane	6.4	U	0.69	3.2	6.4	ug/Kg
106-93-4	1,2-Dibromoethane	6.4	U	0.82	3.2	6.4	ug/Kg



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Report of Analysis

Client: First Environment

Date Collected: 12/16/10

Project: Provan

Date Received: 12/20/10

Client Sample ID: PT-B-5(15.0-15.5)

SDG No.: B4601

Lab Sample ID: B4601-01

Matrix: SOIL

Analytical Method: SW8260B

% Moisture: 22

Sample Wt/Vol: 4.99 Units: g

Final Vol: 5000 uL

Soil Aliquot Vol: uL

Test: VOC-TCLVOA-10

File ID/Qc Batch: VK042681.D

Dilution: 1

Prep Date

Date Analyzed

Prep Batch ID

VK042681.D

1

12/23/10

VK122310

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.4	U	1.3	3.2	6.4	ug/Kg
108-90-7	Chlorobenzene	6.4	U	0.64	3.2	6.4	ug/Kg
100-41-4	Ethyl Benzene	6.4	U	0.8	3.2	6.4	ug/Kg
179601-23-1	m/p-Xylenes	13	U	0.92	6.5	13	ug/Kg
95-47-6	o-Xylene	6.4	U	0.87	3.2	6.4	ug/Kg
100-42-5	Styrene	6.4	U	0.58	3.2	6.4	ug/Kg
75-25-2	Bromoform	6.4	U	0.95	3.2	6.4	ug/Kg
98-82-8	Isopropylbenzene	6.4	U	0.62	3.2	6.4	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.4	U	0.59	3.2	6.4	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.4	U	0.48	3.2	6.4	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.4	U	0.53	3.2	6.4	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.4	U	0.8	3.2	6.4	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.4	U	1.1	3.2	6.4	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.4	U	0.9	3.2	6.4	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	47.3		55 - 158		95%	SPK: 50
1868-53-7	Dibromofluoromethane	54.2		53 - 156		108%	SPK: 50
2037-26-5	Toluene-d8	48.8		68 - 122		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.3		25 - 144		101%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	172009	3.19				
540-36-3	1,4-Difluorobenzene	227340	3.57				
3114-55-4	Chlorobenzene-d5	242105	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	162700	8.59				
TENTITIVE IDENTIFIED COMPOUNDS							
95-63-6	1,2,4-Trimethylbenzene	2.9	J			8.29	ug/Kg
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11	J			9.74	ug/Kg
91-20-3	Naphthalene	26	J			10.26	ug/Kg
000091-57-6	Naphthalene, 2-methyl-	18	J			11	ug/Kg
000264-09-5	Benzocycloheptatriene	18	J			11.09	ug/Kg
000575-43-9	Naphthalene, 1,6-dimethyl-	10	J			11.62	ug/Kg
000582-16-1	Naphthalene, 2,7-dimethyl-	18	J			11.71	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/16/10	
Project:	Provan	Date Received:	12/20/10	
Client Sample ID:	PT-B-5(15.0-15.5)	SDG No.:	B4601	
Lab Sample ID:	B4601-01	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	22	
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042681.D	1		12/23/10	VK122310

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
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U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/17/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	PT-S-9(11.0-11.5)	SDG No.:	B4601
Lab Sample ID:	B4601-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	16
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025206.D	1		12/22/10	VF122110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	590	U	65	295	590	ug/Kg
74-87-3	Chloromethane	590	U	64	295	590	ug/Kg
75-01-4	Vinyl Chloride	590	U	40	295	590	ug/Kg
74-83-9	Bromomethane	590	U	73	295	590	ug/Kg
75-00-3	Chloroethane	590	U	78	295	590	ug/Kg
75-69-4	Trichlorofluoromethane	590	U	41	295	590	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	590	U	53	295	590	ug/Kg
75-35-4	1,1-Dichloroethene	590	U	56	295	590	ug/Kg
67-64-1	Acetone	3000	U	330	1500	3000	ug/Kg
75-15-0	Carbon Disulfide	590	U	64	295	590	ug/Kg
1634-04-4	Methyl tert-butyl Ether	590	U	41	295	590	ug/Kg
79-20-9	Methyl Acetate	590	U	98	295	590	ug/Kg
75-09-2	Methylene Chloride	590	U	49	295	590	ug/Kg
156-60-5	trans-1,2-Dichloroethene	590	U	49	295	590	ug/Kg
75-34-3	1,1-Dichloroethane	590	U	43	295	590	ug/Kg
110-82-7	Cyclohexane	340	J	65	295	590	ug/Kg
78-93-3	2-Butanone	3000	U	160	1500	3000	ug/Kg
56-23-5	Carbon Tetrachloride	590 UJ	U	73	295	590	ug/Kg
156-59-2	cis-1,2-Dichloroethene	590	U	41	295	590	ug/Kg
67-66-3	Chloroform	590	U	40	295	590	ug/Kg
71-55-6	1,1,1-Trichloroethane	590	U	47	295	590	ug/Kg
108-87-2	Methylcyclohexane	1900 J	U	80	295	590	ug/Kg
71-43-2	Benzene	590	U	38	295	590	ug/Kg
107-06-2	1,2-Dichloroethane	590	U	57	295	590	ug/Kg
79-01-6	Trichloroethene	590	U	33	295	590	ug/Kg
78-87-5	1,2-Dichloropropane	590	U	54	295	590	ug/Kg
75-27-4	Bromodichloromethane	590	U	43	295	590	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3000	U	250	1500	3000	ug/Kg
108-88-3	Toluene	590	U	44	295	590	ug/Kg
10061-02-6	t-1,3-Dichloropropene	590	U	34	295	590	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	590	U	37	295	590	ug/Kg
79-00-5	1,1,2-Trichloroethane	590	U	45	295	590	ug/Kg
591-78-6	2-Hexanone	3000	U	230	1500	3000	ug/Kg
124-48-1	Dibromochloromethane	590	U	62	295	590	ug/Kg
106-93-4	1,2-Dibromoethane	590	U	49	295	590	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/17/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	PT-S-9(11.0-11.5)	SDG No.:	B4601
Lab Sample ID:	B4601-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	16
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025206.D	1		12/22/10	VF122110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	590	U	32	295	590	ug/Kg
108-90-7	Chlorobenzene	590	U	58	295	590	ug/Kg
100-41-4	Ethyl Benzene	4700		63	295	590	ug/Kg
179601-23-1	m/p-Xylenes	15000		110	600	1200	ug/Kg
95-47-6	o-Xylene	73	J	51	295	590	ug/Kg
100-42-5	Styrene	590	U	43	295	590	ug/Kg
75-25-2	Bromoform	590	U	56	295	590	ug/Kg
98-82-8	Isopropylbenzene	850		53	295	590	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	590	U	37	295	590	ug/Kg
541-73-1	1,3-Dichlorobenzene	590	U	51	295	590	ug/Kg
106-46-7	1,4-Dichlorobenzene	590	U	38	295	590	ug/Kg
95-50-1	1,2-Dichlorobenzene	590	U	53	295	590	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	590	U	54	295	590	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	590	U	73	295	590	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	45.5		55 - 158		91%	SPK: 50
1868-53-7	Dibromofluoromethane	32.4		53 - 156		65%	SPK: 50
2037-26-5	Toluene-d8	46.9		68 - 122		94%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.5		25 - 144		95%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	1036590	3.24
540-36-3	1,4-Difluorobenzene	1988490	3.65
3114-55-4	Chlorobenzene-d5	1912940	6.55
3855-82-1	1,4-Dichlorobenzene-d4	1101630	8.98

TENTATIVE IDENTIFIED COMPOUNDS

000592-27-8	Heptane, 2-methyl-	5500	J		4.21	ug/Kg
002216-34-4	Octane, 4-methyl-	7200	J		5.98	ug/Kg
103-65-1	n-propylbenzene	4400	J		8.1	ug/Kg
000611-14-3	Benzene, 1-ethyl-2-methyl-	23000	J		8.21	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	8800	J		8.31	ug/Kg
000620-14-4	Benzene, 1-ethyl-3-methyl-	5600	J		8.49	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	22000	J		8.66	ug/Kg
99-87-6	p-Isopropyltoluene	310	J		8.89	ug/Kg
000526-73-8	Benzene, 1,2,3-trimethyl-	6100	J		9.03	ug/Kg
000873-49-4	Benzene, cyclopropyl-	6800	J		9.14	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/17/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	PT-S-9(11.0-11.5)	SDG No.:	B4601
Lab Sample ID:	B4601-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	16
Sample Wt/Vol:	5.03	Units:	g
Soil Aliquot Vol:	100		uL
		Final Vol:	10000
		Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VF025206.D	1		12/22/10
			Prep Batch ID
			VF122110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
104-51-8	n-Butylbenzene	2900	J			9.26	ug/Kg
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	5800	J			9.48	ug/Kg
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl)	7500	J			9.55	ug/Kg
000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	9000	J			10.09	ug/Kg
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	8700	J			10.23	ug/Kg
91-20-3	Naphthalene	4900	J			10.81	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/17/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	PT-S-10(11.5-12.0)	SDG No.:	B4601
Lab Sample ID:	B4601-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	13
Sample Wt/Vol:	5.04 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025207.D	1		12/22/10	VF122110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
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TARGETS							
75-71-8	Dichlorodifluoromethane	570	U	63	285	570	ug/Kg
74-87-3	Chloromethane	570	U	62	285	570	ug/Kg
75-01-4	Vinyl Chloride	570	U	39	285	570	ug/Kg
74-83-9	Bromomethane	570	U	71	285	570	ug/Kg
75-00-3	Chloroethane	570	U	75	285	570	ug/Kg
75-69-4	Trichlorofluoromethane	570	U	40	285	570	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	570	U	51	285	570	ug/Kg
75-35-4	1,1-Dichloroethene	570	U	54	285	570	ug/Kg
67-64-1	Acetone	2900	U	310	1450	2900	ug/Kg
75-15-0	Carbon Disulfide	570	U	62	285	570	ug/Kg
1634-04-4	Methyl tert-butyl Ether	570	U	40	285	570	ug/Kg
79-20-9	Methyl Acetate	570	U	95	285	570	ug/Kg
75-09-2	Methylene Chloride	570	U	47	285	570	ug/Kg
156-60-5	trans-1,2-Dichloroethene	570	U	47	285	570	ug/Kg
75-34-3	1,1-Dichloroethane	570	U	41	285	570	ug/Kg
110-82-7	Cyclohexane	1000		63	285	570	ug/Kg
78-93-3	2-Butanone	2900	U	150	1450	2900	ug/Kg
56-23-5	Carbon Tetrachloride	570	U	71	285	570	ug/Kg
156-59-2	cis-1,2-Dichloroethene	570	U	40	285	570	ug/Kg
67-66-3	Chloroform	570	U	39	285	570	ug/Kg
71-55-6	1,1,1-Trichloroethane	570	U	46	285	570	ug/Kg
108-87-2	Methylcyclohexane	9600	U	78	285	570	ug/Kg
71-43-2	Benzene	570	U	36	285	570	ug/Kg
107-06-2	1,2-Dichloroethane	570	U	55	285	570	ug/Kg
79-01-6	Trichloroethene	570	U	32	285	570	ug/Kg
78-87-5	1,2-Dichloropropane	570	U	52	285	570	ug/Kg
75-27-4	Bromodichloromethane	570	U	41	285	570	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2900	U	240	1450	2900	ug/Kg
108-88-3	Toluene	570	U	42	285	570	ug/Kg
10061-02-6	t-1,3-Dichloropropene	570	U	33	285	570	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	570	U	35	285	570	ug/Kg
79-00-5	1,1,2-Trichloroethane	570	U	43	285	570	ug/Kg
591-78-6	2-Hexanone	2900	U	220	1450	2900	ug/Kg
124-48-1	Dibromochloromethane	570	U	59	285	570	ug/Kg
106-93-4	1,2-Dibromoethane	570	U	47	285	570	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/17/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	PT-S-10(11.5-12.0)	SDG No.:	B4601
Lab Sample ID:	B4601-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	13
Sample Wt/Vol:	5.04 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025207.D	1		12/22/10	VF122110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	570	U	31	285	570	ug/Kg
108-90-7	Chlorobenzene	570	U	56	285	570	ug/Kg
100-41-4	Ethyl Benzene	1900		60	285	570	ug/Kg
179601-23-1	m/p-Xylenes	460	J	110	550	1100	ug/Kg
95-47-6	o-Xylene	570	U	49	285	570	ug/Kg
100-42-5	Styrene	570	U	41	285	570	ug/Kg
75-25-2	Bromoform	570	U	54	285	570	ug/Kg
98-82-8	Isopropylbenzene	2200		51	285	570	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	570	U	35	285	570	ug/Kg
541-73-1	1,3-Dichlorobenzene	570	U	49	285	570	ug/Kg
106-46-7	1,4-Dichlorobenzene	570	U	36	285	570	ug/Kg
95-50-1	1,2-Dichlorobenzene	570	U	51	285	570	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	570	U	52	285	570	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	570	U	71	285	570	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	45.8		55 - 158	92%	SPK: 50
1868-53-7	Dibromofluoromethane	27.5		53 - 156	55%	SPK: 50
2037-26-5	Toluene-d8	45.3		68 - 122	91%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.8		25 - 144	104%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	1057880	3.24			
540-36-3	1,4-Difluorobenzene	2033540	3.65			
3114-55-4	Chlorobenzene-d5	1862640	6.55			
3855-82-1	1,4-Dichlorobenzene-d4	1137830	8.98			

TENTATIVE IDENTIFIED COMPOUNDS

000592-27-8	Heptane, 2-methyl-	9300	J		4.22	ug/Kg
000638-04-0	Cyclohexane, 1,3-dimethyl-, cis-	6800	J		4.54	ug/Kg
000111-65-9	Octane	6800	J		4.79	ug/Kg
103-65-1	n-propylbenzene	6800	J		8.1	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	760	J		8.3	ug/Kg
98-06-6	tert-Butylbenzene	140	J		8.59	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	1200	J		8.66	ug/Kg
135-98-8	sec-Butylbenzene	1300	J		8.75	ug/Kg
99-87-6	p-Isopropyltoluene	890	J		8.9	ug/Kg
000637-50-3	Benzene, 1-propenyl-	8200	J		9.15	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/17/10	
Project:	Provan	Date Received:	12/20/10	
Client Sample ID:	PT-S-10(11.5-12.0)	SDG No.:	B4601	
Lab Sample ID:	B4601-05	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	13	
Sample Wt/Vol:	5.04 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025207.D	1		12/22/10	VF122110

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
104-51-8	n-Butylbenzene	2500	J			9.26	ug/Kg
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl)	10000	J			9.56	ug/Kg
007525-62-4	Benzene, 1-ethenyl-3-ethyl-	7600	J			9.62	ug/Kg
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	9200	J			9.93	ug/Kg
002234-20-0	2,4-Dimethylstyrene	11000	J			10.09	ug/Kg
000768-00-3	Benzene, (1-methyl-1-propenyl)-, (18000	J			10.23	ug/Kg
006682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethy	9900	J			10.53	ug/Kg
91-20-3	Naphthalene	1200	J			10.81	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-B-1(15-15.5)	SDG No.:	B4601
Lab Sample ID:	B4601-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	24
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042740.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.5	U	0.85	3.25	6.5	ug/Kg
74-87-3	Chloromethane	6.5	U	1.1	3.25	6.5	ug/Kg
75-01-4	Vinyl Chloride	6.5	U	1.6	3.25	6.5	ug/Kg
74-83-9	Bromomethane	6.5	U	3.2	3.25	6.5	ug/Kg
75-00-3	Chloroethane	6.5	U	1.8	3.25	6.5	ug/Kg
75-69-4	Trichlorofluoromethane	6.5	U	1.7	3.25	6.5	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.5	U	1.7	3.25	6.5	ug/Kg
75-35-4	1,1-Dichloroethene	6.5	U	1.9	3.25	6.5	ug/Kg
67-64-1	Acetone	33	UJ	3.9	16.5	33	ug/Kg
75-15-0	Carbon Disulfide	6.5	U	1.4	3.25	6.5	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.5	U	1.3	3.25	6.5	ug/Kg
79-20-9	Methyl Acetate	6.5	U	2	3.25	6.5	ug/Kg
75-09-2	Methylene Chloride	6.5	U	1.9	3.25	6.5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.5	U	0.9	3.25	6.5	ug/Kg
75-34-3	1,1-Dichloroethane	6.5	U	1.2	3.25	6.5	ug/Kg
110-82-7	Cyclohexane	6.5	U	1.3	3.25	6.5	ug/Kg
78-93-3	2-Butanone	33	U	4.1	16.5	33	ug/Kg
56-23-5	Carbon Tetrachloride	6.5	U	1.3	3.25	6.5	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.5	U	1.2	3.25	6.5	ug/Kg
67-66-3	Chloroform	6.5	U	0.97	3.25	6.5	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.5	U	1.1	3.25	6.5	ug/Kg
108-87-2	Methylcyclohexane	6.5	U	1.4	3.25	6.5	ug/Kg
71-43-2	Benzene	6.5	U	0.5	3.25	6.5	ug/Kg
107-06-2	1,2-Dichloroethane	6.5	U	0.84	3.25	6.5	ug/Kg
79-01-6	Trichloroethene	6.5	U	1.1	3.25	6.5	ug/Kg
78-87-5	1,2-Dichloropropane	6.5	U	0.34	3.25	6.5	ug/Kg
75-27-4	Bromodichloromethane	6.5	U	0.81	3.25	6.5	ug/Kg
108-10-1	4-Methyl-2-Pentanone	33	U	3.8	16.5	33	ug/Kg
108-88-3	Toluene	6.5	U	0.84	3.25	6.5	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.5	U	1	3.25	6.5	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.5	U	0.94	3.25	6.5	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.5	U	1.2	3.25	6.5	ug/Kg
591-78-6	2-Hexanone	33	U	5.1	16.5	33	ug/Kg
124-48-1	Dibromochloromethane	6.5	U	0.7	3.25	6.5	ug/Kg
106-93-4	1,2-Dibromoethane	6.5	U	0.84	3.25	6.5	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-B-1(15-15.5)	SDG No.:	B4601
Lab Sample ID:	B4601-06	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	24
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042740.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.5	U	1.3	3.25	6.5	ug/Kg
108-90-7	Chlorobenzene	6.5	U	0.65	3.25	6.5	ug/Kg
100-41-4	Ethyl Benzene	6.5	U	0.81	3.25	6.5	ug/Kg
179601-23-1	m/p-Xylenes	13	U	0.94	6.5	13	ug/Kg
95-47-6	o-Xylene	6.5	U	0.89	3.25	6.5	ug/Kg
100-42-5	Styrene	6.5	U	0.59	3.25	6.5	ug/Kg
75-25-2	Bromoform	6.5	U	0.97	3.25	6.5	ug/Kg
98-82-8	Isopropylbenzene	6.5	U	0.63	3.25	6.5	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.5	U	0.6	3.25	6.5	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.5	U	0.48	3.25	6.5	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.5	U	0.54	3.25	6.5	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.5	U	0.81	3.25	6.5	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.5	U	1.1	3.25	6.5	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.5	U	0.91	3.25	6.5	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.1		55 - 158		90%	SPK: 50
1868-53-7	Dibromofluoromethane	51.6		53 - 156		103%	SPK: 50
2037-26-5	Toluene-d8	49.3		68 - 122		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.8		25 - 144		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	231737	3.19				
540-36-3	1,4-Difluorobenzene	316714	3.58				
3114-55-4	Chlorobenzene-d5	338120	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	224406	8.59				
TENTATIVE IDENTIFIED COMPOUNDS							
91-20-3	Naphthalene	6.4	J			10.26	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-1(14.5-15)	SDG No.:	B4601
Lab Sample ID:	B4601-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	21
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042741.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.3	U	0.82	3.15	6.3	ug/Kg
74-87-3	Chloromethane	6.3	U	1.1	3.15	6.3	ug/Kg
75-01-4	Vinyl Chloride	3.8	J	1.5	3.15	6.3	ug/Kg
74-83-9	Bromomethane	6.3	U	3.1	3.15	6.3	ug/Kg
75-00-3	Chloroethane	6.3	U	1.8	3.15	6.3	ug/Kg
75-69-4	Trichlorofluoromethane	6.3	U	1.7	3.15	6.3	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.3	U	1.7	3.15	6.3	ug/Kg
75-35-4	1,1-Dichloroethene	2.3	J	1.8	3.15	6.3	ug/Kg
67-64-1	Acetone	31 <i>UJ</i>	U	3.8	15.5	31	ug/Kg
75-15-0	Carbon Disulfide	6.3	U	1.3	3.15	6.3	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.3	U	1.2	3.15	6.3	ug/Kg
79-20-9	Methyl Acetate	6.3	U	1.9	3.15	6.3	ug/Kg
75-09-2	Methylene Chloride	6.3	U	1.8	3.15	6.3	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.3	U	0.87	3.15	6.3	ug/Kg
75-34-3	1,1-Dichloroethane	2.7	J	1.2	3.15	6.3	ug/Kg
110-82-7	Cyclohexane	2.8	J	1.3	3.15	6.3	ug/Kg
78-93-3	2-Butanone	31	U	3.9	15.5	31	ug/Kg
56-23-5	Carbon Tetrachloride	6.3	U	1.2	3.15	6.3	ug/Kg
156-59-2	cis-1,2-Dichloroethene	480	E	1.1	3.15	6.3	ug/Kg
67-66-3	Chloroform	6.3	U	0.93	3.15	6.3	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.2	J	1.1	3.15	6.3	ug/Kg
108-87-2	Methylcyclohexane	5.1	J	1.3	3.15	6.3	ug/Kg
71-43-2	Benzene	6.3	U	0.48	3.15	6.3	ug/Kg
107-06-2	1,2-Dichloroethane	6.3	U	0.81	3.15	6.3	ug/Kg
79-01-6	Trichloroethene	1.6	J	1.1	3.15	6.3	ug/Kg
78-87-5	1,2-Dichloropropane	6.3	U	0.33	3.15	6.3	ug/Kg
75-27-4	Bromodichloromethane	6.3	U	0.78	3.15	6.3	ug/Kg
108-10-1	4-Methyl-2-Pentanone	31	U	3.7	15.5	31	ug/Kg
108-88-3	Toluene	2.8	J	0.81	3.15	6.3	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.3	U	0.99	3.15	6.3	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.3	U	0.91	3.15	6.3	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.3	U	1.1	3.15	6.3	ug/Kg
591-78-6	2-Hexanone	31	U	4.9	15.5	31	ug/Kg
124-48-1	Dibromochloromethane	6.3	U	0.68	3.15	6.3	ug/Kg
106-93-4	1,2-Dibromoethane	6.3	U	0.81	3.15	6.3	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-1(14.5-15)	SDG No.:	B4601
Lab Sample ID:	B4601-07	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	21
Sample Wt/Vol:	5.03	Units:	g
Soil Aliquot Vol:		Final Vol:	5000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042741.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.3	U	1.3	3.15	6.3	ug/Kg
108-90-7	Chlorobenzene	6.3	U	0.63	3.15	6.3	ug/Kg
100-41-4	Ethyl Benzene	4.7	J	0.78	3.15	6.3	ug/Kg
179601-23-1	m/p-Xylenes	3.3	J	0.91	6.5	13	ug/Kg
95-47-6	o-Xylene	4.8	J	0.86	3.15	6.3	ug/Kg
100-42-5	Styrene	6.3	U	0.57	3.15	6.3	ug/Kg
75-25-2	Bromoform	6.3	U	0.93	3.15	6.3	ug/Kg
98-82-8	Isopropylbenzene	0.74	J	0.6	3.15	6.3	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U	0.58	3.15	6.3	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.3	U	0.47	3.15	6.3	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.3	U	0.52	3.15	6.3	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.3	U	0.78	3.15	6.3	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.3	U	1.1	3.15	6.3	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.3	U	0.88	3.15	6.3	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	42.8		55 - 158		86%	SPK: 50
1868-53-7	Dibromofluoromethane	49.6		53 - 156		99%	SPK: 50
2037-26-5	Toluene-d8	48.4		68 - 122		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.8		25 - 144		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	246492	3.19				
540-36-3	1,4-Difluorobenzene	329704	3.57				
3114-55-4	Chlorobenzene-d5	349788	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	232936	8.59				
TENTATIVE IDENTIFIED COMPOUNDS							
103-65-1	n-propylbenzene	0.91	J			7.75	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	4.3	J			8.29	ug/Kg
91-20-3	Naphthalene	11	J			10.26	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-1(14.5-15)DL	SDG No.:	B4601
Lab Sample ID:	B4601-07DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	21
Sample Wt/Vol:	5.04 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039103.D	1		12/29/10	VH122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	630	U	69	315	630	ug/Kg
74-87-3	Chloromethane	630	U	68	315	630	ug/Kg
75-01-4	Vinyl Chloride	630	U	43	315	630	ug/Kg
74-83-9	Bromomethane	630	U	78	315	630	ug/Kg
75-00-3	Chloroethane	630	U	83	315	630	ug/Kg
75-69-4	Trichlorofluoromethane	630	U	44	315	630	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	630	U	57	315	630	ug/Kg
75-35-4	1,1-Dichloroethene	630	U	59	315	630	ug/Kg
67-64-1	Acetone	3100	U	350	1550	3100	ug/Kg
75-15-0	Carbon Disulfide	630	U	68	315	630	ug/Kg
1634-04-4	Methyl tert-butyl Ether	630	U	44	315	630	ug/Kg
79-20-9	Methyl Acetate	630	U	100	315	630	ug/Kg
75-09-2	Methylene Chloride	630	U	51	315	630	ug/Kg
156-60-5	trans-1,2-Dichloroethene	630	U	51	315	630	ug/Kg
75-34-3	1,1-Dichloroethane	630	U	45	315	630	ug/Kg
110-82-7	Cyclohexane	630	U	69	315	630	ug/Kg
78-93-3	2-Butanone	3100	U	170	1550	3100	ug/Kg
56-23-5	Carbon Tetrachloride	630	U	78	315	630	ug/Kg
156-59-2	cis-1,2-Dichloroethene	670	D	44	315	630	ug/Kg
67-66-3	Chloroform	630	U	43	315	630	ug/Kg
71-55-6	1,1,1-Trichloroethane	630	U	50	315	630	ug/Kg
108-87-2	Methylcyclohexane	630	U	85	315	630	ug/Kg
71-43-2	Benzene	630	U	40	315	630	ug/Kg
107-06-2	1,2-Dichloroethane	630	U	60	315	630	ug/Kg
79-01-6	Trichloroethene	630	U	35	315	630	ug/Kg
78-87-5	1,2-Dichloropropane	630	U	58	315	630	ug/Kg
75-27-4	Bromodichloromethane	630	U	45	315	630	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3100	U	260	1550	3100	ug/Kg
108-88-3	Toluene	630	U	46	315	630	ug/Kg
10061-02-6	t-1,3-Dichloropropene	630	U	36	315	630	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	630	U	39	315	630	ug/Kg
79-00-5	1,1,2-Trichloroethane	630	U	48	315	630	ug/Kg
591-78-6	2-Hexanone	3100	U	240	1550	3100	ug/Kg
124-48-1	Dibromochloromethane	630	U	65	315	630	ug/Kg
106-93-4	1,2-Dibromoethane	630	U	51	315	630	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-1(14.5-15)DL	SDG No.:	B4601
Lab Sample ID:	B4601-07DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	21
Sample Wt/Vol:	5.04 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCL VOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VH039103.D	I		12/29/10
			Prep Batch ID
			VH122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	630	U	34	315	630	ug/Kg
108-90-7	Chlorobenzene	630	U	62	315	630	ug/Kg
100-41-4	Ethyl Benzene	630	U	67	315	630	ug/Kg
179601-23-1	m/p-Xylenes	1300	U	120	650	1300	ug/Kg
95-47-6	o-Xylene	630	U	54	315	630	ug/Kg
100-42-5	Styrene	630	U	45	315	630	ug/Kg
75-25-2	Bromoform	630	U	59	315	630	ug/Kg
98-82-8	Isopropylbenzene	630	U	57	315	630	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	630	U	39	315	630	ug/Kg
541-73-1	1,3-Dichlorobenzene	630	U	54	315	630	ug/Kg
106-46-7	1,4-Dichlorobenzene	630	U	40	315	630	ug/Kg
95-50-1	1,2-Dichlorobenzene	630	U	57	315	630	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	630	U	58	315	630	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	630	U	78	315	630	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.3		55 - 158		91%	SPK: 50
1868-53-7	Dibromofluoromethane	52.3		53 - 156		105%	SPK: 50
2037-26-5	Toluene-d8	52		68 - 122		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	54.9		25 - 144		110%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1571080	4.07				
540-36-3	1,4-Difluorobenzene	2292720	4.58				
3114-55-4	Chlorobenzene-d5	1772350	7.94				
3855-82-1	1,4-Dichlorobenzene-d4	1079060	10.43				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-1(10-10.5)	SDG No.:	B4601
Lab Sample ID:	B4601-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042742.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.2	U	0.8	3.1	6.2	ug/Kg
74-87-3	Chloromethane	6.2	U	1.1	3.1	6.2	ug/Kg
75-01-4	Vinyl Chloride	6.2	U	1.5	3.1	6.2	ug/Kg
74-83-9	Bromomethane	6.2	U	3	3.1	6.2	ug/Kg
75-00-3	Chloroethane	6.2	U	1.7	3.1	6.2	ug/Kg
75-69-4	Trichlorofluoromethane	6.2	U	1.6	3.1	6.2	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.2	U	1.6	3.1	6.2	ug/Kg
75-35-4	1,1-Dichloroethene	6.2	U	1.8	3.1	6.2	ug/Kg
67-64-1	Acetone	31	U	3.7	15.5	31	ug/Kg
75-15-0	Carbon Disulfide	6.2	U	1.3	3.1	6.2	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.2	U	1.2	3.1	6.2	ug/Kg
79-20-9	Methyl Acetate	6.2	U	1.9	3.1	6.2	ug/Kg
75-09-2	Methylene Chloride	6.2	U	1.8	3.1	6.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.2	U	0.85	3.1	6.2	ug/Kg
75-34-3	1,1-Dichloroethane	6.2	U	1.2	3.1	6.2	ug/Kg
110-82-7	Cyclohexane	6.2	U	1.2	3.1	6.2	ug/Kg
78-93-3	2-Butanone	31	U	3.8	15.5	31	ug/Kg
56-23-5	Carbon Tetrachloride	6.2	U	1.2	3.1	6.2	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.2	U	1.1	3.1	6.2	ug/Kg
67-66-3	Chloroform	6.2	U	0.92	3.1	6.2	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.2	U	1.1	3.1	6.2	ug/Kg
108-87-2	Methylcyclohexane	6.2	U	1.3	3.1	6.2	ug/Kg
71-43-2	Benzene	6.2	U	0.47	3.1	6.2	ug/Kg
107-06-2	1,2-Dichloroethane	6.2	U	0.79	3.1	6.2	ug/Kg
79-01-6	Trichloroethene	4.3	J	1.1	3.1	6.2	ug/Kg
78-87-5	1,2-Dichloropropane	6.2	U	0.32	3.1	6.2	ug/Kg
75-27-4	Bromodichloromethane	6.2	U	0.77	3.1	6.2	ug/Kg
108-10-1	4-Methyl-2-Pentanone	31	U	3.6	15.5	31	ug/Kg
108-88-3	Toluene	6.2	U	0.79	3.1	6.2	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.2	U	0.98	3.1	6.2	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.2	U	0.89	3.1	6.2	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.2	U	1.1	3.1	6.2	ug/Kg
591-78-6	2-Hexanone	31	U	4.8	15.5	31	ug/Kg
124-48-1	Dibromochloromethane	6.2	U	0.67	3.1	6.2	ug/Kg
106-93-4	1,2-Dibromoethane	6.2	U	0.79	3.1	6.2	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-1(10-10.5)	SDG No.:	B4601
Lab Sample ID:	B4601-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042742.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.2	U	1.2	3.1	6.2	ug/Kg
108-90-7	Chlorobenzene	6.2	U	0.62	3.1	6.2	ug/Kg
100-41-4	Ethyl Benzene	6.2	U	0.77	3.1	6.2	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.89	6	12	ug/Kg
95-47-6	o-Xylene	6.2	U	0.84	3.1	6.2	ug/Kg
100-42-5	Styrene	6.2	U	0.56	3.1	6.2	ug/Kg
75-25-2	Bromoform	6.2	U	0.92	3.1	6.2	ug/Kg
98-82-8	Isopropylbenzene	6.2	U	0.59	3.1	6.2	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.2	U	0.57	3.1	6.2	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.2	U	0.46	3.1	6.2	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.2	U	0.51	3.1	6.2	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.2	U	0.77	3.1	6.2	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.2	U	1.1	3.1	6.2	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.2	U	0.87	3.1	6.2	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44		55 - 158		88%	SPK: 50
1868-53-7	Dibromofluoromethane	50.5		53 - 156		101%	SPK: 50
2037-26-5	Toluene-d8	47.6		68 - 122		95%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.3		25 - 144		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	229895	3.19				
540-36-3	1,4-Difluorobenzene	320407	3.57				
3114-55-4	Chlorobenzene-d5	333237	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	217385	8.59				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-2 (15-15.5)	SDG No.:	B4601
Lab Sample ID:	B4601-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042743.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.4	U	0.83	3.2	6.4	ug/Kg
74-87-3	Chloromethane	6.4	U	1.1	3.2	6.4	ug/Kg
75-01-4	Vinyl Chloride	6.4	U	1.6	3.2	6.4	ug/Kg
74-83-9	Bromomethane	6.4	U	3.1	3.2	6.4	ug/Kg
75-00-3	Chloroethane	6.4	U	1.8	3.2	6.4	ug/Kg
75-69-4	Trichlorofluoromethane	6.4	U	1.7	3.2	6.4	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.4	U	1.7	3.2	6.4	ug/Kg
75-35-4	1,1-Dichloroethene	6.4	U	1.9	3.2	6.4	ug/Kg
67-64-1	Acetone	32 UJ	U	3.8	16	32	ug/Kg
75-15-0	Carbon Disulfide	6.4	U	1.4	3.2	6.4	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.4	U	1.2	3.2	6.4	ug/Kg
79-20-9	Methyl Acetate	6.4	U	1.9	3.2	6.4	ug/Kg
75-09-2	Methylene Chloride	6.4	U	1.8	3.2	6.4	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.4	U	0.88	3.2	6.4	ug/Kg
75-34-3	1,1-Dichloroethane	6.4	U	1.2	3.2	6.4	ug/Kg
110-82-7	Cyclohexane	6.4	U	1.3	3.2	6.4	ug/Kg
78-93-3	2-Butanone	32	U	4	16	32	ug/Kg
56-23-5	Carbon Tetrachloride	6.4	U	1.3	3.2	6.4	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.4	U	1.1	3.2	6.4	ug/Kg
67-66-3	Chloroform	6.4	U	0.94	3.2	6.4	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.4	U	1.1	3.2	6.4	ug/Kg
108-87-2	Methylcyclohexane	6.4	U	1.4	3.2	6.4	ug/Kg
71-43-2	Benzene	6.4	U	0.48	3.2	6.4	ug/Kg
107-06-2	1,2-Dichloroethane	6.4	U	0.82	3.2	6.4	ug/Kg
79-01-6	Trichloroethene	6.4	U	1.1	3.2	6.4	ug/Kg
78-87-5	1,2-Dichloropropane	6.4	U	0.33	3.2	6.4	ug/Kg
75-27-4	Bromodichloromethane	6.4	U	0.79	3.2	6.4	ug/Kg
108-10-1	4-Methyl-2-Pentanone	32	U	3.7	16	32	ug/Kg
108-88-3	Toluene	6.4	U	0.82	3.2	6.4	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.4	U	1	3.2	6.4	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.4	U	0.92	3.2	6.4	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.4	U	1.1	3.2	6.4	ug/Kg
591-78-6	2-Hexanone	32	U	5	16	32	ug/Kg
124-48-1	Dibromochloromethane	6.4	U	0.69	3.2	6.4	ug/Kg
106-93-4	1,2-Dibromoethane	6.4	U	0.82	3.2	6.4	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-2 (15-15.5)	SDG No.:	B4601
Lab Sample ID:	B4601-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5.03 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042743.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.4	U	1.3	3.2	6.4	ug/Kg
108-90-7	Chlorobenzene	6.4	U	0.64	3.2	6.4	ug/Kg
100-41-4	Ethyl Benzene	6.4	U	0.79	3.2	6.4	ug/Kg
179601-23-1	m/p-Xylenes	13	U	0.92	6.5	13	ug/Kg
95-47-6	o-Xylene	6.4	U	0.87	3.2	6.4	ug/Kg
100-42-5	Styrene	6.4	U	0.57	3.2	6.4	ug/Kg
75-25-2	Bromoform	6.4	U	0.94	3.2	6.4	ug/Kg
98-82-8	Isopropylbenzene	6.4	U	0.61	3.2	6.4	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.4	U	0.59	3.2	6.4	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.4	U	0.47	3.2	6.4	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.4	U	0.52	3.2	6.4	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.4	U	0.79	3.2	6.4	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.4	U	1.1	3.2	6.4	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.4	U	0.89	3.2	6.4	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.4		55 - 158		87%	SPK: 50
1868-53-7	Dibromofluoromethane	48.7		53 - 156		97%	SPK: 50
2037-26-5	Toluene-d8	48.3		68 - 122		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.1		25 - 144		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	245492	3.19				
540-36-3	1,4-Difluorobenzene	337525	3.57				
3114-55-4	Chlorobenzene-d5	352125	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	231749	8.59				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-3(14-14.5)	SDG No.:	B4601
Lab Sample ID:	B4601-10	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	18
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042744.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
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TARGETS							
75-71-8	Dichlorodifluoromethane	6.1	U	0.79	3.05	6.1	ug/Kg
74-87-3	Chloromethane	6.1	U	1.1	3.05	6.1	ug/Kg
75-01-4	Vinyl Chloride	6.1	U	1.5	3.05	6.1	ug/Kg
74-83-9	Bromomethane	6.1	U	3	3.05	6.1	ug/Kg
75-00-3	Chloroethane	6.1	U	1.7	3.05	6.1	ug/Kg
75-69-4	Trichlorofluoromethane	6.1	U	1.6	3.05	6.1	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.1	U	1.6	3.05	6.1	ug/Kg
75-35-4	1,1-Dichloroethene	6.1	U	1.8	3.05	6.1	ug/Kg
67-64-1	Acetone	31	U	3.7	15.5	31	ug/Kg
75-15-0	Carbon Disulfide	6.1	U	1.3	3.05	6.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.1	U	1.2	3.05	6.1	ug/Kg
79-20-9	Methyl Acetate	6.1	U	1.8	3.05	6.1	ug/Kg
75-09-2	Methylene Chloride	6.1	U	1.7	3.05	6.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.1	U	0.84	3.05	6.1	ug/Kg
75-34-3	1,1-Dichloroethane	6.1	U	1.1	3.05	6.1	ug/Kg
110-82-7	Cyclohexane	6.1	U	1.2	3.05	6.1	ug/Kg
78-93-3	2-Butanone	31	U	3.8	15.5	31	ug/Kg
56-23-5	Carbon Tetrachloride	6.1	U	1.2	3.05	6.1	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.1	U	1.1	3.05	6.1	ug/Kg
67-66-3	Chloroform	6.1	U	0.9	3.05	6.1	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.1	U	1.1	3.05	6.1	ug/Kg
108-87-2	Methylcyclohexane	6.1	U	1.3	3.05	6.1	ug/Kg
71-43-2	Benzene	6.1	U	0.46	3.05	6.1	ug/Kg
107-06-2	1,2-Dichloroethane	6.1	U	0.78	3.05	6.1	ug/Kg
79-01-6	Trichloroethene	1.9	J	1.1	3.05	6.1	ug/Kg
78-87-5	1,2-Dichloropropane	6.1	U	0.32	3.05	6.1	ug/Kg
75-27-4	Bromodichloromethane	6.1	U	0.76	3.05	6.1	ug/Kg
108-10-1	4-Methyl-2-Pentanone	31	U	3.6	15.5	31	ug/Kg
108-88-3	Toluene	6.1	U	0.78	3.05	6.1	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.1	U	0.97	3.05	6.1	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.1	U	0.88	3.05	6.1	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.1	U	1.1	3.05	6.1	ug/Kg
591-78-6	2-Hexanone	31	U	4.8	15.5	31	ug/Kg
124-48-1	Dibromochloromethane	6.1	U	0.66	3.05	6.1	ug/Kg
106-93-4	1,2-Dibromoethane	6.1	U	0.78	3.05	6.1	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-3(14-14.5)	SDG No.:	B4601
Lab Sample ID:	B4601-10	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	18
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042744.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.1	U	1.2	3.05	6.1	ug/Kg
108-90-7	Chlorobenzene	6.1	U	0.61	3.05	6.1	ug/Kg
100-41-4	Ethyl Benzene	6.1	U	0.76	3.05	6.1	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.88	6	12	ug/Kg
95-47-6	o-Xylene	6.1	U	0.83	3.05	6.1	ug/Kg
100-42-5	Styrene	6.1	U	0.55	3.05	6.1	ug/Kg
75-25-2	Bromoform	6.1	U	0.9	3.05	6.1	ug/Kg
98-82-8	Isopropylbenzene	6.1	U	0.59	3.05	6.1	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.1	U	0.56	3.05	6.1	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.1	U	0.45	3.05	6.1	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.1	U	0.5	3.05	6.1	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.1	U	0.76	3.05	6.1	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.1	U	1.1	3.05	6.1	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.1	U	0.86	3.05	6.1	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.1		55 - 158		88%	SPK: 50
1868-53-7	Dibromofluoromethane	51.5		53 - 156		103%	SPK: 50
2037-26-5	Toluene-d8	49.1		68 - 122		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.2		25 - 144		100%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	235714	3.19				
540-36-3	1,4-Difluorobenzene	317793	3.56				
3114-55-4	Chlorobenzene-d5	342842	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	222420	8.59				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-B-2(15-15.5)	SDG No.:	B4601
Lab Sample ID:	B4601-12	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042745.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.2	U	0.8	3.1	6.2	ug/Kg
74-87-3	Chloromethane	6.2	U	1.1	3.1	6.2	ug/Kg
75-01-4	Vinyl Chloride	6.2	U	1.5	3.1	6.2	ug/Kg
74-83-9	Bromomethane	6.2	U	3	3.1	6.2	ug/Kg
75-00-3	Chloroethane	6.2	U	1.7	3.1	6.2	ug/Kg
75-69-4	Trichlorofluoromethane	6.2	U	1.6	3.1	6.2	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.2	U	1.6	3.1	6.2	ug/Kg
75-35-4	1,1-Dichloroethene	6.2	U	1.8	3.1	6.2	ug/Kg
67-64-1	Acetone	31	U	3.7	15.5	31	ug/Kg
75-15-0	Carbon Disulfide	6.2	U	1.3	3.1	6.2	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.2	U	1.2	3.1	6.2	ug/Kg
79-20-9	Methyl Acetate	6.2	U	1.9	3.1	6.2	ug/Kg
75-09-2	Methylene Chloride	6.2	U	1.8	3.1	6.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.2	U	0.85	3.1	6.2	ug/Kg
75-34-3	1,1-Dichloroethane	6.2	U	1.2	3.1	6.2	ug/Kg
110-82-7	Cyclohexane	6.2	U	1.2	3.1	6.2	ug/Kg
78-93-3	2-Butanone	31	U	3.8	15.5	31	ug/Kg
56-23-5	Carbon Tetrachloride	6.2	U	1.2	3.1	6.2	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.2	U	1.1	3.1	6.2	ug/Kg
67-66-3	Chloroform	6.2	U	0.91	3.1	6.2	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.2	U	1.1	3.1	6.2	ug/Kg
108-87-2	Methylcyclohexane	6.2	U	1.3	3.1	6.2	ug/Kg
71-43-2	Benzene	6.2	U	0.47	3.1	6.2	ug/Kg
107-06-2	1,2-Dichloroethane	6.2	U	0.79	3.1	6.2	ug/Kg
79-01-6	Trichloroethene	6.2	U	1.1	3.1	6.2	ug/Kg
78-87-5	1,2-Dichloropropane	6.2	U	0.32	3.1	6.2	ug/Kg
75-27-4	Bromodichloromethane	6.2	U	0.77	3.1	6.2	ug/Kg
108-10-1	4-Methyl-2-Pentanone	31	U	3.6	15.5	31	ug/Kg
108-88-3	Toluene	6.2	U	0.79	3.1	6.2	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.2	U	0.98	3.1	6.2	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.2	U	0.89	3.1	6.2	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.2	U	1.1	3.1	6.2	ug/Kg
591-78-6	2-Hexanone	31	U	4.8	15.5	31	ug/Kg
124-48-1	Dibromochloromethane	6.2	U	0.67	3.1	6.2	ug/Kg
106-93-4	1,2-Dibromoethane	6.2	U	0.79	3.1	6.2	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-B-2(15-15.5)	SDG No.:	B4601
Lab Sample ID:	B4601-12	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042745.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.2	U	1.2	3.1	6.2	ug/Kg
108-90-7	Chlorobenzene	6.2	U	0.62	3.1	6.2	ug/Kg
100-41-4	Ethyl Benzene	6.2	U	0.77	3.1	6.2	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.89	6	12	ug/Kg
95-47-6	o-Xylene	6.2	U	0.84	3.1	6.2	ug/Kg
100-42-5	Styrene	6.2	U	0.56	3.1	6.2	ug/Kg
75-25-2	Bromoform	6.2	U	0.91	3.1	6.2	ug/Kg
98-82-8	Isopropylbenzene	6.2	U	0.59	3.1	6.2	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.2	U	0.57	3.1	6.2	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.2	U	0.46	3.1	6.2	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.2	U	0.51	3.1	6.2	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.2	U	0.77	3.1	6.2	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.2	U	1.1	3.1	6.2	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.2	U	0.86	3.1	6.2	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.1		55 - 158		90%	SPK: 50
1868-53-7	Dibromofluoromethane	49.7		53 - 156		99%	SPK: 50
2037-26-5	Toluene-d8	47.8		68 - 122		96%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.3		25 - 144		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	198031	3.19				
540-36-3	1,4-Difluorobenzene	272036	3.57				
3114-55-4	Chlorobenzene-d5	286721	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	184747	8.59				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-6(5-5.5)	SDG No.:	B4601
Lab Sample ID:	B4601-13	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	12
Sample Wt/Vol:	4.96 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042746.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.7	U	0.74	2.85	5.7	ug/Kg
74-87-3	Chloromethane	5.7	U	0.99	2.85	5.7	ug/Kg
75-01-4	Vinyl Chloride	5.7	U	1.4	2.85	5.7	ug/Kg
74-83-9	Bromomethane	5.7	U	2.8	2.85	5.7	ug/Kg
75-00-3	Chloroethane	5.7	U	1.6	2.85	5.7	ug/Kg
75-69-4	Trichlorofluoromethane	5.7	U	1.5	2.85	5.7	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.7	U	1.5	2.85	5.7	ug/Kg
75-35-4	1,1-Dichloroethene	5.7	U	1.7	2.85	5.7	ug/Kg
67-64-1	Acetone	29 <i>UJ</i>	U	3.5	14.5	29	ug/Kg
75-15-0	Carbon Disulfide	5.7	U	1.2	2.85	5.7	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.7	U	1.1	2.85	5.7	ug/Kg
79-20-9	Methyl Acetate	5.7	U	1.7	2.85	5.7	ug/Kg
75-09-2	Methylene Chloride	5.7	U	1.6	2.85	5.7	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.7	U	0.79	2.85	5.7	ug/Kg
75-34-3	1,1-Dichloroethane	5.7	U	1.1	2.85	5.7	ug/Kg
110-82-7	Cyclohexane	5.7	U	1.2	2.85	5.7	ug/Kg
78-93-3	2-Butanone	29	U	3.6	14.5	29	ug/Kg
56-23-5	Carbon Tetrachloride	5.7	U	1.1	2.85	5.7	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.7	U	1	2.85	5.7	ug/Kg
67-66-3	Chloroform	5.7	U	0.85	2.85	5.7	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.7	U	1	2.85	5.7	ug/Kg
108-87-2	Methylcyclohexane	5.7	U	1.2	2.85	5.7	ug/Kg
71-43-2	Benzene	5.7	U	0.44	2.85	5.7	ug/Kg
107-06-2	1,2-Dichloroethane	5.7	U	0.73	2.85	5.7	ug/Kg
79-01-6	Trichloroethene	3.8	J	0.99	2.85	5.7	ug/Kg
78-87-5	1,2-Dichloropropane	5.7	U	0.3	2.85	5.7	ug/Kg
75-27-4	Bromodichloromethane	5.7	U	0.71	2.85	5.7	ug/Kg
108-10-1	4-Methyl-2-Pentanone	29	U	3.3	14.5	29	ug/Kg
108-88-3	Toluene	5.7	U	0.73	2.85	5.7	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.7	U	0.9	2.85	5.7	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.7	U	0.82	2.85	5.7	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.7	U	1	2.85	5.7	ug/Kg
591-78-6	2-Hexanone	29	U	4.5	14.5	29	ug/Kg
124-48-1	Dibromochloromethane	5.7	U	0.62	2.85	5.7	ug/Kg
106-93-4	1,2-Dibromoethane	5.7	U	0.73	2.85	5.7	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-6(5-5.5)	SDG No.:	B4601
Lab Sample ID:	B4601-13	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	12
Sample Wt/Vol:	4.96 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042746.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.7	U	1.2	2.85	5.7	ug/Kg
108-90-7	Chlorobenzene	5.7	U	0.57	2.85	5.7	ug/Kg
100-41-4	Ethyl Benzene	5.7	U	0.71	2.85	5.7	ug/Kg
179601-23-1	m/p-Xylenes	11	U	0.82	5.5	11	ug/Kg
95-47-6	o-Xylene	5.7	U	0.78	2.85	5.7	ug/Kg
100-42-5	Styrene	5.7	U	0.52	2.85	5.7	ug/Kg
75-25-2	Bromoform	5.7	U	0.85	2.85	5.7	ug/Kg
98-82-8	Isopropylbenzene	5.7	U	0.55	2.85	5.7	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U	0.53	2.85	5.7	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.7	U	0.42	2.85	5.7	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.7	U	0.47	2.85	5.7	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.7	U	0.71	2.85	5.7	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.7	U	1	2.85	5.7	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.7	U	0.8	2.85	5.7	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.5		55 - 158		89%	SPK: 50
1868-53-7	Dibromofluoromethane	51.1		53 - 156		102%	SPK: 50
2037-26-5	Toluene-d8	48.9		68 - 122		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.8		25 - 144		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	242181	3.19				
540-36-3	1,4-Difluorobenzene	326543	3.56				
3114-55-4	Chlorobenzene-d5	342557	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	221214	8.59				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-4(13.5-14)	SDG No.:	B4601
Lab Sample ID:	B4601-14	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042747.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.1	U	0.8	3.05	6.1	ug/Kg
74-87-3	Chloromethane	6.1	U	1.1	3.05	6.1	ug/Kg
75-01-4	Vinyl Chloride	6.1	U	1.5	3.05	6.1	ug/Kg
74-83-9	Bromomethane	6.1	U	3	3.05	6.1	ug/Kg
75-00-3	Chloroethane	6.1	U	1.7	3.05	6.1	ug/Kg
75-69-4	Trichlorofluoromethane	4.2	J	1.6	3.05	6.1	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.1	U	1.6	3.05	6.1	ug/Kg
75-35-4	1,1-Dichloroethene	6.4		1.8	3.05	6.1	ug/Kg
67-64-1	Acetone	31 <i>UJ</i>	U	3.7	15.5	31	ug/Kg
75-15-0	Carbon Disulfide	6.1	U	1.3	3.05	6.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.1	U	1.2	3.05	6.1	ug/Kg
79-20-9	Methyl Acetate	6.1	U	1.8	3.05	6.1	ug/Kg
75-09-2	Methylene Chloride	6.1	U	1.7	3.05	6.1	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.1	U	0.85	3.05	6.1	ug/Kg
75-34-3	1,1-Dichloroethane	4.9	J	1.2	3.05	6.1	ug/Kg
110-82-7	Cyclohexane	4.5	J	1.2	3.05	6.1	ug/Kg
78-93-3	2-Butanone	31	U	3.8	15.5	31	ug/Kg
56-23-5	Carbon Tetrachloride	6.1	U	1.2	3.05	6.1	ug/Kg
156-59-2	cis-1,2-Dichloroethene	1700	E	1.1	3.05	6.1	ug/Kg
67-66-3	Chloroform	6.1	U	0.91	3.05	6.1	ug/Kg
71-55-6	1,1,1-Trichloroethane	87		1.1	3.05	6.1	ug/Kg
108-87-2	Methylcyclohexane	11		1.3	3.05	6.1	ug/Kg
71-43-2	Benzene	0.97	J	0.47	3.05	6.1	ug/Kg
107-06-2	1,2-Dichloroethane	6.1	U	0.78	3.05	6.1	ug/Kg
79-01-6	Trichloroethene	900	E	1.1	3.05	6.1	ug/Kg
78-87-5	1,2-Dichloropropane	6.1	U	0.32	3.05	6.1	ug/Kg
75-27-4	Bromodichloromethane	6.1	U	0.76	3.05	6.1	ug/Kg
108-10-1	4-Methyl-2-Pentanone	31	U	3.6	15.5	31	ug/Kg
108-88-3	Toluene	8.5		0.78	3.05	6.1	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.1	U	0.97	3.05	6.1	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.1	U	0.88	3.05	6.1	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.1	U	1.1	3.05	6.1	ug/Kg
591-78-6	2-Hexanone	31	U	4.8	15.5	31	ug/Kg
124-48-1	Dibromochloromethane	6.1	U	0.66	3.05	6.1	ug/Kg
106-93-4	1,2-Dibromoethane	6.1	U	0.78	3.05	6.1	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-4(13.5-14)	SDG No.:	B4601
Lab Sample ID:	B4601-14	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	5.04 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042747.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	5.4	J	1.2	3.05	6.1	ug/Kg
108-90-7	Chlorobenzene	6.1	U	0.61	3.05	6.1	ug/Kg
100-41-4	Ethyl Benzene	1.3	J	0.76	3.05	6.1	ug/Kg
179601-23-1	m/p-Xylenes	2.4	J	0.88	6	12	ug/Kg
95-47-6	o-Xylene	6.1	U	0.83	3.05	6.1	ug/Kg
100-42-5	Styrene	6.1	U	0.55	3.05	6.1	ug/Kg
75-25-2	Bromoform	6.1	U	0.91	3.05	6.1	ug/Kg
98-82-8	Isopropylbenzene	0.96	J	0.59	3.05	6.1	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.1	U	0.56	3.05	6.1	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.1	U	0.45	3.05	6.1	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.1	U	0.5	3.05	6.1	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.1	U	0.76	3.05	6.1	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.1	U	1.1	3.05	6.1	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.1	U	0.86	3.05	6.1	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	44.8		55 - 158		90%	SPK: 50
1868-53-7	Dibromofluoromethane	52.6		53 - 156		105%	SPK: 50
2037-26-5	Toluene-d8	49.6		68 - 122		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.6		25 - 144		99%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	221620	3.19				
540-36-3	1,4-Difluorobenzene	294835	3.56				
3114-55-4	Chlorobenzene-d5	320408	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	210791	8.59				
TENTATIVE IDENTIFIED COMPOUNDS							
103-65-1	n-propylbenzene	0.97	J			7.75	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	2.7	J			7.95	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	5.9	J			8.28	ug/Kg
91-20-3	Naphthalene	7.1	J			10.26	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10	
Project:	Provan	Date Received:	12/23/10	
Client Sample ID:	WOT-S-4(13.5-14)DL	SDG No.:	B4601	
Lab Sample ID:	B4601-14DL	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	19	
Sample Wt/Vol:	5.02 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039105.D	1		12/29/10	vh122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	610	U	68	305	610	ug/Kg
74-87-3	Chloromethane	610	U	66	305	610	ug/Kg
75-01-4	Vinyl Chloride	610	U	42	305	610	ug/Kg
74-83-9	Bromomethane	610	U	76	305	610	ug/Kg
75-00-3	Chloroethane	610	U	81	305	610	ug/Kg
75-69-4	Trichlorofluoromethane	610	U	43	305	610	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	610	U	55	305	610	ug/Kg
75-35-4	1,1-Dichloroethene	610	U	58	305	610	ug/Kg
67-64-1	Acetone	3100	U	340	1550	3100	ug/Kg
75-15-0	Carbon Disulfide	610	U	66	305	610	ug/Kg
1634-04-4	Methyl tert-butyl Ether	610	U	43	305	610	ug/Kg
79-20-9	Methyl Acetate	610	U	100	305	610	ug/Kg
75-09-2	Methylene Chloride	610	U	50	305	610	ug/Kg
156-60-5	trans-1,2-Dichloroethene	610	U	50	305	610	ug/Kg
75-34-3	1,1-Dichloroethane	610	U	44	305	610	ug/Kg
110-82-7	Cyclohexane	610	U	68	305	610	ug/Kg
78-93-3	2-Butanone	3100	U	160	1550	3100	ug/Kg
56-23-5	Carbon Tetrachloride	610	U	76	305	610	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2000	D	43	305	610	ug/Kg
67-66-3	Chloroform	610	U	42	305	610	ug/Kg
71-55-6	1,1,1-Trichloroethane	610	U	49	305	610	ug/Kg
108-87-2	Methylcyclohexane	610	U	84	305	610	ug/Kg
71-43-2	Benzene	610	U	39	305	610	ug/Kg
107-06-2	1,2-Dichloroethane	610	U	59	305	610	ug/Kg
79-01-6	Trichloroethene	1300	D	34	305	610	ug/Kg
78-87-5	1,2-Dichloropropane	610	U	57	305	610	ug/Kg
75-27-4	Bromodichloromethane	610	U	44	305	610	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3100	U	260	1550	3100	ug/Kg
108-88-3	Toluene	610	U	45	305	610	ug/Kg
10061-02-6	t-1,3-Dichloropropene	610	U	36	305	610	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	610	U	38	305	610	ug/Kg
79-00-5	1,1,2-Trichloroethane	610	U	47	305	610	ug/Kg
591-78-6	2-Hexanone	3100	U	240	1550	3100	ug/Kg
124-48-1	Dibromochloromethane	610	U	64	305	610	ug/Kg
106-93-4	1,2-Dibromoethane	610	U	50	305	610	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10			
Project:	Provan	Date Received:	12/23/10			
Client Sample ID:	WOT-S-4(13.5-14)DL	SDG No.:	B4601			
Lab Sample ID:	B4601-14DL	Matrix:	SOIL			
Analytical Method:	SW8260B	% Moisture:	19			
Sample Wt/Vol:	5.02	Units:	g	Final Vol:	10000	uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10		
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID		
VH039105.D	1		12/29/10	vh122910		

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	610	U	33	305	610	ug/Kg
108-90-7	Chlorobenzene	610	U	60	305	610	ug/Kg
100-41-4	Ethyl Benzene	610	U	65	305	610	ug/Kg
179601-23-1	m/p-Xylenes	1200	U	120	600	1200	ug/Kg
95-47-6	o-Xylene	610	U	53	305	610	ug/Kg
100-42-5	Styrene	610	U	44	305	610	ug/Kg
75-25-2	Bromoform	610	U	58	305	610	ug/Kg
98-82-8	Isopropylbenzene	610	U	55	305	610	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	610	U	38	305	610	ug/Kg
541-73-1	1,3-Dichlorobenzene	610	U	53	305	610	ug/Kg
106-46-7	1,4-Dichlorobenzene	610	U	39	305	610	ug/Kg
95-50-1	1,2-Dichlorobenzene	610	U	55	305	610	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	610	U	57	305	610	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	610	U	76	305	610	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	36.8		55 - 158		74%	SPK: 50
1868-53-7	Dibromofluoromethane	46.7		53 - 156		93%	SPK: 50
2037-26-5	Toluene-d8	44.6		68 - 122		89%	SPK: 50
460-00-4	4-Bromofluorobenzene	50.4		25 - 144		101%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1892410	4.07				
540-36-3	1,4-Difluorobenzene	2643380	4.58				
3114-55-4	Chlorobenzene-d5	2134600	7.94				
3855-82-1	1,4-Dichlorobenzene-d4	1249320	10.43				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-4(11-11.5)	SDG No.:	B4601
Lab Sample ID:	B4601-15	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042748.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.4	U	0.83	3.2	6.4	ug/Kg
74-87-3	Chloromethane	6.4	U	1.1	3.2	6.4	ug/Kg
75-01-4	Vinyl Chloride	6.4	U	1.6	3.2	6.4	ug/Kg
74-83-9	Bromomethane	6.4	U	3.1	3.2	6.4	ug/Kg
75-00-3	Chloroethane	6.4	U	1.8	3.2	6.4	ug/Kg
75-69-4	Trichlorofluoromethane	6.4	U	1.7	3.2	6.4	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.4	U	1.7	3.2	6.4	ug/Kg
75-35-4	1,1-Dichloroethene	6.4	U	1.9	3.2	6.4	ug/Kg
67-64-1	Acetone	32 <i>UJ</i>	U	3.9	16	32	ug/Kg
75-15-0	Carbon Disulfide	6.4	U	1.4	3.2	6.4	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.4	U	1.2	3.2	6.4	ug/Kg
79-20-9	Methyl Acetate	6.4	U	1.9	3.2	6.4	ug/Kg
75-09-2	Methylene Chloride	6.4	U	1.8	3.2	6.4	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.4	U	0.88	3.2	6.4	ug/Kg
75-34-3	1,1-Dichloroethane	6.4	U	1.2	3.2	6.4	ug/Kg
110-82-7	Cyclohexane	6.4	U	1.3	3.2	6.4	ug/Kg
78-93-3	2-Butanone	32	U	4	16	32	ug/Kg
56-23-5	Carbon Tetrachloride	6.4	U	1.3	3.2	6.4	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.4	U	1.1	3.2	6.4	ug/Kg
67-66-3	Chloroform	6.4	U	0.95	3.2	6.4	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.4	U	1.1	3.2	6.4	ug/Kg
108-87-2	Methylcyclohexane	6.4	U	1.4	3.2	6.4	ug/Kg
71-43-2	Benzene	6.4	U	0.49	3.2	6.4	ug/Kg
107-06-2	1,2-Dichloroethane	6.4	U	0.82	3.2	6.4	ug/Kg
79-01-6	Trichloroethene	6.4	U	1.1	3.2	6.4	ug/Kg
78-87-5	1,2-Dichloropropane	6.4	U	0.33	3.2	6.4	ug/Kg
75-27-4	Bromodichloromethane	6.4	U	0.79	3.2	6.4	ug/Kg
108-10-1	4-Methyl-2-Pentanone	32	U	3.7	16	32	ug/Kg
108-88-3	Toluene	6.4	U	0.82	3.2	6.4	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.4	U	1	3.2	6.4	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.4	U	0.92	3.2	6.4	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.4	U	1.2	3.2	6.4	ug/Kg
591-78-6	2-Hexanone	32	U	5	16	32	ug/Kg
124-48-1	Dibromochloromethane	6.4	U	0.69	3.2	6.4	ug/Kg
106-93-4	1,2-Dibromoethane	6.4	U	0.82	3.2	6.4	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-4(11-11.5)	SDG No.:	B4601
Lab Sample ID:	B4601-15	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042748.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.4	U	1.3	3.2	6.4	ug/Kg
108-90-7	Chlorobenzene	6.4	U	0.64	3.2	6.4	ug/Kg
100-41-4	Ethyl Benzene	6.4	U	0.79	3.2	6.4	ug/Kg
179601-23-1	m/p-Xylenes	13	U	0.92	6.5	13	ug/Kg
95-47-6	o-Xylene	6.4	U	0.87	3.2	6.4	ug/Kg
100-42-5	Styrene	6.4	U	0.58	3.2	6.4	ug/Kg
75-25-2	Bromoform	6.4	U	0.95	3.2	6.4	ug/Kg
98-82-8	Isopropylbenzene	6.4	U	0.62	3.2	6.4	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.4	U	0.59	3.2	6.4	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.4	U	0.47	3.2	6.4	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.4	U	0.53	3.2	6.4	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.4	U	0.79	3.2	6.4	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.4	U	1.1	3.2	6.4	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.4	U	0.9	3.2	6.4	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.4		55 - 158		87%	SPK: 50
1868-53-7	Dibromofluoromethane	51.3		53 - 156		103%	SPK: 50
2037-26-5	Toluene-d8	49.1		68 - 122		98%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.9		25 - 144		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	230451	3.19				
540-36-3	1,4-Difluorobenzene	310308	3.57				
3114-55-4	Chlorobenzene-d5	326287	6.25				
3855-82-1	1,4-Dichlorobenzene-d4	215529	8.59				
TENTITIVE IDENTIFIED COMPOUNDS							
002051-30-1	Octane, 2,6-dimethyl-	11	J			6.91	ug/Kg
002847-72-5	Decane, 4-methyl-	13	J			8.09	ug/Kg
	unknown9.74	6.8	J			9.74	ug/Kg
	unknown10.03	7.6	J			10.03	ug/Kg
001129-29-9	Benzene, 1-(1-methylethenyl)-3-(1-	8.2	J			10.13	ug/Kg
054340-86-2	Benzene, 4-(2-butenyl)-1,2-dimethy	7.2	J			10.29	ug/Kg
014679-13-1	Benzene, 1,3,5-trimethyl-2-(1-meth	8.7	J			10.64	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-4(11-11.5)	SDG No.:	B4601
Lab Sample ID:	B4601-15	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	22
Sample Wt/Vol:	5	Units:	g
Soil Aliquot Vol:			uL
		Final Vol:	5000
		Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed
VK042748.D	1		12/29/10
			Prep Batch ID
			VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
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U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-5(12-12.5)	SDG No.:	B4601
Lab Sample ID:	B4601-16	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	21
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042749.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.3	U	0.82	3.15	6.3	ug/Kg
74-87-3	Chloromethane	6.3	U	1.1	3.15	6.3	ug/Kg
75-01-4	Vinyl Chloride	6.3	U	1.6	3.15	6.3	ug/Kg
74-83-9	Bromomethane	6.3	U	3.1	3.15	6.3	ug/Kg
75-00-3	Chloroethane	6.3	U	1.8	3.15	6.3	ug/Kg
75-69-4	Trichlorofluoromethane	6.3	U	1.7	3.15	6.3	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.3	U	1.7	3.15	6.3	ug/Kg
75-35-4	1,1-Dichloroethene	6.3	U	1.9	3.15	6.3	ug/Kg
67-64-1	Acetone	32	U	3.8	16	32	ug/Kg
75-15-0	Carbon Disulfide	6.3	U	1.3	3.15	6.3	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.3	U	1.2	3.15	6.3	ug/Kg
79-20-9	Methyl Acetate	6.3	U	1.9	3.15	6.3	ug/Kg
75-09-2	Methylene Chloride	6.3	U	1.8	3.15	6.3	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.3	U	0.88	3.15	6.3	ug/Kg
75-34-3	1,1-Dichloroethane	6.3	U	1.2	3.15	6.3	ug/Kg
110-82-7	Cyclohexane	6.3	U	1.3	3.15	6.3	ug/Kg
78-93-3	2-Butanone	32	U	3.9	16	32	ug/Kg
56-23-5	Carbon Tetrachloride	6.3	U	1.3	3.15	6.3	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.3	U	1.1	3.15	6.3	ug/Kg
67-66-3	Chloroform	6.3	U	0.94	3.15	6.3	ug/Kg
71-55-6	1,1,1-Trichloroethane	6.3	U	1.1	3.15	6.3	ug/Kg
108-87-2	Methylcyclohexane	6.3	U	1.3	3.15	6.3	ug/Kg
71-43-2	Benzene	6.3	U	0.48	3.15	6.3	ug/Kg
107-06-2	1,2-Dichloroethane	6.3	U	0.81	3.15	6.3	ug/Kg
79-01-6	Trichloroethene	6.3	U	1.1	3.15	6.3	ug/Kg
78-87-5	1,2-Dichloropropane	6.3	U	0.33	3.15	6.3	ug/Kg
75-27-4	Bromodichloromethane	6.3	U	0.79	3.15	6.3	ug/Kg
108-10-1	4-Methyl-2-Pentanone	32	U	3.7	16	32	ug/Kg
108-88-3	Toluene	6.3	U	0.81	3.15	6.3	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.3	U	1	3.15	6.3	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.3	U	0.91	3.15	6.3	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.3	U	1.1	3.15	6.3	ug/Kg
591-78-6	2-Hexanone	32	U	5	16	32	ug/Kg
124-48-1	Dibromochloromethane	6.3	U	0.68	3.15	6.3	ug/Kg
106-93-4	1,2-Dibromoethane	6.3	U	0.81	3.15	6.3	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	12/22/10
Project:	Provan	Date Received:	12/23/10
Client Sample ID:	WOT-S-5(12-12.5)	SDG No.:	B4601
Lab Sample ID:	B4601-16	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	21
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042749.D	1		12/29/10	VK122910

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	6.3	U	1.3	3.15	6.3	ug/Kg
108-90-7	Chlorobenzene	6.3	U	0.63	3.15	6.3	ug/Kg
100-41-4	Ethyl Benzene	6.3	U	0.79	3.15	6.3	ug/Kg
179601-23-1	m/p-Xylenes	13	U	0.91	6.5	13	ug/Kg
95-47-6	o-Xylene	6.3	U	0.86	3.15	6.3	ug/Kg
100-42-5	Styrene	6.3	U	0.57	3.15	6.3	ug/Kg
75-25-2	Bromoform	6.3	U	0.94	3.15	6.3	ug/Kg
98-82-8	Isopropylbenzene	6.3	U	0.61	3.15	6.3	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U	0.58	3.15	6.3	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.3	U	0.47	3.15	6.3	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.3	U	0.52	3.15	6.3	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.3	U	0.79	3.15	6.3	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.3	U	1.1	3.15	6.3	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.3	U	0.89	3.15	6.3	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	45.6		55 - 158		91%	SPK: 50
1868-53-7	Dibromofluoromethane	52.1		53 - 156		104%	SPK: 50
2037-26-5	Toluene-d8	49.3		68 - 122		99%	SPK: 50
460-00-4	4-Bromofluorobenzene	48		25 - 144		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	239038	3.19				
540-36-3	1,4-Difluorobenzene	325205	3.56				
3114-55-4	Chlorobenzene-d5	344615	6.26				
3855-82-1	1,4-Dichlorobenzene-d4	225856	8.59				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	12/16/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	RU-PTSV-1	SDG No.:	B4601
Lab Sample ID:	B4601-03	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE068049.D	1	12/21/10	12/22/10	PB53103

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
100-52-7	Benzaldehyde	370	U	20	185	370	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	370	U	18	185	370	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	370	U	15	185	370	ug/Kg
98-86-2	Acetophenone	370	U	11	185	370	ug/Kg
621-64-7	N-Nitroso-di-n-propylamine	370	U	19	185	370	ug/Kg
67-72-1	Hexachloroethane	370	U	17	185	370	ug/Kg
98-95-3	Nitrobenzene	370	U	14	185	370	ug/Kg
78-59-1	Isophorone	370	U	12	185	370	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	370	U	22	185	370	ug/Kg
91-20-3	Naphthalene	57	J	13	185	370	ug/Kg
106-47-8	4-Chloroaniline	370	U	26	185	370	ug/Kg
87-68-3	Hexachlorobutadiene	370	U	14	185	370	ug/Kg
105-60-2	Caprolactam	370	U	17	185	370	ug/Kg
91-57-6	2-Methylnaphthalene	84	J	9.4	185	370	ug/Kg
77-47-4	Hexachlorocyclopentadiene	370	U	9.1	185	370	ug/Kg
92-52-4	1,1-Biphenyl	370	U	14	185	370	ug/Kg
91-58-7	2-Chloronaphthalene	370	U	8.5	185	370	ug/Kg
88-74-4	2-Nitroaniline	370	U	17	185	370	ug/Kg
131-11-3	Dimethylphthalate	530 U	B	10	185	370	ug/Kg
208-96-8	Acenaphthylene	200	J	9.4	185	370	ug/Kg
606-20-2	2,6-Dinitrotoluene	370	U	15	185	370	ug/Kg
99-09-2	3-Nitroaniline	370	U	24	185	370	ug/Kg
83-32-9	Acenaphthene	110	J	11	185	370	ug/Kg
132-64-9	Dibenzofuran	64	J	15	185	370	ug/Kg
121-14-2	2,4-Dinitrotoluene	370	U	11	185	370	ug/Kg
84-66-2	Diethylphthalate	370	U	5.8	185	370	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	370	U	20	185	370	ug/Kg
86-73-7	Fluorene	170	J	14	185	370	ug/Kg
100-01-6	4-Nitroaniline	370	U	49	185	370	ug/Kg
86-30-6	N-Nitrosodiphenylamine	370	U	9	185	370	ug/Kg
101-55-3	4-Bromophenyl-phenylether	370	U	7.3	185	370	ug/Kg
118-74-1	Hexachlorobenzene	370	U	15	185	370	ug/Kg
1912-24-9	Atrazine	370	U	20	185	370	ug/Kg
85-01-8	Phenanthrene	1200		10	185	370	ug/Kg
120-12-7	Anthracene	380		7.6	185	370	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	12/16/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	RU-PTSV-1	SDG No.:	B4601
Lab Sample ID:	B4601-03	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE068049.D	1	12/21/10	12/22/10	PB53103

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
86-74-8	Carbazole	100	J	8.2	185	370	ug/Kg
84-74-2	Di-n-butylphthalate	370	U	29	185	370	ug/Kg
206-44-0	Fluoranthene	2700		7.5	185	370	ug/Kg
129-00-0	Pyrene	2000		9	185	370	ug/Kg
85-68-7	Butylbenzylphthalate	370	U	18	185	370	ug/Kg
91-94-1	3,3-Dichlorobenzidine	370	U	24	185	370	ug/Kg
56-55-3	Benzo(a)anthracene	1300		18	185	370	ug/Kg
218-01-9	Chrysene	1300		17	185	370	ug/Kg
117-81-7	bis(2-Ethylhexyl)phthalate	87	J	13	185	370	ug/Kg
117-84-0	Di-n-octyl phthalate	370	U	4.3	185	370	ug/Kg
205-99-2	Benzo(b)fluoranthene	1700		12	185	370	ug/Kg
207-08-9	Benzo(k)fluoranthene	590		18	185	370	ug/Kg
50-32-8	Benzo(a)pyrene	1400		8.1	185	370	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	870		12	185	370	ug/Kg
53-70-3	Dibenz(a,h)anthracene	240	J	11	185	370	ug/Kg
191-24-2	Benzo(g,h,i)perylene	1000		15	185	370	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	137		26 - 141		92%	SPK:
13127-88-3	Phenol-d5	143		28 - 142		96%	SPK:
4165-60-0	Nitrobenzene-d5	88.8		30 - 150		89%	SPK:
321-60-8	2-Fluorobiphenyl	86.7		19 - 182		87%	SPK:
118-79-6	2,4,6-Tribromophenol	145		29 - 150		97%	SPK:
1718-51-0	Terphenyl-d14	81.5		24 - 191		81%	SPK:
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	71625	5.68				
1146-65-2	Naphthalene-d8	259982	8.14				
15067-26-2	Acenaphthene-d10	157704	12.09				
1517-22-2	Phenanthrene-d10	323167	15.14				
1719-03-5	Chrysene-d12	408489	19.6				
1520-96-3	Perylene-d12	359803	21.74				
TENTATIVE IDENTIFIED COMPOUNDS							
123-42-2	2-Pentanone, 4-hydroxy-4-methyl- unknown10.34	1300	AB			3.13	ug/Kg
		210	J			10.34	ug/Kg
31295-56-4	Dodecane, 2,6,11-trimethyl-	260	J			10.71	ug/Kg
582-16-1	Naphthalene, 2,7-dimethyl-	210	J			11.35	ug/Kg



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	12/16/10
Project:	Provan	Date Received:	12/20/10
Client Sample ID:	RU-PTSV-1	SDG No.:	B4601
Lab Sample ID:	B4601-03	Matrix:	SOIL
Analytical Method:	SW8270C	% Moisture:	11
Sample Wt/Vol:	30.02 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BN -10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BE068049.D	1	12/21/10	12/22/10	PB53103

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
80655-44-3	Decahydro-4,4,8,9,10-pentamethylna	380	J			11.43	ug/Kg
313253-65-5	2-Pentanone, 4-cyclohexylidene-3,3	220	J			11.91	ug/Kg
829-26-5	Naphthalene, 2,3,6-trimethyl-	210	J			12.9	ug/Kg
1921-70-6	Pentadecane, 2,6,10,14-tetramethyl	670	J			14.39	ug/Kg
2531-84-2	Phenanthrene, 2-methyl-	230	J			16.06	ug/Kg
610-48-0	Anthracene, 1-methyl-	320	J			16.1	ug/Kg
203-64-5	4H-Cyclopenta[def]phenanthrene	450	J			16.22	ug/Kg
779-02-2	Anthracene, 9-methyl-	210	J			16.28	ug/Kg
612-94-2	Naphthalene, 2-phenyl-	270	J			16.6	ug/Kg
781-43-1	9,10-Dimethylanthracene	270	J			17.02	ug/Kg
192-97-2	Benzo[e]pyrene	1000	J			21.59	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

APPENDIX C

91 Fulton Street, Boonton, NJ 07005 • (973) 334-0003

CHAIN OF CUSTODY

Page 1 of 1

LABORATORY COPY

Premier Environmental Services

DATA VALIDATION SUMMARY

FORMER PROVAN FORD SITE

VOLATILE ORGANIC ANALYSES
(EPA METHOD 8260B)

IN NON-AQUEOUS SAMPLES

CHEMTECH
MOUNTAINSIDE, NEW JERSEY

PROJECT NUMBER:

C1051

April, 2011

Prepared for
First Environment, Incorporated
Boonton, New Jersey

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	Volatile Organic Compounds (VOC's)
SITE:	Former Provan Ford Site
CONTRACT LAB:	Chemtech Mountainside, New Jersey
PROJECT NO.:	C1051
REVIEWER:	Renee Cohen
DATE REVIEW COMPLETED:	April, 2011
MATRIX:	Non-Aqueous

The data validation was performed according to the guidelines in the USEPA National Functional Guidelines for Organic Data Review and the USEPA Region II SOP HW-6-CLP Organic Data Review Preliminary Review. In addition, method and QC criteria specified in the NYSDEC ASP documents were cited. 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 six (6) non-aqueous samples. The samples in this data set were collected January 5, 2011 and January 6, 2011. The sample was received at Chemtech located in Mountainside, NJ on January 7, 2011. The samples in this data set were analyzed for Volatile Organic Analytes (VOA) as marked on the Chain of Custody documents that accompanied the samples to the laboratory.

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 Test Methods for the Evaluation of Solid Waste (SW846) as well as the NYSDC ASP methodologies. Data validation will utilize the validation guidelines listed above, however, QA/QC requirements of the NYS DEC ASP (12/95) will supersede CLP requirements in terms of calibration (where applicable) and holding time. Chemtech generated a stand-alone report for the VOA fraction in compliance with the NYS DEC ASP Category B deliverables. A summary of the applicable QC will be discussed at each section of the report.

Laboratory report C1051 consists of six (6) non-aqueous samples. The laboratory sample ID and field sample ID's are summarized in Table 1 of this report.

A copy of the COC documents associated with this data set is located in Appendix C of this report.

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 NYS DEC ASP criteria specifies holding times for solid and soil samples. These holding times are based on Validated Time of Sample Receipt (VTSR). The holding times cited in the NY ASP were reviewed. EPA SW846 methods cite holding times based on collection date. The technical holding time for properly preserved aqueous and non aqueous Volatile Organic samples is fourteen (14) days.

Proper preservation of a soil sample is refrigeration at 4 degrees C until analysis. The holding time criteria for volatile organic sample analysis is that properly preserved samples be analyzed within ten (10) days of VTSR. The holding time criteria for semivolatile organic samples is that the extraction is to be completed within five (5) days of VTSR and that analysis of the extract is be completed within forty (40) days. The technical holding time for the extraction of non-aqueous samples for semivolatile organic analytes is fourteen (14) days from collection.

Volatile Organic Analyses (EPA Method 8260B) - The sample in this data set was collected January 5, 2011 and January 6, 2011 and were received at the laboratory January 7, 2011. All analyses associated with this data set were completed by January 10, 2011. The samples in this data set were analyzed within the method holding time.

ORGANIC DATA ASSESSMENT

3. SURROGATES:

Samples to be analyzed for Volatile Organic Analytes (VOA) are fortified with four (4) method recommended surrogate compounds. These include 1,2-Dichloroethane-d4, Dibromofluoromethane, Toluene-d8 and 4-Bromofluorobenzene prior to analysis to evaluate the overall laboratory performance and the efficiency of the analytical technique. The samples to be analyzed for Semivolatile Organic Analytes (SVOA) are fortified with the surrogate compounds 2-Fluorophenol, Phenol-d5, 2,4,6-Tribromophenol, Nitrobenzene-d5, 2-Fluorobiphenyl and Terphenyl-d14 prior to sample extraction to evaluate the overall laboratory performance and the efficiency of the analytical technique.

Volatile Organic Analyses (EPA Method 8260B) – The laboratory reported in-house limits for the surrogate recovery limits. The surrogate percent recoveries met QC criteria in each of the low level soil sample analyses reported with this data set. The surrogate recoveries exceeded QC criteria in each of the medium dilution analyses reported in this data set. Samples were reanalyzed or reanalyzed with further dilutions due to the concentration of target analytes detected at these sample point. Surrogate outliers are summarized below:

Sample ID	Surrogate
WOT-B-3(12-12.5)	Dibromofluoromethane, Toluene-d8, 4-Bromofluorobenzene
WOT-B-3(12-12.5)DL	Toluene-d8,
WOT-B-3(12-12.5)DL2	Toluene-d8, 4-Bromofluorobenzene
WOT-DUP	Dibromofluoromethane, Toluene-d8, 4-Bromofluorobenzene
WOT-DUPDL	Toluene-d8,
WOT-S-9(9.5-10)	1,2-Dichloroethane-d4, Dibromofluoromethane, Toluene-d8
WOT-S-9(9.5-10)RE	1,2-Dichloroethane-d4, Dibromofluoromethane, Toluene-d8, 4-Bromofluorobenzene

Matrix interference has been confirmed in the dilution analysis and reanalysis at these sample points. All target analytes in these sample analyses, dilution analyses and/or reanalyses have been qualified "UJ/J" estimated.

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

ORGANIC DATA ASSESSMENT

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.

Volatile Organic Analyses (EPA Method 8260B) –Site specific MS/MSD analysis was marked on the COC to be performed on sample WOT-S-8(12-12.5) (C1051-05). The sample points were C1051-06 and C1051-07. This MS/MSD is a low level soil sample analysis. The sample was fortified with all target analytes. The percent recovery of each analyte in the MS and MSD and the RPD of each target analyte met QC criteria. Medium level soil sample analysis was performed on sample WOT-S-9 (9.5-10) (C1051-09). The sample was fortified with all target analytes. The percent recovery of each analyte in the MS and MSD and the RPD of each target analyte met QC criteria.

The laboratory prepared and analyzed a one (1) Laboratory Control Sample (LCS) with both the low level soil and medium level soil sample batches in this data set. One (1) low level Laboratory Control Sample (LCS) was prepared and analyzed. Two (2) medium level Laboratory Control Samples (LCS) were prepared and analyzed. The laboratory fortified each with a full component spike solution. Chemtech used a "CLP Like" QC summary form to report the data results. In-house QC limits were applied for each analyte. The percent recovery of each target analytes met QC criteria in each of the LCS samples.

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.

A) Method Blank contamination

Volatile Organic Analyses (EPA Method 8260B) – One (1) non-aqueous low level method blank sample is associated with this data set. Two (2) medium level non-aqueous method blank samples are associated with this data set. Each of these method blank samples was free from contamination of target and non-target analytes.

B) Field or Equipment Rinse Blank (ERB) contamination

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

C) Trip Blank contamination

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

ORGANIC DATA ASSESSMENT

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. Region USEPA and Region II criteria is the sample for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses is the same, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Three (3) initial calibration curve analyses are associated with this data set. The laboratory performed a one (1) low level non-aqueous initial multilevel calibration on January 3, 2011 (Inst. VOAK). 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. One (1) continuing calibration verification (CCV) standard is associated with this curve analysis. The CCV standard was analyzed January 7, 2011. The RRF of all target analytes met QC criteria in this CCV standard analysis.

Two (2) medium level soil initial multilevel calibration curve analyses are associated with this data set. They were analyzed on January 7, 2011 (Inst F and Inst H). 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 each of these initial calibration curve analyses. One (1) continuing calibration verification (CCV) standard is associated with the initial calibration curve on Instrument H. This CCV standard was analyzed January 10, 2011. The RRF of all target analytes met QC criteria in each of this CCV standard.

ORGANIC DATA ASSESSMENT

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

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

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. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. 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. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

Volatile Organic Analyses (EPA Method 8260B) – Three (3) initial calibration curves are associated with the samples in this data set. The laboratory performed a low level multilevel calibration on January 3, 2011 (Inst. VOAK). 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 with the exception of Dichlorodifluoromethane (32.34%) met QC criteria in this initial calibration curve analysis met QC criteria. Dichlorodifluoromethane has been qualified "UJ/J" estimated in each of the low level soil samples reported in this data set. One (1) continuing calibration verification (CCV) standard is associated with this calibration curve analysis. The %Difference of all target analytes met QC criteria.

Two (2) medium level soil multilevel calibrations are associated with this data set. They were performed on January 7, 2011 (Instrument F and H). 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 with the exception of Methylcyclohexane (32.87%) in the calibration on Instrument F met QC criteria. One (1) continuing calibration verification (CCV) standard is associated with these curve analyses. The %Difference of all target analytes met QC criteria in this CCV standard. Methylcyclohexane has been previously qualified due to surrogate QC outliers in the samples analyzed on Instrument F. No further action has been taken.

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

ORGANIC DATA ASSESSMENT

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 tuning compound for semivolatile organic analyses is decafluorotriphenylphosphine (DFTPP). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

Volatile Organic Analyses - 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.

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.

Volatile Organic Analyses (EPA Method 8260B) - All samples were spiked with the internal standards Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 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 with the exception of the following:

Sample ID	Internal Standard
WOT-B-3 (12-12.5)	1,4-Difluorobenzene
WOT-B-3 (12-12.5)DL	1,4-Difluorobenzene

A review of these outlier indicates matrix interference at this sample point. Matrix interference was confirmed in the dilution analysis at this sample point. The target analytes associated with this internal standard have been qualified "UJ/J" estimated.

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

ORGANIC DATA ASSESSMENT

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.

Volatile Organic Analyses (EPA Method 8260B) – This data set reports the analysis of sample six (6) non-aqueous samples. The sample was analyzed via Method 8260B. Tentatively Identified Compounds (TIC's) were analyzed for and reported when detected at each sample point.

Sample WOT-B-3 (12-12.5) (C1051-01) was initially prepared and analyzed as a medium level soil sample. The initial analysis was done using the minimum methanol extraction procedure resulting in a dilution factor of 1:100. This sample chromatogram exhibited a large number of TIC compound peaks and a rise in the baseline. The concentration of 1,1-Dichloroethene, 1,1,1-Trichloroethane, Trichloroethene, Toluene, Tetrachloroethene, Ethylbenzene, m,p-Xylenes and o-Xylenes exceeded the concentration range. This sample was reanalyzed with an additional dilution factor of 1:10 to report the concentration of 1,1-Dichloroethene (10000 D ug/kg), 1,1,1-Trichloroethane (180000 ED ug/kg), Trichloroethene (1600000 ED ug/kg), Toluene (110000 D ug/kg), Tetrachloroethene (800000 ED ug/kg), Ethylbenzene (32000 D ug/kg), m,p-Xylenes (120000 ug/kg) and o-Xylenes (41000 D ug/kg) detected. An additional 1:100 dilution was prepared and analyzed to report the concentration of 1,1,1-Trichloroethane (130000D ug/kg), Trichloroethene (1400000 D ug/kg) and Tetrachloroethene (1300000 D ug/kg) at this sample point.

Sample WOT-DUP (C1051-04) was initially prepared and analyzed as a medium level soil sample. The initial analysis was done using the minimum methanol extraction procedure resulting in a dilution factor of 1:100. This sample chromatogram exhibited a large number of TIC compound peaks and a rise in the baseline. The concentration of 1,1-Dichloroethene, 1,1,1-Trichloroethane, Trichloroethene, Toluene, Tetrachloroethene, Ethylbenzene, m,p-Xylenes and o-Xylenes exceeded the concentration range. This sample was reanalyzed with an additional dilution factor of 1:10 to report the concentration of 1,1-Dichloroethene (8100 D ug/kg), 1,1,1-Trichloroethane (160000 ED ug/kg), Trichloroethene (1500000 ED ug/kg), Toluene (86000 D ug/kg), Tetrachloroethene (800000 ED ug/kg), Ethylbenzene (29000 D ug/kg), m,p-Xylenes (110000 ug/kg) and o-Xylenes (37000 D ug/kg) detected. An additional 1:100 dilution was prepared and analyzed to report the concentration of 1,1,1-Trichloroethane (71000D ug/kg), Trichloroethene (890000 D ug/kg) and Tetrachloroethene (790000 D ug/kg) at this sample point.

Sample WOT-S-0 (9.5-10) (C1051-09) was initially prepared and analyzed as a medium level soil sample. The initial analysis was done using the minimum methanol extraction procedure resulting in a dilution factor of 1:100. This sample chromatogram exhibited a large number of TIC compound peaks and a rise in the baseline. The concentration of all target analytes in this analysis were reported in within in the calibration range of the GC/MS. This sample required a methanol extract reanalysis due to surrogate recovery outliers. The reanalysis confirmed matrix interference. Comparable target analytes and analyte concentrations were reported at this sample point.

ORGANIC DATA ASSESSMENT

10. FIELD DUPLICATE ANALYSES:

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. Soil samples have a greater variability than aqueous samples. Percent moisture and reported dilution factors also tend to lead to greater variability in RPD. Analytes reported above the reporting limit are listed. Data was not qualified based on the calculated RPD of field duplicate sample analyses.

Field duplicate sample analysis was performed on sample: WOT-B-3 (12-12.5) (C1051-1). Below is a summary of the detected target analytes at this sample point.

WOT-B-3 (12-12.5) (C1051-1)/WOT-DUP (C1051-4)

Analyte	Result (ug/kg)	Result (ug/kg)	RPD (%)
Trichlorofluoromethane	1200	830	36.5
1,1,2-Trichlorotrifluoroethane	990	780	23.7
1,1-Dichloroethene	10000*	8100*	21.0
Cyclohexane	2100	1600	27.0
cis 1,2-Dichloroethene	7900	5400	37.6
1,1,1-Trichloroethane	130000**	71000**	58.7
Benzene	2600	1900	31.1
Trichloroethene	1400000**	890000**	44.5
Toluene	110000*	86000*	24.5
Tetrachloroethene	1300000**	790000**	48.8
Chlorobenzene	110 J	87 J	23.3
Ethyl Benzene	32000*	29000*	9.83
m,p-Xylene	120000*	110000*	8.69
o-Xylene	41000*	37000*	7.08
Isopropylbenzene	3600	2800	25.0
1,2-Dichlorobenzene	240 J	200 J	18.2

The sample and field duplicate sample were each prepared and analyzed as a medium level soil sample. This Methanol extraction yielded an initial 1:100 dilution for reporting purposes. Additional dilution analysis was necessary due to the high concentration of target analytes detected at this sample point. Comparable analytes were detected in these field duplicate samples. All initial medium level sample analyses yielded an acceptable precision of <20%. There is more variability in sample results when additional dilution analyses are required. Based on the high dilution utilized sample data in the parent sample and field duplicate samples have not been qualified "J" estimated by this data validator.

* denotes additional 1:10 dilution

** denotes additional 1:100 dilution

ORGANIC DATA ASSESSMENT

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 DUSR 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. Soil sample results are reported on a dry weight basis. 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.

TABLE 1

FIELD SAMPLE ID**LABORATORY ID**

WOT-3(12-12.5)
RU-WOTV-2
WOT-DUP
WOT-S-8(12-12.5)
C1051-05MS
C1051-05MSD
WOT-B-3.1(12-12.5)
WOT-S-9 (9.5-10)

C1051-01
C1051-02
C1051-04
C1051-05
C1051-06
C1051-07
C1051-08
C1051-09

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

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-B-3(12-12.5)	SDG No.:	C1051
Lab Sample ID:	C1051-01	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025314.D	1		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	550	U	60	275	550	ug/Kg
74-87-3	Chloromethane	550	U	59	275	550	ug/Kg
75-01-4	Vinyl Chloride	550	U	37	275	550	ug/Kg
74-83-9	Bromomethane	550	U	68	275	550	ug/Kg
75-00-3	Chloroethane	550	U	72	275	550	ug/Kg
75-69-4	Trichlorofluoromethane	1200	U	38	275	550	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	990	U	49	275	550	ug/Kg
75-35-4	1,1-Dichloroethene	16000	E	51	275	550	ug/Kg
67-64-1	Acetone	2700	U	300	1350	2700	ug/Kg
75-15-0	Carbon Disulfide	550	U	59	275	550	ug/Kg
1634-04-4	Methyl tert-butyl Ether	550	U	38	275	550	ug/Kg
79-20-9	Methyl Acetate	550	U	91	275	550	ug/Kg
75-09-2	Methylene Chloride	550	U	45	275	550	ug/Kg
156-60-5	trans-1,2-Dichloroethene	550	U	45	275	550	ug/Kg
75-34-3	1,1-Dichloroethane	550	U	39	275	550	ug/Kg
110-82-7	Cyclohexane	2100	U	60	275	550	ug/Kg
78-93-3	2-Butanone	2700	U	140	1350	2700	ug/Kg
56-23-5	Carbon Tetrachloride	550	U	68	275	550	ug/Kg
156-59-2	cis-1,2-Dichloroethene	7900	U	38	275	550	ug/Kg
67-66-3	Chloroform	550	U	37	275	550	ug/Kg
71-55-6	1,1,1-Trichloroethane	130000	E	44	275	550	ug/Kg
108-87-2	Methylcyclohexane	550	U	74	275	550	ug/Kg
71-43-2	Benzene	2600	U	35	275	550	ug/Kg
107-06-2	1,2-Dichloroethane	550	U	52	275	550	ug/Kg
79-01-6	Trichloroethene	2100000	E	31	275	550	ug/Kg
78-87-5	1,2-Dichloropropane	550	U	50	275	550	ug/Kg
75-27-4	Bromodichloromethane	550	U	39	275	550	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2700	U	230	1350	2700	ug/Kg
108-88-3	Toluene	310000	E	40	275	550	ug/Kg
10061-02-6	t-1,3-Dichloropropene	550	U	32	275	550	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	550	U	34	275	550	ug/Kg
79-00-5	1,1,2-Trichloroethane	550	U	42	275	550	ug/Kg
591-78-6	2-Hexanone	2700	U	210	1350	2700	ug/Kg
124-48-1	Dibromochloromethane	550	U	57	275	550	ug/Kg
106-93-4	1,2-Dibromoethane	550	U	45	275	550	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-B-3(12-12.5)	SDG No.:	C1051
Lab Sample ID:	C1051-01	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025314.D	1		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	480000	J E	29	275	550	ug/Kg
108-90-7	Chlorobenzene	110	J J	54	275	550	ug/Kg
100-41-4	Ethyl Benzene	28000	J E	58	275	550	ug/Kg
179601-23-1	m/p-Xylenes	70000	J E	100	550	1100	ug/Kg
95-47-6	o-Xylene	31000	J E	47	275	550	ug/Kg
100-42-5	Styrene	550	U J	39	275	550	ug/Kg
75-25-2	Bromoform	550	U J	51	275	550	ug/Kg
98-82-8	Isopropylbenzene	3600	J	49	275	550	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	550	U J	34	275	550	ug/Kg
541-73-1	1,3-Dichlorobenzene	550	U J	47	275	550	ug/Kg
106-46-7	1,4-Dichlorobenzene	550	U J	35	275	550	ug/Kg
95-50-1	1,2-Dichlorobenzene	240	J J	49	275	550	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	550	U J	50	275	550	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	550	U J	68	275	550	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	33.5		55 - 158		67%	SPK: 50
1868-53-7	Dibromofluoromethane	122	*	53 - 156		246%	SPK: 50
2037-26-5	Toluene-d8	192	*	68 - 122		385%	SPK: 50
460-00-4	4-Bromofluorobenzene	222	*	25 - 144		445%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	936457	3.25				
540-36-3	1,4-Difluorobenzene	283374	3.73				
3114-55-4	Chlorobenzene-d5	1431290	6.58				
3855-82-1	1,4-Dichlorobenzene-d4	763879	9				
TENTITIVE IDENTIFIED COMPOUNDS							
	unknown6.18	15000	J			6.18	ug/Kg
005911-04-6	Nonane, 3-methyl-	9700	J			7.82	ug/Kg
103-65-1	n-propylbenzene	11000	J			8.12	ug/Kg
000124-18-5	Decane	17000	J			8.18	ug/Kg
000611-14-3	Benzene, 1-ethyl-2-methyl-	22000	J			8.22	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	18000	J			8.33	ug/Kg
000622-96-8	Benzene, 1-ethyl-4-methyl-	12000	J			8.5	ug/Kg
98-06-6	tert-Butylbenzene	270	J			8.6	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	37000	J			8.68	ug/Kg
135-98-8	sec-Butylbenzene	4000	J			8.77	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-B-3(12-12.5)	SDG No.:	C1051
Lab Sample ID:	C1051-01	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025314.D	1		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
99-87-6	p-Isopropyltoluene	3200	J			8.91	ug/Kg
000526-73-8	Benzene, 1,2,3-trimethyl-	12000	J			9.05	ug/Kg
104-51-8	n-Butylbenzene	9000	J			9.27	ug/Kg
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl)	15000	J			9.51	ug/Kg
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	10000	J			9.94	ug/Kg
003333-13-9	Benzene, 1-methyl-4-(2-propenyl)-	14000	J			10.1	ug/Kg
001560-06-1	Benzene, 2-butenyl-	14000	J			10.24	ug/Kg
91-20-3	Naphthalene	17000	J			10.82	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-B-3(12-12.5)DL	SDG No.:	C1051
Lab Sample ID:	C1051-01DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025315.D	10		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
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TARGETS							
75-71-8	Dichlorodifluoromethane	5500	U	600	2750	5500	ug/Kg
74-87-3	Chloromethane	5500	U	590	2750	5500	ug/Kg
75-01-4	Vinyl Chloride	5500	U	370	2750	5500	ug/Kg
74-83-9	Bromomethane	5500	U	680	2750	5500	ug/Kg
75-00-3	Chloroethane	5500	U	720	2750	5500	ug/Kg
75-69-4	Trichlorofluoromethane	5500	U	380	2750	5500	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5500	U	490	2750	5500	ug/Kg
75-35-4	1,1-Dichloroethene	10000	D	510	2750	5500	ug/Kg
67-64-1	Acetone	27000	U	3000	13500	27000	ug/Kg
75-15-0	Carbon Disulfide	5500	U	590	2750	5500	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5500	U	380	2750	5500	ug/Kg
79-20-9	Methyl Acetate	5500	U	910	2750	5500	ug/Kg
75-09-2	Methylene Chloride	5500	U	450	2750	5500	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5500	U	450	2750	5500	ug/Kg
75-34-3	1,1-Dichloroethane	5500	U	390	2750	5500	ug/Kg
110-82-7	Cyclohexane	3500	JD	600	2750	5500	ug/Kg
78-93-3	2-Butanone	27000	U	1400	13500	27000	ug/Kg
56-23-5	Carbon Tetrachloride	5500	U	680	2750	5500	ug/Kg
156-59-2	cis-1,2-Dichloroethene	11000	D	380	2750	5500	ug/Kg
67-66-3	Chloroform	5500	U	370	2750	5500	ug/Kg
71-55-6	1,1,1-Trichloroethane	180000	ED	440	2750	5500	ug/Kg
108-87-2	Methylcyclohexane	5500	U	740	2750	5500	ug/Kg
71-43-2	Benzene	5500	U	350	2750	5500	ug/Kg
107-06-2	1,2-Dichloroethane	5500	U	520	2750	5500	ug/Kg
79-01-6	Trichloroethene	1600000	ED	310	2750	5500	ug/Kg
78-87-5	1,2-Dichloropropane	5500	U	500	2750	5500	ug/Kg
75-27-4	Bromodichloromethane	5500	U	390	2750	5500	ug/Kg
108-10-1	4-Methyl-2-Pentanone	27000	U	2300	13500	27000	ug/Kg
108-88-3	Toluene	110000	D	400	2750	5500	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5500	U	320	2750	5500	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5500	U	340	2750	5500	ug/Kg
79-00-5	1,1,2-Trichloroethane	5500	U	420	2750	5500	ug/Kg
591-78-6	2-Hexanone	27000	U	2100	13500	27000	ug/Kg
124-48-1	Dibromochloromethane	5500	U	570	2750	5500	ug/Kg
106-93-4	1,2-Dibromoethane	5500	U	450	2750	5500	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-B-3(12-12.5)DL	SDG No.:	C1051
Lab Sample ID:	C1051-01DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025315.D	10		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	800000 J	ED	290	2750	5500	ug/Kg
108-90-7	Chlorobenzene	5500 U J		540	2750	5500	ug/Kg
100-41-4	Ethyl Benzene	32000 J	D	580	2750	5500	ug/Kg
179601-23-1	m/p-Xylenes	120000 J	D	1000	5500	11000	ug/Kg
95-47-6	o-Xylene	41000 J	D	470	2750	5500	ug/Kg
100-42-5	Styrene	5500 U J		390	2750	5500	ug/Kg
75-25-2	Bromoform	5500 U J		510	2750	5500	ug/Kg
98-82-8	Isopropylbenzene	3100 J	JD	490	2750	5500	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5500 U J		340	2750	5500	ug/Kg
541-73-1	1,3-Dichlorobenzene	5500	U	470	2750	5500	ug/Kg
106-46-7	1,4-Dichlorobenzene	5500	U	350	2750	5500	ug/Kg
95-50-1	1,2-Dichlorobenzene	5500	U	490	2750	5500	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5500	U	500	2750	5500	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5500	U	680	2750	5500	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	396		55 - 158		79%	SPK: 50
1868-53-7	Dibromofluoromethane	737		53 - 156		147%	SPK: 50
2037-26-5	Toluene-d8	720	*	68 - 122		144%	SPK: 50
460-00-4	4-Bromofluorobenzene	708		25 - 144		142%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1118710	3.25				
540-36-3	1,4-Difluorobenzene	1122620	3.67				
3114-55-4	Chlorobenzene-d5	1813440	6.56				
3855-82-1	1,4-Dichlorobenzene-d4	1100180	8.99				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment		Date Collected:	01/05/11
Project:	Provan		Date Received:	01/07/11
Client Sample ID:	WOT-B-3(12-12.5)DL2		SDG No.:	C1051
Lab Sample ID:	C1051-01DL2		Matrix:	SOIL
Analytical Method:	SW8260B		% Moisture:	9
Sample Wt/Vol:	5.03	Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100	uL	Test:	VOC-TCLVOA-10
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039200.D	100		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	55000	U U J	6000	27500	55000	ug/Kg
74-87-3	Chloromethane	55000	U	5900	27500	55000	ug/Kg
75-01-4	Vinyl Chloride	55000	U	3700	27500	55000	ug/Kg
74-83-9	Bromomethane	55000	U	6800	27500	55000	ug/Kg
75-00-3	Chloroethane	55000	U	7200	27500	55000	ug/Kg
75-69-4	Trichlorofluoromethane	55000	U	3800	27500	55000	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	55000	U	4900	27500	55000	ug/Kg
75-35-4	1,1-Dichloroethene	55000	U	5100	27500	55000	ug/Kg
67-64-1	Acetone	270000	U	30000	135000	270000	ug/Kg
75-15-0	Carbon Disulfide	55000	U	5900	27500	55000	ug/Kg
1634-04-4	Methyl tert-butyl Ether	55000	U	3800	27500	55000	ug/Kg
79-20-9	Methyl Acetate	55000	U	9100	27500	55000	ug/Kg
75-09-2	Methylene Chloride	55000	U	4500	27500	55000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	55000	U	4500	27500	55000	ug/Kg
75-34-3	1,1-Dichloroethane	55000	U	3900	27500	55000	ug/Kg
110-82-7	Cyclohexane	55000	U	6000	27500	55000	ug/Kg
78-93-3	2-Butanone	270000	U	14000	135000	270000	ug/Kg
56-23-5	Carbon Tetrachloride	55000	U	6800	27500	55000	ug/Kg
156-59-2	cis-1,2-Dichloroethene	8400	JD J	3800	27500	55000	ug/Kg
67-66-3	Chloroform	55000	U U J	3700	27500	55000	ug/Kg
71-55-6	1,1,1-Trichloroethane	130000	D J	4400	27500	55000	ug/Kg
108-87-2	Methylcyclohexane	55000	U U J	7400	27500	55000	ug/Kg
71-43-2	Benzene	55000	U	3500	27500	55000	ug/Kg
107-06-2	1,2-Dichloroethane	55000	U	5200	27500	55000	ug/Kg
79-01-6	Trichloroethene	1400000	D J	3100	27500	55000	ug/Kg
78-87-5	1,2-Dichloropropane	55000	U U J	5000	27500	55000	ug/Kg
75-27-4	Bromodichloromethane	55000	U	3900	27500	55000	ug/Kg
108-10-1	4-Methyl-2-Pentanone	270000	U	23000	135000	270000	ug/Kg
108-88-3	Toluene	42000	JD J	4000	27500	55000	ug/Kg
10061-02-6	t-1,3-Dichloropropene	55000	U U J	3200	27500	55000	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	55000	U	3400	27500	55000	ug/Kg
79-00-5	1,1,2-Trichloroethane	55000	U	4200	27500	55000	ug/Kg
591-78-6	2-Hexanone	270000	U	21000	135000	270000	ug/Kg
124-48-1	Dibromochloromethane	55000	U	5700	27500	55000	ug/Kg
106-93-4	1,2-Dibromoethane	55000	U	4500	27500	55000	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-B-3(12-12.5)DL2	SDG No.:	C1051
Lab Sample ID:	C1051-01DL2	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	9
Sample Wt/Vol:	5.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039200.D	100		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	1300000	J D	2900	27500	55000	ug/Kg
108-90-7	Chlorobenzene	55000	U J U	5400	27500	55000	ug/Kg
100-41-4	Ethyl Benzene	22000	J JD	5800	27500	55000	ug/Kg
179601-23-1	m/p-Xylenes	78000	J JD	10000	55000	110000	ug/Kg
95-47-6	o-Xylene	25000	J JD	4700	27500	55000	ug/Kg
100-42-5	Styrene	55000	U J U	3900	27500	55000	ug/Kg
75-25-2	Bromoform	55000	U	5100	27500	55000	ug/Kg
98-82-8	Isopropylbenzene	55000	U	4900	27500	55000	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	55000	U	3400	27500	55000	ug/Kg
541-73-1	1,3-Dichlorobenzene	55000	U	4700	27500	55000	ug/Kg
106-46-7	1,4-Dichlorobenzene	55000	U	3500	27500	55000	ug/Kg
95-50-1	1,2-Dichlorobenzene	55000	U	4900	27500	55000	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	55000	U	5000	27500	55000	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	55000	U	6800	27500	55000	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	7762		55 - 158		155%	SPK: 50
1868-53-7	Dibromofluoromethane	7383		53 - 156		148%	SPK: 50
2037-26-5	Toluene-d8	7062	*	68 - 122		141%	SPK: 50
460-00-4	4-Bromofluorobenzene	7599	*	25 - 144		152%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1147870	4.07				
540-36-3	1,4-Difluorobenzene	1726980	4.58				
3114-55-4	Chlorobenzene-d5	1463280	7.92				
3855-82-1	1,4-Dichlorobenzene-d4	934886	10.43				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	RU-WOTV-2	SDG No.:	C1051
Lab Sample ID:	C1051-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	14
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042862.D	1		01/07/11	VK010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.8	U	0.76	2.9	5.8	ug/Kg
74-87-3	Chloromethane	5.8	U	1	2.9	5.8	ug/Kg
75-01-4	Vinyl Chloride	5.8	U	1.4	2.9	5.8	ug/Kg
74-83-9	Bromomethane	5.8	U	2.9	2.9	5.8	ug/Kg
75-00-3	Chloroethane	5.8	U	1.6	2.9	5.8	ug/Kg
75-69-4	Trichlorofluoromethane	5.8	U	1.5	2.9	5.8	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.8	U	1.5	2.9	5.8	ug/Kg
75-35-4	1,1-Dichloroethene	5.8	U	1.7	2.9	5.8	ug/Kg
67-64-1	Acetone	29	U	3.5	14.5	29	ug/Kg
75-15-0	Carbon Disulfide	5.8	U	1.2	2.9	5.8	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.8	U	1.1	2.9	5.8	ug/Kg
79-20-9	Methyl Acetate	5.8	U	1.8	2.9	5.8	ug/Kg
75-09-2	Methylene Chloride	5.8	U	1.7	2.9	5.8	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.8	U	0.8	2.9	5.8	ug/Kg
75-34-3	1,1-Dichloroethane	5.8	U	1.1	2.9	5.8	ug/Kg
110-82-7	Cyclohexane	5.8	U	1.2	2.9	5.8	ug/Kg
78-93-3	2-Butanone	29	U	3.6	14.5	29	ug/Kg
56-23-5	Carbon Tetrachloride	5.8	U	1.2	2.9	5.8	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5.8	U	1	2.9	5.8	ug/Kg
67-66-3	Chloroform	5.8	U	0.86	2.9	5.8	ug/Kg
71-55-6	1,1,1-Trichloroethane	5.8	U	1	2.9	5.8	ug/Kg
108-87-2	Methylcyclohexane	5.8	U	1.2	2.9	5.8	ug/Kg
71-43-2	Benzene	5.8	U	0.44	2.9	5.8	ug/Kg
107-06-2	1,2-Dichloroethane	5.8	U	0.75	2.9	5.8	ug/Kg
79-01-6	Trichloroethene	11		1	2.9	5.8	ug/Kg
78-87-5	1,2-Dichloropropane	5.8	U	0.3	2.9	5.8	ug/Kg
75-27-4	Bromodichloromethane	5.8	U	0.72	2.9	5.8	ug/Kg
108-10-1	4-Methyl-2-Pentanone	29	U	3.4	14.5	29	ug/Kg
108-88-3	Toluene	5.8	U	0.75	2.9	5.8	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.8	U	0.92	2.9	5.8	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.8	U	0.84	2.9	5.8	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.8	U	1	2.9	5.8	ug/Kg
591-78-6	2-Hexanone	29	U	4.6	14.5	29	ug/Kg
124-48-1	Dibromochloromethane	5.8	U	0.63	2.9	5.8	ug/Kg
106-93-4	1,2-Dibromoethane	5.8	U	0.75	2.9	5.8	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	RU-WOTV-2	SDG No.:	C1051
Lab Sample ID:	C1051-02	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	14
Sample Wt/Vol:	4.99 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042862.D	1		01/07/11	VK010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	2.8	J	1.2	2.9	5.8	ug/Kg
108-90-7	Chlorobenzene	5.8	U	0.58	2.9	5.8	ug/Kg
100-41-4	Ethyl Benzene	5.8	U	0.72	2.9	5.8	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.84	6	12	ug/Kg
95-47-6	o-Xylene	5.8	U	0.79	2.9	5.8	ug/Kg
100-42-5	Styrene	5.8	U	0.52	2.9	5.8	ug/Kg
75-25-2	Bromoform	5.8	U	0.86	2.9	5.8	ug/Kg
98-82-8	Isopropylbenzene	5.8	U	0.56	2.9	5.8	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.8	U	0.54	2.9	5.8	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.8	U	0.43	2.9	5.8	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.8	U	0.48	2.9	5.8	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.8	U	0.72	2.9	5.8	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.8	U	1	2.9	5.8	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.8	U	0.82	2.9	5.8	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	37.1		55 - 158		74%	SPK: 50
1868-53-7	Dibromofluoromethane	44.7		53 - 156		89%	SPK: 50
2037-26-5	Toluene-d8	50.3		68 - 122		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	45.5		25 - 144		91%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	270160	3.21				
540-36-3	1,4-Difluorobenzene	360779	3.59				
3114-55-4	Chlorobenzene-d5	389442	6.28				
3855-82-1	1,4-Dichlorobenzene-d4	247336	8.6				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-DUP	SDG No.:	C1051
Lab Sample ID:	C1051-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	8
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCL VOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025316.D	1		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	540	U	60	270	540	ug/Kg
74-87-3	Chloromethane	540	U	59	270	540	ug/Kg
75-01-4	Vinyl Chloride	540	U	37	270	540	ug/Kg
74-83-9	Bromomethane	540	U	67	270	540	ug/Kg
75-00-3	Chloroethane	540	U	72	270	540	ug/Kg
75-69-4	Trichlorofluoromethane	830	J	38	270	540	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	780	J	49	270	540	ug/Kg
75-35-4	1,1-Dichloroethene	11000	J E	51	270	540	ug/Kg
67-64-1	Acetone	2700	U	300	1350	2700	ug/Kg
75-15-0	Carbon Disulfide	540	U	59	270	540	ug/Kg
1634-04-4	Methyl tert-butyl Ether	540	U	38	270	540	ug/Kg
79-20-9	Methyl Acetate	540	U	90	270	540	ug/Kg
75-09-2	Methylene Chloride	540	U	44	270	540	ug/Kg
156-60-5	trans-1,2-Dichloroethene	540	U	44	270	540	ug/Kg
75-34-3	1,1-Dichloroethane	540	U	39	270	540	ug/Kg
110-82-7	Cyclohexane	1600	J	60	270	540	ug/Kg
78-93-3	2-Butanone	2700	U	140	1350	2700	ug/Kg
56-23-5	Carbon Tetrachloride	540	U	67	270	540	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5400	J	38	270	540	ug/Kg
67-66-3	Chloroform	540	U	37	270	540	ug/Kg
71-55-6	1,1,1-Trichloroethane	100000	J E	43	270	540	ug/Kg
108-87-2	Methyleyclohexane	540	U	74	270	540	ug/Kg
71-43-2	Benzene	1900	J	35	270	540	ug/Kg
107-06-2	1,2-Dichloroethane	540	U	52	270	540	ug/Kg
79-01-6	Trichloroethene	1700000	J E	30	270	540	ug/Kg
78-87-5	1,2-Dichloropropane	540	U	50	270	540	ug/Kg
75-27-4	Bromodichloromethane	540	U	39	270	540	ug/Kg
108-10-1	4-Methyl-2-Pentanone	2700	U	230	1350	2700	ug/Kg
108-88-3	Toluene	230000	J E	40	270	540	ug/Kg
10061-02-6	t-1,3-Dichloropropene	540	U	31	270	540	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	540	U	34	270	540	ug/Kg
79-00-5	1,1,2-Trichloroethane	540	U	41	270	540	ug/Kg
591-78-6	2-Hexanone	2700	U	210	1350	2700	ug/Kg
124-48-1	Dibromochloromethane	540	U	56	270	540	ug/Kg
106-93-4	1,2-Dibromoethane	540	U	44	270	540	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-DUP	SDG No.:	C1051
Lab Sample ID:	C1051-04	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	8
Sample Wt/Vol:	5.01	Units:	g
Soil Aliquot Vol:	100	Final Vol:	10000 uL
		Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025316.D	1		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	380000	J E	29	270	540	ug/Kg
108-90-7	Chlorobenzene	87	J	53	270	540	ug/Kg
100-41-4	Ethyl Benzene	22000	E	57	270	540	ug/Kg
179601-23-1	m/p-Xylenes	58000	E	100	550	1100	ug/Kg
95-47-6	o-Xylene	26000	E	47	270	540	ug/Kg
100-42-5	Styrene	540	U	39	270	540	ug/Kg
75-25-2	Bromoform	540	U	51	270	540	ug/Kg
98-82-8	Isopropylbenzene	2800	J	49	270	540	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	540	U	34	270	540	ug/Kg
541-73-1	1,3-Dichlorobenzene	540	U	47	270	540	ug/Kg
106-46-7	1,4-Dichlorobenzene	540	U	35	270	540	ug/Kg
95-50-1	1,2-Dichlorobenzene	200	J	49	270	540	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	540	U	50	270	540	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	540	U	67	270	540	ug/Kg

SURROGATES

17060-07-0	1,2-Dichloroethane-d4	38.3		55 - 158	77%	SPK: 50
1868-53-7	Dibromofluoromethane	142	*	53 - 156	285%	SPK: 50
2037-26-5	Toluene-d8	229	*	68 - 122	458%	SPK: 50
460-00-4	4-Bromofluorobenzene	253	*	25 - 144	506%	SPK: 50

INTERNAL STANDARDS

363-72-4	Pentafluorobenzene	1000680	3.25
540-36-3	1,4-Difluorobenzene	322202	3.72
3114-55-4	Chlorobenzene-d5	1590960	6.58
3855-82-1	1,4-Dichlorobenzene-d4	856614	8.99

TENTATIVE IDENTIFIED COMPOUNDS

	unknown6.17	14000	J		6.17	ug/Kg
000097-87-0	Propanoic acid, 2-methyl-, butyl e	8300	J		7.82	ug/Kg
103-65-1	n-propylbenzene	8700	J		8.11	ug/Kg
000124-18-5	Decane	15000	J		8.17	ug/Kg
000620-14-4	Benzene, 1-ethyl-3-methyl-	17000	J		8.22	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	15000	J		8.32	ug/Kg
000622-96-8	Benzene, 1-ethyl-4-methyl-	11000	J		8.49	ug/Kg
98-06-6	tert-Butylbenzene	210	J		8.6	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	32000	J		8.67	ug/Kg
135-98-8	sec-Butylbenzene	3300	J		8.77	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	01/05/11	
Project:	Provan	Date Received:	01/07/11	
Client Sample ID:	WOT-DUP	SDG No.:	C1051	
Lab Sample ID:	C1051-04	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	8	
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025316.D	1		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
99-87-6	p-Isopropyltoluene	2500	J			8.91	ug/Kg
000526-73-8	Benzene, 1,2,3-trimethyl-	11000	J			9.05	ug/Kg
104-51-8	n-Butylbenzene	7200	J			9.27	ug/Kg
000527-84-4	Benzene, 1-methyl-2-(1-methylethyl)	13000	J			9.51	ug/Kg
000112-40-3	Dodecane	13000	J			10.11	ug/Kg
000824-90-8	1-Phenyl-1-butene	13000	J			10.24	ug/Kg
056253-64-6	Benzene, (2-methyl-1-butenyl)-	8400	J			10.53	ug/Kg
91-20-3	Naphthalene	14000	J			10.82	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-DUPDL	SDG No.:	C1051
Lab Sample ID:	C1051-04DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	8
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025317.D	10		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5400	U	600	2700	5400	ug/Kg
74-87-3	Chloromethane	5400	U	590	2700	5400	ug/Kg
75-01-4	Vinyl Chloride	5400	U	370	2700	5400	ug/Kg
74-83-9	Bromomethane	5400	U	670	2700	5400	ug/Kg
75-00-3	Chloroethane	5400	U	720	2700	5400	ug/Kg
75-69-4	Trichlorofluoromethane	5400	U	380	2700	5400	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5400	U	490	2700	5400	ug/Kg
75-35-4	1,1-Dichloroethene	8100	D	510	2700	5400	ug/Kg
67-64-1	Acetone	27000	U	3000	13500	27000	ug/Kg
75-15-0	Carbon Disulfide	5400	U	590	2700	5400	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5400	U	380	2700	5400	ug/Kg
79-20-9	Methyl Acetate	5400	U	900	2700	5400	ug/Kg
75-09-2	Methylene Chloride	5400	U	440	2700	5400	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5400	U	440	2700	5400	ug/Kg
75-34-3	1,1-Dichloroethane	5400	U	390	2700	5400	ug/Kg
110-82-7	Cyclohexane	3000	JD	600	2700	5400	ug/Kg
78-93-3	2-Butanone	27000	U	1400	13500	27000	ug/Kg
56-23-5	Carbon Tetrachloride	5400	U	670	2700	5400	ug/Kg
156-59-2	cis-1,2-Dichloroethene	8700	D	380	2700	5400	ug/Kg
67-66-3	Chloroform	5400	U	370	2700	5400	ug/Kg
71-55-6	1,1,1-Trichloroethane	160000	ED	430	2700	5400	ug/Kg
108-87-2	Methylcyclohexane	5400	U	740	2700	5400	ug/Kg
71-43-2	Benzene	710	JD	350	2700	5400	ug/Kg
107-06-2	1,2-Dichloroethane	5400	U	520	2700	5400	ug/Kg
79-01-6	Trichloroethene	1500000	ED	300	2700	5400	ug/Kg
78-87-5	1,2-Dichloropropane	5400	U	500	2700	5400	ug/Kg
75-27-4	Bromodichloromethane	5400	U	390	2700	5400	ug/Kg
108-10-1	4-Methyl-2-Pentanone	27000	U	2300	13500	27000	ug/Kg
108-88-3	Toluene	86000	D	400	2700	5400	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5400	U	310	2700	5400	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5400	U	340	2700	5400	ug/Kg
79-00-5	1,1,2-Trichloroethane	5400	U	410	2700	5400	ug/Kg
591-78-6	2-Hexanone	27000	U	2100	13500	27000	ug/Kg
124-48-1	Dibromochloromethane	5400	U	560	2700	5400	ug/Kg
106-93-4	1,2-Dibromoethane	5400	U	440	2700	5400	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-DUPDL	SDG No.:	C1051
Lab Sample ID:	C1051-04DL	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	8
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VF025317.D	10		01/07/11	VF010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	800000 J	ED	290	2700	5400	ug/Kg
108-90-7	Chlorobenzene	5400 U J	U	530	2700	5400	ug/Kg
100-41-4	Ethyl Benzene	29000 J	D	570	2700	5400	ug/Kg
179601-23-1	m/p-Xylenes	110000 J	D	1000	5500	11000	ug/Kg
95-47-6	o-Xylene	37000 J	D	470	2700	5400	ug/Kg
100-42-5	Styrene	5400 U J	U	390	2700	5400	ug/Kg
75-25-2	Bromoform	5400 U J	U	510	2700	5400	ug/Kg
98-82-8	Isopropylbenzene	2800 J	JD	490	2700	5400	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5400 U J	U	340	2700	5400	ug/Kg
541-73-1	1,3-Dichlorobenzene	5400	U	470	2700	5400	ug/Kg
106-46-7	1,4-Dichlorobenzene	5400	U	350	2700	5400	ug/Kg
95-50-1	1,2-Dichlorobenzene	5400	U	490	2700	5400	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5400	U	500	2700	5400	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5400	U	670	2700	5400	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	413		55 - 158		83%	SPK: 50
1868-53-7	Dibromofluoromethane	712		53 - 156		142%	SPK: 50
2037-26-5	Toluene-d8	688	*	68 - 122		138%	SPK: 50
460-00-4	4-Bromofluorobenzene	683		25 - 144		137%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1050040	3.25				
540-36-3	1,4-Difluorobenzene	1144690	3.67				
3114-55-4	Chlorobenzene-d5	1699340	6.56				
3855-82-1	1,4-Dichlorobenzene-d4	1036190	8.99				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-DUPDL2	SDG No.:	C1051
Lab Sample ID:	C1051-04DL2	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	8
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039201.D	100		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	54000	U	6000	27000	54000	ug/Kg
74-87-3	Chloromethane	54000	U	5900	27000	54000	ug/Kg
75-01-4	Vinyl Chloride	54000	U	3700	27000	54000	ug/Kg
74-83-9	Bromomethane	54000	U	6700	27000	54000	ug/Kg
75-00-3	Chloroethane	54000	U	7200	27000	54000	ug/Kg
75-69-4	Trichlorofluoromethane	54000	U	3800	27000	54000	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	54000	U	4900	27000	54000	ug/Kg
75-35-4	1,1-Dichloroethene	54000	U	5100	27000	54000	ug/Kg
67-64-1	Acetone	270000	U	30000	135000	270000	ug/Kg
75-15-0	Carbon Disulfide	54000	U	5900	27000	54000	ug/Kg
1634-04-4	Methyl tert-butyl Ether	54000	U	3800	27000	54000	ug/Kg
79-20-9	Methyl Acetate	54000	U	9000	27000	54000	ug/Kg
75-09-2	Methylene Chloride	54000	U	4400	27000	54000	ug/Kg
156-60-5	trans-1,2-Dichloroethene	54000	U	4400	27000	54000	ug/Kg
75-34-3	1,1-Dichloroethane	54000	U	3900	27000	54000	ug/Kg
110-82-7	Cyclohexane	54000	U	6000	27000	54000	ug/Kg
78-93-3	2-Butanone	270000	U	14000	135000	270000	ug/Kg
56-23-5	Carbon Tetrachloride	54000	U	6700	27000	54000	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5400	JD	3800	27000	54000	ug/Kg
67-66-3	Chloroform	54000	U	3700	27000	54000	ug/Kg
71-55-6	1,1,1-Trichloroethane	71000	D	4300	27000	54000	ug/Kg
108-87-2	Methylcyclohexane	54000	U	7400	27000	54000	ug/Kg
71-43-2	Benzene	54000	U	3500	27000	54000	ug/Kg
107-06-2	1,2-Dichloroethane	54000	U	5200	27000	54000	ug/Kg
79-01-6	Trichloroethene	890000	D	3000	27000	54000	ug/Kg
78-87-5	1,2-Dichloropropane	54000	U	5000	27000	54000	ug/Kg
75-27-4	Bromodichloromethane	54000	U	3900	27000	54000	ug/Kg
108-10-1	4-Methyl-2-Pentanone	270000	U	23000	135000	270000	ug/Kg
108-88-3	Toluene	27000	JD	4000	27000	54000	ug/Kg
10061-02-6	t-1,3-Dichloropropene	54000	U	3100	27000	54000	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	54000	U	3400	27000	54000	ug/Kg
79-00-5	1,1,2-Trichloroethane	54000	U	4100	27000	54000	ug/Kg
591-78-6	2-Hexanone	270000	U	21000	135000	270000	ug/Kg
124-48-1	Dibromochloromethane	54000	U	5600	27000	54000	ug/Kg
106-93-4	1,2-Dibromoethane	54000	U	4400	27000	54000	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	01/05/11	
Project:	Provan	Date Received:	01/07/11	
Client Sample ID:	WOT-DUPDL2	SDG No.:	C1051	
Lab Sample ID:	C1051-04DL2	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	8	
Sample Wt/Vol:	5.01 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039201.D	100		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	790000	D	2900	27000	54000	ug/Kg
108-90-7	Chlorobenzene	54000	U	5300	27000	54000	ug/Kg
100-41-4	Ethyl Benzene	11000	JD	5700	27000	54000	ug/Kg
179601-23-1	m/p-Xylenes	47000	JD	10000	55000	110000	ug/Kg
95-47-6	o-Xylene	16000	JD	4700	27000	54000	ug/Kg
100-42-5	Styrene	54000	U	3900	27000	54000	ug/Kg
75-25-2	Bromoform	54000	U	5100	27000	54000	ug/Kg
98-82-8	Isopropylbenzene	54000	U	4900	27000	54000	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	54000	U	3400	27000	54000	ug/Kg
541-73-1	1,3-Dichlorobenzene	54000	U	4700	27000	54000	ug/Kg
106-46-7	1,4-Dichlorobenzene	54000	U	3500	27000	54000	ug/Kg
95-50-1	1,2-Dichlorobenzene	54000	U	4900	27000	54000	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	54000	U	5000	27000	54000	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	54000	U	6700	27000	54000	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	3691		55 - 158		74%	SPK: 50
1868-53-7	Dibromofluoromethane	3661		53 - 156		73%	SPK: 50
2037-26-5	Toluene-d8	3420		68 - 122		68%	SPK: 50
460-00-4	4-Bromofluorobenzene	3768		25 - 144		75%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1176320	4.08				
540-36-3	1,4-Difluorobenzene	1697730	4.58				
3114-55-4	Chlorobenzene-d5	1485420	7.93				
3855-82-1	1,4-Dichlorobenzene-d4	905036	10.42				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-S-8(12-12.5)	SDG No.:	C1051
Lab Sample ID:	C1051-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	12
Sample Wt/Vol:	4.98 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042861.D	1		01/07/11	VK010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	5.7	U	0.74	2.85	5.7	ug/Kg
74-87-3	Chloromethane	5.7	U	0.98	2.85	5.7	ug/Kg
75-01-4	Vinyl Chloride	5.7	U	1.4	2.85	5.7	ug/Kg
74-83-9	Bromomethane	5.7	U	2.8	2.85	5.7	ug/Kg
75-00-3	Chloroethane	5.7	U	1.6	2.85	5.7	ug/Kg
75-69-4	Trichlorofluoromethane	5.7	U	1.5	2.85	5.7	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	5.7	U	1.5	2.85	5.7	ug/Kg
75-35-4	1,1-Dichloroethene	5.7	U	1.7	2.85	5.7	ug/Kg
67-64-1	Acetone	6	J	3.4	14.5	29	ug/Kg
75-15-0	Carbon Disulfide	5.7	U	1.2	2.85	5.7	ug/Kg
1634-04-4	Methyl tert-butyl Ether	5.7	U	1.1	2.85	5.7	ug/Kg
79-20-9	Methyl Acetate	5.7	U	1.7	2.85	5.7	ug/Kg
75-09-2	Methylene Chloride	5.7	U	1.6	2.85	5.7	ug/Kg
156-60-5	trans-1,2-Dichloroethene	5.7	U	0.79	2.85	5.7	ug/Kg
75-34-3	1,1-Dichloroethane	5.7	U	1.1	2.85	5.7	ug/Kg
110-82-7	Cyclohexane	5.7	U	1.2	2.85	5.7	ug/Kg
78-93-3	2-Butanone	29	U	3.5	14.5	29	ug/Kg
56-23-5	Carbon Tetrachloride	5.7	U	1.1	2.85	5.7	ug/Kg
156-59-2	cis-1,2-Dichloroethene	8.8		1	2.85	5.7	ug/Kg
67-66-3	Chloroform	5.7	U	0.84	2.85	5.7	ug/Kg
71-55-6	1,1,1-Trichloroethane	1.4	J	1	2.85	5.7	ug/Kg
108-87-2	Methylcyclohexane	5.7	U	1.2	2.85	5.7	ug/Kg
71-43-2	Benzene	5.7	U	0.43	2.85	5.7	ug/Kg
107-06-2	1,2-Dichloroethane	5.7	U	0.73	2.85	5.7	ug/Kg
79-01-6	Trichloroethene	21		0.98	2.85	5.7	ug/Kg
78-87-5	1,2-Dichloropropane	5.7	U	0.3	2.85	5.7	ug/Kg
75-27-4	Bromodichloromethane	5.7	U	0.71	2.85	5.7	ug/Kg
108-10-1	4-Methyl-2-Pentanone	29	U	3.3	14.5	29	ug/Kg
108-88-3	Toluene	5.7	U	0.73	2.85	5.7	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5.7	U	0.9	2.85	5.7	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5.7	U	0.82	2.85	5.7	ug/Kg
79-00-5	1,1,2-Trichloroethane	5.7	U	1	2.85	5.7	ug/Kg
591-78-6	2-Hexanone	29	U	4.5	14.5	29	ug/Kg
124-48-1	Dibromochloromethane	5.7	U	0.62	2.85	5.7	ug/Kg
106-93-4	1,2-Dibromoethane	5.7	U	0.73	2.85	5.7	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-S-8(12-12.5)	SDG No.:	C1051
Lab Sample ID:	C1051-05	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	12
Sample Wt/Vol:	4.98 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042861.D	1		01/07/11	VK010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	2.8	J	1.2	2.85	5.7	ug/Kg
108-90-7	Chlorobenzene	5.7	U	0.57	2.85	5.7	ug/Kg
100-41-4	Ethyl Benzene	5.7	U	0.71	2.85	5.7	ug/Kg
179601-23-1	m/p-Xylenes	11	U	0.82	5.5	11	ug/Kg
95-47-6	o-Xylene	5.7	U	0.78	2.85	5.7	ug/Kg
100-42-5	Styrene	5.7	U	0.51	2.85	5.7	ug/Kg
75-25-2	Bromoform	5.7	U	0.84	2.85	5.7	ug/Kg
98-82-8	Isopropylbenzene	5.7	U	0.55	2.85	5.7	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5.7	U	0.52	2.85	5.7	ug/Kg
541-73-1	1,3-Dichlorobenzene	5.7	U	0.42	2.85	5.7	ug/Kg
106-46-7	1,4-Dichlorobenzene	5.7	U	0.47	2.85	5.7	ug/Kg
95-50-1	1,2-Dichlorobenzene	5.7	U	0.71	2.85	5.7	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	5.7	U	0.99	2.85	5.7	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	5.7	U	0.8	2.85	5.7	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	36.6		55 - 158		73%	SPK: 50
1868-53-7	Dibromofluoromethane	45.1		53 - 156		90%	SPK: 50
2037-26-5	Toluene-d8	50.6		68 - 122		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	48		25 - 144		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	259454	3.21				
540-36-3	1,4-Difluorobenzene	352838	3.59				
3114-55-4	Chlorobenzene-d5	390603	6.28				
3855-82-1	1,4-Dichlorobenzene-d4	251358	8.6				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	01/05/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-B-3.1(12-12.5)	SDG No.:	C1051
Lab Sample ID:	C1051-08	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	19
Sample Wt/Vol:	4.97 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042863.D	1		01/07/11	VK010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	6.2	U	0.81	3.1	6.2	ug/Kg
74-87-3	Chloromethane	6.2	U	1.1	3.1	6.2	ug/Kg
75-01-4	Vinyl Chloride	6.2	U	1.5	3.1	6.2	ug/Kg
74-83-9	Bromomethane	6.2	U	3	3.1	6.2	ug/Kg
75-00-3	Chloroethane	6.2	U	1.7	3.1	6.2	ug/Kg
75-69-4	Trichlorofluoromethane	6.2	U	1.6	3.1	6.2	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	6.2	U	1.7	3.1	6.2	ug/Kg
75-35-4	1,1-Dichloroethene	6.2	U	1.8	3.1	6.2	ug/Kg
67-64-1	Acetone	31	U	3.8	15.5	31	ug/Kg
75-15-0	Carbon Disulfide	6.2	U	1.3	3.1	6.2	ug/Kg
1634-04-4	Methyl tert-butyl Ether	6.2	U	1.2	3.1	6.2	ug/Kg
79-20-9	Methyl Acetate	6.2	U	1.9	3.1	6.2	ug/Kg
75-09-2	Methylene Chloride	6.2	U	1.8	3.1	6.2	ug/Kg
156-60-5	trans-1,2-Dichloroethene	6.2	U	0.86	3.1	6.2	ug/Kg
75-34-3	1,1-Dichloroethane	6.2	U	1.2	3.1	6.2	ug/Kg
110-82-7	Cyclohexane	6.2	U	1.3	3.1	6.2	ug/Kg
78-93-3	2-Butanone	31	U	3.9	15.5	31	ug/Kg
56-23-5	Carbon Tetrachloride	6.2	U	1.2	3.1	6.2	ug/Kg
156-59-2	cis-1,2-Dichloroethene	6.9		1.1	3.1	6.2	ug/Kg
67-66-3	Chloroform	6.2	U	0.92	3.1	6.2	ug/Kg
71-55-6	1,1,1-Trichloroethane	1.2	J	1.1	3.1	6.2	ug/Kg
108-87-2	Methylcyclohexane	6.2	U	1.3	3.1	6.2	ug/Kg
71-43-2	Benzene	6.2	U	0.47	3.1	6.2	ug/Kg
107-06-2	1,2-Dichloroethane	6.2	U	0.79	3.1	6.2	ug/Kg
79-01-6	Trichloroethene	22		1.1	3.1	6.2	ug/Kg
78-87-5	1,2-Dichloropropane	6.2	U	0.32	3.1	6.2	ug/Kg
75-27-4	Bromodichloromethane	6.2	U	0.77	3.1	6.2	ug/Kg
108-10-1	4-Methyl-2-Pentanone	31	U	3.6	15.5	31	ug/Kg
108-88-3	Toluene	6.2	U	0.79	3.1	6.2	ug/Kg
10061-02-6	t-1,3-Dichloropropene	6.2	U	0.98	3.1	6.2	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6.2	U	0.89	3.1	6.2	ug/Kg
79-00-5	1,1,2-Trichloroethane	6.2	U	1.1	3.1	6.2	ug/Kg
591-78-6	2-Hexanone	31	U	4.9	15.5	31	ug/Kg
124-48-1	Dibromochloromethane	6.2	U	0.67	3.1	6.2	ug/Kg
106-93-4	1,2-Dibromoethane	6.2	U	0.79	3.1	6.2	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	01/05/11	
Project:	Provan	Date Received:	01/07/11	
Client Sample ID:	WOT-B-3.1(12-12.5)	SDG No.:	C1051	
Lab Sample ID:	C1051-08	Matrix:	SOIL	
Analytical Method:	SW8260B	% Moisture:	19	
Sample Wt/Vol:	4.97 Units: g	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VK042863.D	1		01/07/11	VK010711

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	3.7	J	1.3	3.1	6.2	ug/Kg
108-90-7	Chlorobenzene	6.2	U	0.62	3.1	6.2	ug/Kg
100-41-4	Ethyl Benzene	6.2	U	0.77	3.1	6.2	ug/Kg
179601-23-1	m/p-Xylenes	12	U	0.89	6	12	ug/Kg
95-47-6	o-Xylene	6.2	U	0.84	3.1	6.2	ug/Kg
100-42-5	Styrene	6.2	U	0.56	3.1	6.2	ug/Kg
75-25-2	Bromoform	6.2	U	0.92	3.1	6.2	ug/Kg
98-82-8	Isopropylbenzene	6.2	U	0.6	3.1	6.2	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6.2	U	0.57	3.1	6.2	ug/Kg
541-73-1	1,3-Dichlorobenzene	6.2	U	0.46	3.1	6.2	ug/Kg
106-46-7	1,4-Dichlorobenzene	6.2	U	0.51	3.1	6.2	ug/Kg
95-50-1	1,2-Dichlorobenzene	6.2	U	0.77	3.1	6.2	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.2	U	1.1	3.1	6.2	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	6.2	U	0.87	3.1	6.2	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	37.2		55 - 158		74%	SPK: 50
1868-53-7	Dibromofluoromethane	46.3		53 - 156		93%	SPK: 50
2037-26-5	Toluene-d8	50.4		68 - 122		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.4		25 - 144		95%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	262312	3.21				
540-36-3	1,4-Difluorobenzene	355851	3.59				
3114-55-4	Chlorobenzene-d5	395587	6.28				
3855-82-1	1,4-Dichlorobenzene-d4	254240	8.61				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	01/06/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-S-9(9.5-10)	SDG No.:	C1051
Lab Sample ID:	C1051-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	15
Sample Wt/Vol:	4.97 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039202.D	1		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	590 UJ	U	65	295	590	ug/Kg
74-87-3	Chloromethane	590 UJ	U	64	295	590	ug/Kg
75-01-4	Vinyl Chloride	4200 J		40	295	590	ug/Kg
74-83-9	Bromomethane	590 UJ	U	73	295	590	ug/Kg
75-00-3	Chloroethane	590	U	78	295	590	ug/Kg
75-69-4	Trichlorofluoromethane	590	U	41	295	590	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	590	U	53	295	590	ug/Kg
75-35-4	1,1-Dichloroethene	590	U	56	295	590	ug/Kg
67-64-1	Acetone	3000	U	330	1500	3000	ug/Kg
75-15-0	Carbon Disulfide	590	U	64	295	590	ug/Kg
1634-04-4	Methyl tert-butyl Ether	590	U	41	295	590	ug/Kg
79-20-9	Methyl Acetate	590	U	98	295	590	ug/Kg
75-09-2	Methylene Chloride	590	U	49	295	590	ug/Kg
156-60-5	trans-1,2-Dichloroethene	590	U	49	295	590	ug/Kg
75-34-3	1,1-Dichloroethane	590	U	43	295	590	ug/Kg
110-82-7	Cyclohexane	140 J	J	65	295	590	ug/Kg
78-93-3	2-Butanone	3000 UJ	U	160	1500	3000	ug/Kg
56-23-5	Carbon Tetrachloride	590 UJ	U	73	295	590	ug/Kg
156-59-2	cis-1,2-Dichloroethene	3600 J		41	295	590	ug/Kg
67-66-3	Chloroform	590 UJ	U	40	295	590	ug/Kg
71-55-6	1,1,1-Trichloroethane	590 UJ	U	47	295	590	ug/Kg
108-87-2	Methylcyclohexane	1500 J		80	295	590	ug/Kg
71-43-2	Benzene	590 UJ	U	38	295	590	ug/Kg
107-06-2	1,2-Dichloroethane	590 UJ	U	57	295	590	ug/Kg
79-01-6	Trichloroethene	240 J	J	33	295	590	ug/Kg
78-87-5	1,2-Dichloropropane	590 UJ	U	54	295	590	ug/Kg
75-27-4	Bromodichloromethane	590 UJ	U	43	295	590	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3000 UJ	U	250	1500	3000	ug/Kg
108-88-3	Toluene	400 J	J	44	295	590	ug/Kg
10061-02-6	t-1,3-Dichloropropene	590 UJ	U	34	295	590	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	590	U	37	295	590	ug/Kg
79-00-5	1,1,2-Trichloroethane	590	U	45	295	590	ug/Kg
591-78-6	2-Hexanone	3000	U	230	1500	3000	ug/Kg
124-48-1	Dibromochloromethane	590	U	62	295	590	ug/Kg
106-93-4	1,2-Dibromoethane	590	U	49	295	590	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	01/06/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-S-9(9.5-10)	SDG No.:	C1051
Lab Sample ID:	C1051-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	15
Sample Wt/Vol:	4.97 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039202.D	1		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	130	J	32	295	590	ug/Kg
108-90-7	Chlorobenzene	590	U	58	295	590	ug/Kg
100-41-4	Ethyl Benzene	430	J	63	295	590	ug/Kg
179601-23-1	m/p-Xylenes	720	J	110	600	1200	ug/Kg
95-47-6	o-Xylene	640	J	51	295	590	ug/Kg
100-42-5	Styrene	590	U	43	295	590	ug/Kg
75-25-2	Bromoform	590	U	56	295	590	ug/Kg
98-82-8	Isopropylbenzene	120	J	53	295	590	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	590	U	37	295	590	ug/Kg
541-73-1	1,3-Dichlorobenzene	590	U	51	295	590	ug/Kg
106-46-7	1,4-Dichlorobenzene	590	U	38	295	590	ug/Kg
95-50-1	1,2-Dichlorobenzene	590	U	53	295	590	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	590	U	54	295	590	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	590	U	73	295	590	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	14.7	*	55 - 158		29%	SPK: 50
1868-53-7	Dibromofluoromethane	13	*	53 - 156		26%	SPK: 50
2037-26-5	Toluene-d8	12.3	*	68 - 122		25%	SPK: 50
460-00-4	4-Bromofluorobenzene	16.1		25 - 144		32%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1993470	4.05				
540-36-3	1,4-Difluorobenzene	2906240	4.57				
3114-55-4	Chlorobenzene-d5	2443950	7.92				
3855-82-1	1,4-Dichlorobenzene-d4	1471390	10.42				
TENTITIVE IDENTIFIED COMPOUNDS							
000540-84-1	Pentane, 2,2,4-trimethyl-	2100	J			3.85	ug/Kg
000592-27-8	Heptane, 2-methyl-	1500	J			5.28	ug/Kg
002216-34-4	Octane, 4-methyl-	2000	J			7.32	ug/Kg
002216-33-3	Octane, 3-methyl-	1900	J			7.47	ug/Kg
005911-04-6	Nonane, 3-methyl-	2300	J			8.67	ug/Kg
	unknown9.22	4700	J			9.22	ug/Kg
103-65-1	n-propylbenzene	190	J			9.51	ug/Kg
000124-18-5	Decane	6600	J			9.57	ug/Kg
000611-14-3	Benzene, 1-ethyl-2-methyl-	2300	J			9.63	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	570	J			9.73	ug/Kg



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Report of Analysis

Client:	First Environment	Date Collected:	01/06/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-S-9(9.5-10)	SDG No.:	C1051
Lab Sample ID:	C1051-09	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	15
Sample Wt/Vol:	4.97 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039202.D	1		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
055162-61-3	Tetracontane, 3,5,24-trimethyl-	1500	J			9.84	ug/Kg
005881-17-4	Octane, 3-ethyl-	5900	J			9.89	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	2700	J			10.09	ug/Kg
135-98-8	sec-Butylbenzene	170	J			10.19	ug/Kg
99-87-6	p-Isopropyltoluene	260	J			10.32	ug/Kg
91-20-3	Naphthalene	18000	J			12.28	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	First Environment	Date Collected:	01/06/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-S-9(9.5-10)RE	SDG No.:	C1051
Lab Sample ID:	C1051-09RE	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	15
Sample Wt/Vol:	4.97 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039205.D	1		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	590	U	65	295	590	ug/Kg
74-87-3	Chloromethane	590	U	64	295	590	ug/Kg
75-01-4	Vinyl Chloride	4500	J	40	295	590	ug/Kg
74-83-9	Bromomethane	590	U	73	295	590	ug/Kg
75-00-3	Chloroethane	590	U	78	295	590	ug/Kg
75-69-4	Trichlorofluoromethane	590	U	41	295	590	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	590	U	53	295	590	ug/Kg
75-35-4	1,1-Dichloroethene	590	U	56	295	590	ug/Kg
67-64-1	Acetone	3000	U	330	1500	3000	ug/Kg
75-15-0	Carbon Disulfide	590	U	64	295	590	ug/Kg
1634-04-4	Methyl tert-butyl Ether	590	U	41	295	590	ug/Kg
79-20-9	Methyl Acetate	590	U	98	295	590	ug/Kg
75-09-2	Methylene Chloride	590	U	49	295	590	ug/Kg
156-60-5	trans-1,2-Dichloroethene	590	U	49	295	590	ug/Kg
75-34-3	1,1-Dichloroethane	590	U	43	295	590	ug/Kg
110-82-7	Cyclohexane	180	J	65	295	590	ug/Kg
78-93-3	2-Butanone	3000	U	160	1500	3000	ug/Kg
56-23-5	Carbon Tetrachloride	590	U	73	295	590	ug/Kg
156-59-2	cis-1,2-Dichloroethene	4300	J	41	295	590	ug/Kg
67-66-3	Chloroform	590	U	40	295	590	ug/Kg
71-55-6	1,1,1-Trichloroethane	590	U	47	295	590	ug/Kg
108-87-2	Methylcyclohexane	1700	J	80	295	590	ug/Kg
71-43-2	Benzene	590	U	38	295	590	ug/Kg
107-06-2	1,2-Dichloroethane	590	U	57	295	590	ug/Kg
79-01-6	Trichloroethene	320	J	33	295	590	ug/Kg
78-87-5	1,2-Dichloropropane	590	U	54	295	590	ug/Kg
75-27-4	Bromodichloromethane	590	U	43	295	590	ug/Kg
108-10-1	4-Methyl-2-Pentanone	3000	U	250	1500	3000	ug/Kg
108-88-3	Toluene	490	J	44	295	590	ug/Kg
10061-02-6	t-1,3-Dichloropropene	590	U	34	295	590	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	590	U	37	295	590	ug/Kg
79-00-5	1,1,2-Trichloroethane	590	U	45	295	590	ug/Kg
591-78-6	2-Hexanone	3000	U	230	1500	3000	ug/Kg
124-48-1	Dibromochloromethane	590	U	62	295	590	ug/Kg
106-93-4	1,2-Dibromoethane	590	U	49	295	590	ug/Kg

Report of Analysis

Client:	First Environment	Date Collected:	01/06/11
Project:	Provan	Date Received:	01/07/11
Client Sample ID:	WOT-S-9(9.5-10)RE	SDG No.:	C1051
Lab Sample ID:	C1051-09RE	Matrix:	SOIL
Analytical Method:	SW8260B	% Moisture:	15
Sample Wt/Vol:	4.97 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VH039205.D	1		01/10/11	VH011011

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ	Units
127-18-4	Tetrachloroethene	170	J	32	295	590	ug/Kg
108-90-7	Chlorobenzene	590	U	58	295	590	ug/Kg
100-41-4	Ethyl Benzene	580	J	63	295	590	ug/Kg
179601-23-1	m/p-Xylenes	970	J	110	600	1200	ug/Kg
95-47-6	o-Xylene	840	J	51	295	590	ug/Kg
100-42-5	Styrene	590	U	43	295	590	ug/Kg
75-25-2	Bromoform	590	U	56	295	590	ug/Kg
98-82-8	Isopropylbenzene	170	J	53	295	590	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	590	U	37	295	590	ug/Kg
541-73-1	1,3-Dichlorobenzene	590	U	51	295	590	ug/Kg
106-46-7	1,4-Dichlorobenzene	590	U	38	295	590	ug/Kg
95-50-1	1,2-Dichlorobenzene	590	U	53	295	590	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	590	U	54	295	590	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	590	U	73	295	590	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	3.83	*	55 - 158		8%	SPK: 50
1868-53-7	Dibromofluoromethane	4.1	*	53 - 156		8%	SPK: 50
2037-26-5	Toluene-d8	4.74	*	68 - 122		9%	SPK: 50
460-00-4	4-Bromofluorobenzene	6.09	*	25 - 144		12%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	1696970	4.05				
540-36-3	1,4-Difluorobenzene	2497690	4.57				
3114-55-4	Chlorobenzene-d5	1919290	7.92				
3855-82-1	1,4-Dichlorobenzene-d4	1175700	10.43				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

APPENDIX C

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