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Solutia, Inc.
St. Louis, Missouri

Sauget Area 1 - Dead Creek Final Remedy Creek Bottom Soil Engineering Evaluation/Cost Analysis

Volume IV: Data Validation Report – Part A

Sauget and Cahokia, Illinois

Submitted To:
USEPA Region 5, Chicago, Illinois

Submitted By:
Solutia Inc.
St. Louis, Missouri

ENSR International
June 21, 2002
Revision 0
Document Number 06105-012-450

SOLUTIA™

LETTER OF TRANSMITTAL

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Sauget Area 1

Dead Creek Final Remedy
Engineering Evaluation/Cost Analysis

The following items are:

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3	Engineering Evaluation/Cost Analysis,
3	Human Health Risk Assessment
3	Ecological Risk Assessment
3	Data Validation Report ✓
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Comments:

By: Bruce Yare

Solutia, Inc.
St. Louis, Missouri

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EXECUTIVE SUMMARY

This report documents the results of the data validation task for chemical analyses of soil samples collected as part of the Unilateral Administrative Order (UAO) response activities for Dead Creek and Site M. The samples included in this data validation effort were creek bottom soil collected from excavated areas of Dead Creek in Sauget Area 1 (the Site) in Sauget and Cahokia, Illinois. A total of 117 soil samples were collected along with 13 field duplicate samples for a total of 130 samples. Samples were submitted for analysis to Severn Trent Laboratories in Savannah, Georgia (STL Savannah) and Triangle Laboratories (Triangle) in Durham, North Carolina.

Data validation was conducted with respect to the project data quality objectives (DQOs) including completeness, accuracy, precision and sample quantitation limits (SQLs). Validation was performed on 100% of the data for samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), Target Analyte List (TAL) metals, cyanide, and dioxin/furans. Samples analyzed for Toxicity Characteristic Leaching Procedure (TCLP), total organic carbon, and pH were not included in the validation effort.

The sample results were validated according to the following guidelines:

- USEPA Region V Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data (1997)
- USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999)
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1993)
- USEPA Contract Laboratory Program National Functional Guidelines for Dioxin/Furan Data Validation (Draft, April 1993)

Validation acceptance criteria was based on information provided in the Quality Assurance Project Plan (QAPP) for the Sauget Area 1 Support Sampling Plan, Sauget and Cahokia, Illinois, Volume 2B (August 1999), the analytical methods, and laboratory control limits.

Level IV (full) validation was performed on 10% of the data and Level III (limited) validation was conducted on the remaining 90% of the data. Level IV is defined as covering the elements described in the USEPA Contract Laboratory Program National Functional Validation Guidelines (National Functional Guidelines) and included an examination of the raw data in addition to data summary forms. Level III validation was restricted to holding times, blanks, spikes, and duplicates. Qualifiers applied to

data were consistent with those in the National Functional and USEPA Region V Guidelines cited above.

Overall, the data generated was valid and may be used with confidence for decision-making purposes. With respect to completeness, 99.9% of the data was considered valid, with only 16 of the 21,991 reportable data points rejected and, therefore, unusable. Data were rejected due to extremely low recoveries of either matrix spikes or surrogates. Approximately half of the data was qualified as estimated either because of quantitation below the SQL or due to non-conformance with criteria established in the analytical methods or EPA validation protocols.

1.0 INTRODUCTION

1.1 Program Summary

This report assesses the quality of the data generated for soil samples collected from excavated areas of the Dead Creek and Site M in the Sauget Area 1 site (the Site) in Sauget and Cahokia, Illinois. A total of 130 soil samples were collected (117 samples and 13 field duplicate samples). Samples were submitted for analysis to Severn Trent Laboratories in Savannah, Georgia (STL Savannah) and Triangle Laboratories (Triangle) in Durham, North Carolina. The samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), Target Analyte List (TAL) metals, cyanide, and dioxin/furans. Ancillary parameters included Toxicity Characteristic Leaching Procedure (TCLP), total organic carbon (TOC), and pH.

1.2 Analytical Methods

All analyses for VOCs, SVOCs, pesticides, PCBs, herbicides, metals, and cyanide were performed by STL Savannah. The following analytical methods were used by STL Savannah to analyze the soil samples that were included in the validation:

- TCL VOCs – USEPA SW-846 method 8620B
- TCL SVOCs – USEPA SW-846 method 8270C
- Pesticides – USEPA SW846 method 8081A
- PCBs – USEPA method 680
- Herbicides – USEPA SW-846 method 8151A
- TAL metals – USEPA SW846 method 6010B
- Mercury – USEPA SW846 methods 7470A/7471A
- Cyanide – USEPA SW846 methods 9010B/9012

Dioxins/furans analysis was performed by Triangle using USEPA SW846 method 8280A.

1.3 Data Validation Protocols

Data validation was performed on 100% of the data for samples analyzed for TCL VOCs, TCL SVOCs, pesticides, herbicides, PCBs, TAL metals, cyanide and dioxin/furans. TCLP, TOC, and pH data was not included in the validation effort. Level IV (full) validation was performed on 10% of the data and

Level III (limited) validation was conducted on the remaining data. Level IV is defined as covering the elements described in the USEPA Contract Laboratory Program National Functional Validation Guidelines (National Functional Guidelines) and included an examination of the raw data in addition to data summary forms. Level III validation was restricted to holding times, blanks, spikes, and duplicates. The review elements specific to each level of validation are shown in Table 2-1.

Data quality assessments and actions used during validation were based on the following EPA data validation guidelines:

- USEPA Region V Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data (1997)
- USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999)
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1993)
- USEPA Contract Laboratory Program National Functional Guidelines for Dioxin/Furan Data Validation (Draft April 1993)

Quality control (QC) acceptance criteria were based on the individual analytical methods, in-house laboratory limits, and/or the Quality Assurance Project Plan (QAPP) for the Sauget Area 1 Support Sampling Plan, Sauget and Cahokia, Illinois, Volume 2B (August 1999).

Qualifiers applied to data were consistent with those in the National Functional and USEPA Region V Guidelines. These qualifiers are defined as follows:

"U" The analyte was analyzed for, but was not detected above the sample reporting limit. This qualifier is also used when the detection limit of a compound is raised due to blank contamination.

"J" The analyte was positively identified, but the numerical value associated with it is considered estimated or approximate.

"UJ" The analyte was analyzed for, but was not detected above the sample reporting limit. The associated sample reporting limit is considered to be estimated.

"R" The result is rejected because of serious deficiencies. The result is deemed unreliable or unusable.

In addition to assigning the above qualifiers to data, codes were also appended to qualified data to specify the reason for the qualification. These "reason codes" were used as a method of tracking data

that was qualified based on specific reasons such as low surrogate recovery or blank contamination. The reason codes are only found on laboratory sample result forms (Form 1s) contained in Appendix A. The table contained Appendix A lists the reason codes that were used for this validation and their definitions. Reason codes were used for internal purposes only and are not reported in the summary tables of validated data.

1.4 Data Quality Assessment

An assessment of the overall quality of the analytical data generated for this program was based on the data quality indicators of representativeness, accuracy, precision, sensitivity, and completeness:

- Representativeness was assessed based on conformance to sample holding times, preservation requirements, and analytical methodologies,
- Accuracy was evaluated based on the results of spiked samples, instrument calibration, and laboratory blanks.
- Precision was evaluated using the results of field and laboratory duplicate analyses.
- Analytical sensitivity was assessed by reviewing the SQLs achieved, and
- Completeness was assessed based on both the successful analysis of samples in the laboratory and the amount of valid data as determined during validation.

Section 2 of this report presents the findings of the data quality assessment. Detailed data validation reports for each data package, summarizing the samples included in the review, actions taken, and the qualifiers that were applied are included as Appendix A.

2.0 SUMMARY OF FINDINGS

2.1 Sample Holding Times and Preservation

All samples were preserved and analyzed within the method specified holding times for initial analyses. Seventeen PCB samples and one herbicide sample were either reextracted and/or reanalyzed outside of acceptable holding times. Results for these samples were qualified as estimated (J/UJ) due to holding time exceedances (a total of 175 data points or <1% of the data). The PCB and herbicide samples were entirely from two Sample Delivery Groups. No data was rejected on the basis of holding times.

2.2 Analytical Methodologies

Sample analyses was performed using the methods cited Section 1.2. No deviations from the methodologies were noted.

2.3 Quality Control (QC) Samples

QC samples provide a measure of the accuracy and precision of the sample data. For this program, accuracy was measured using the results of spiked samples and blanks; precision was assessed by laboratory and field duplicate sample results.

2.3.1 Spiked Samples

Spiked sample results are expressed as recoveries, which demonstrate the relationship between the amount spiked into the sample and the amount measured or "recovered". Spiked samples included laboratory control samples (LCSs) and/or matrix spikes which were analyzed at a frequency of one per batch.

Laboratory Control Samples

LCS recoveries were acceptable (i.e., within the acceptance criteria) for all analyses with the following exceptions:

- Pesticides: alpha-chlordane, methoxychlor
- Herbicides: Dinoseb, MCPP
- Dioxin/Furans: 1,2,3,4,7,8,9-HpCDF, 1,2,3,7,8,9-HxCDF, and 2,3,4,6,7,8-HxCDF.

Sample results associated with the non-compliant LCSs were qualified as estimated (J/UJ). Fifty-six reportable data points (0.25% of the data) were qualified as estimated (J/UJ) for LCS recoveries that exceeded the QC limits.

Matrix Spikes

Matrix spikes recoveries were generally acceptable. The majority of the 652 data points (3% of the data) estimated due to poor matrix spike recovery were inorganic samples. This was due in part to the nature of the matrix (soil) and to the validation protocols which require that the same matrix of an entire set of samples to be qualified based on matrix spike recovery. Inorganic analytes that were qualified based on matrix spike recovery were antimony, barium, cadmium, calcium, chromium, copper, lead, magnesium, manganese, nickel, potassium, mercury, and cyanide. Of note were the mercury results in which 63% of the reported data were qualified as estimated (J/UJ) due to low matrix spike recovery.

Selected results for the organic analyses were also qualified on the basis of matrix spikes. For these analyses, only the associated sample was qualified for matrix spike recoveries. The following compounds were affected:

- PCBs: all target compounds
- Pesticides: all target compounds with the exception of heptachlor epoxide
- Herbicides: all target compounds
- VOCs: all target compounds
- SVOCs: all target compounds with the exception of isophorone, 4-chloroaniline, 2,4,5 trichlorophenol, 2-nitroaniline, 2,6-dinitrotoluene, 2,4-dinitrophenol, 2,4-dinitrotoluene, fluorene, 4-nitroaniline, 4,6-dinitro-2-methylphenol,hexachlorobenzene, pentachlorophenol, pyrene, 3,3-dichlorobenzidene, di-n-octylphthalate, benzo(k)fluoranthene, indeno(1,2,3-cd) pyrene, dibenzo(a,h)anthracene, benzo(g,h,i) perylene, and carbazole
- Dioxin/furan: 1,2,3,4,6,7,8,9-OCDD and 1,2,3,4,6,7,8-HpCDD

A limited number of data points (10) were rejected (R) based on extremely low matrix spikes. The rejected analytes were 4,4-DDE, 4,4-DDT, Endosulfan I, heptachlor, Dalapon, Dinoseb, and hexachlorocyclopentadiene. A summary of the rejected data, including the samples affected, is included in Table 2-2.

2.3.2 Blanks

Blank samples provide a measure of accuracy by monitoring contaminants potentially introduced in the field or in the laboratory. For this sampling program, there were no field blanks (trip blanks, equipment

rinsates, field blanks) collected due to the matrix of the investigative samples. Laboratory blanks for this program included sample preparation or method blanks and calibration blanks. Laboratory blanks were analyzed with each batch of samples.

The results of the blank analyses revealed the presence of the following compounds in one or more method and/or calibration blanks:

- Metals: antimony, beryllium, cadmium, molybdenum, selenium, silver, sodium, thallium, tin, and mercury
- Herbicides: pentachlorophenol
- VOCs: acetone, and toluene
- SVOCs: benzo(a)anthracene, benzo(b) fluoranthene, benzo(k)fluoranthene, chrysene, and di-n-butylphthalate
- Dioxins: 1,2,3,4,6,7,8,9-OCDD, 1,2,3,4,6,7,8,9-OCDF, 1,2,3,4,7,8-HxCDF, 22,3,7,8-TCDD, Total HXCDF, Total TCDD, and Total TCDF.

The presence of these compounds in the blanks indicates the possibility of false positives in the associated samples. For each laboratory blank contaminant, action levels were established in accordance with EPA data validation guidelines and the data were qualified (U) if appropriate. Metals results affected by negative blank contamination were qualified as estimated (J or UJ) (in cases where positive results were less than or equal to the absolute value of the negative action level). There were a total of 511 data points (or 2.3% of the data) qualified based on laboratory blank contamination. No systematic contamination problem within the laboratories appeared to exist.

2.3.3 Duplicates

Duplicate samples measure the precision, or variability, of the sample data. Field duplicates measure the variability associated with both the sampling and analytical processes; laboratory duplicates measure only the variability associated with the sample analyses.

Field Duplicates

In accordance with National Functional Guidelines, inorganic data (metals, mercury, cyanide) was qualified based on field duplicate results. Organic data (VOCs, SVOCs, PCBs, pesticides, herbicides and dioxins) was not qualified based on field duplicate results per the Region V guidelines. Field duplicate results were documented for organic analyses for informational purposes only and are summarized in the data validation reports included in Appendix A.

Field duplicates were collected at a frequency of approximately 10% and analyzed for the same parameters as their associated samples. For this program there were thirteen field duplicate pairs analyzed. The results of the field duplicates generally demonstrated good agreement (expressed as relative percent difference [RPD]). For RPDs that exceeded the acceptance criteria as defined in the QAPP (100% RPD), positive and nondetected results in associated samples were qualified as estimated (J/UJ). For inorganic samples, all samples of the same matrix were qualified. A total of 114 data points (0.5% of the data) were qualified on the basis of field duplicate precision and included the following analytes: cadmium, chromium, cobalt, copper, cyanide, lead, manganese, mercury, nickel, vanadium and zinc.

Laboratory Duplicates

Laboratory duplicates included duplicate analyses of matrix spikes and/or laboratory control spikes. Matrix spike/matrix spike duplicate (MS/MSD) and laboratory control spike/ laboratory control spike duplicate (LCS/LCSD) analyses were performed at a frequency of at least one per 20 samples. Overall, agreement between the two samples, expressed as RPD, met the criteria of the analytical methods. One percent of the data (251 data points) were qualified as estimated (J/UJ) for the following analytes based on laboratory duplicate precision that exceeded the acceptance criteria:

- Metals: aluminum, antimony, barium, cadmium, calcium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, and zinc
- Pesticides: 4,4-DDD, 4,4-DDE, 4,4-DDT, aldrin, alpha-BHC, alpha-chlordane, beta-BHC, delta-BHC, dieldrin, endosulfan I, endosulfan II, endosulfan sulfate, endrin, endrin aldehyde, endrin ketone, gamma-BHC, gamma-chlordane, heptachlor, heptachlor epoxide, methoxychlor, and toxaphene
- Herbicides: 2,4,5-T, 2,4,5-TP (silvex), 2,4-D, 2,4-DB, Dalapon, Dicamba, Dichlorprop, Dinoseb, MCPA, MCPP, and pentachlorophenol
- Dioxins: 1,2,3,4,6,7,8,9-OCDD, 1,2,3,4,6,7,8-HpCDD, 1,2,3,4,7,8,9-HpCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,7,8,9-HXCDF, 2,3,4,6,7,8-HxCDF and 2,3,4,7,8-PeCDF.

2.4 Performance Checks

Performance checks such as surrogate recovery, internal standard recovery, interference check samples, and serial dilutions were also reviewed during data validation.

2.4.1 Surrogates

The majority of surrogate recoveries met the acceptance criteria. Twenty-two PCB samples, 29 pesticide, five herbicide and one SVOC sample (575 data points or 2.6% of the data) were qualified

based on surrogate recoveries outside of acceptance criteria. Qualification on the basis of surrogates was as follows:

- If surrogate percent recoveries were low but greater than or equal to 10%, positive and nondetected results were qualified as estimated (J/UJ);
- If surrogate recoveries were high (exceeding criteria), sample results were assumed to be biased high. Positive results were therefore qualified as estimated (J) and nondetected results were accepted unqualified.
- If surrogate recoveries were less than 10%, nondetected results were rejected (R) and positive results were estimated (J).

All sample results qualified for surrogate recoveries were estimated (J/UJ) with the exception of six compounds from one PCB sample (CBS-CSB-T4-C1) which were rejected due to surrogate recovery less than 10%. A summary of the results that were rejected are summarized in Table 2-2.

2.4.2 Internal Standards

Internal standard performance was reviewed during the Level IV validation (Table 2-1). Internal standard recoveries met acceptance criteria with the exception of two PCB samples, four VOC sample, and six SVOC samples. Positive and nondetected results, as appropriate, were qualified as estimated (J/UJ) based on internal standard recoveries.

2.4.3 Interference Check Samples

Interference check sample results were reviewed during the Level IV validation (Table 2-1). The results of the interference check samples generally met the acceptance criteria. All criteria were met for the interference check solution ICS AB. Various analytes that should not be present were detected in the ICS A solution. The presence of ICS A interference indicates that false positives or false negatives may exist for these analytes in samples. Estimated interferences were calculated for these analytes in samples where one or more concentrations of an interfering element were greater than 50% of that found in the ICS A solution. All soil in the data sets reviewed contained iron at more than 50% of that found in the ICS A solution. As a result, arsenic, cadmium, and selenium were qualified as estimated due to either positive or negative interference in ten metals samples.

2.4.4 Serial Dilutions

Several dilution analyses were reviewed during the Level IV validation (Table 2-1). Beryllium, mercury, potassium, and zinc were found to have percent differences (%D) greater than 10%. Positive results in associated samples were qualified as estimated (J).

2.5 Instrument Calibration

2.5.1 Initial and Continuing Calibrations

Instrument calibrations including initial and continuing calibration standards were reviewed as part of the Level IV data validation (Table 2-1). Acceptance criteria for initial and continuing calibration standards were met for the SVOC, herbicide, and PCB analyses. Selected VOC and pesticides were qualified as estimated due to continuing calibration verification standards (CCVs) outside acceptance criteria (%D > 20%). The affected compounds were acetone, bromomethane, 4,4-DDT, and methoxychlor. Both positive and nondetected results for associated samples were qualified as estimated (U/UJ) for these compounds.

All initial and continuing calibrations for metals samples were within criteria. The laboratory also chose to analyze additional calibration standards near the reported detection limit (CRI for method 6010B and CRA for mercury analyses). Compounds outside the percent recovery acceptance criteria of 100 ±20% included antimony, molybdenum, selenium, thallium, and mercury. Samples with recoveries below the acceptance criteria were qualified as estimated (J/UJ) both for positive results that were less than 2x the CRI/CRA concentration and for nondetects. Samples with recoveries above the acceptance criteria were qualified as estimated (J) for positive results that were less than 2x the CRI/CRA concentration.

Several dioxin compounds were reported as estimated due to exceeding the instrument calibration range. The samples were not diluted and reanalyzed but were reported as estimated. The affected compounds were 1,2,3,4,6,7,8,9-OCDD, 1,2,3,4,6,7,8,9-OCDF, and total TCDD.

2.5.2 Gas Chromatography/Mass Spectrometry (GC/MS) Tuning

Tuning and instrument performance information were reviewed as part of the Level IV data validation effort (Table 2-1). Acceptable instrument tuning included analysis of tuning standards (BFB for VOC analysis, DFTPP for SVOC analysis) and sample analyses performed using the same tune conditions within a 12-hour time frame of tuning solution injection. Acceptance criteria were met in all cases. No data was qualified on this basis.

2.6 Compound Quantitation

PCB, pesticide, and herbicide analyses were reviewed on the basis of agreement between the gas chromatographic (GC) dual columns. Agreement was expressed as RPDs. Sample results for the two analytical columns with RPDs that exceeded the acceptance criteria of <40% were qualified as estimated (J). Acceptance criteria for dual column RPDs were met for all data with the following

exceptions: less than 1% of the data (171 pesticide results and 35 herbicide results) were qualified as estimated (J) based on dual column RPD exceedances.

2.7 Sample Results and Quantitation Limits

2.7.1 Sample Quantitation Limits

STL Savannah reported SQLs for the SVOC analyses at or below one-half of the lowest calibration standard. Therefore, professional judgement was used to qualify nondetected results at the SQL and positive results reported below the lowest calibration standard as estimated (UJ/J). This action resulted in the qualification of over 98% of the SVOC data as estimated (7145 data points or 32% of the total data).

2.7.2 Percent Solids

All samples were reviewed for percent solids to ensure that the sample collected was representative of the matrix sampled and that the analytical methodologies used were appropriate. The criteria for evaluation was a percent solids of <50%. One sample, CBS-CSE-T16-1 was reported with a percent solids result of 49%. All inorganic, VOC, SVOC, PCB, pesticide, and herbicide results for this sample were qualified as estimated (J/UJ).

2.7.3 Estimated Maximum Possible Concentrations (EMPCs)

For dioxin/furan analyses, results were qualified if based on being EMPCs. All target compounds except 2,3,7,8-TCDD were qualified as estimated. The laboratory (Triangle) reported EMPC values for compounds that did not meet ion abundance ratio criteria. For the homologue results in which some peaks met ion abundance ratio criteria and some did not, the EMPC value reported represented the total concentration of peaks that met ion abundance criteria plus those that did not meet criteria. A conservative approach was taken and the value reported and the EMPC concentration was estimated (J) since this result represents the maximum possible concentration present in the sample.

2.8 Completeness

Data completeness was evaluated in terms of the number of samples successfully analyzed and the amount of valid data obtained. All samples submitted to the laboratory were analyzed, thereby achieving 100% completeness in sample analysis. Approximately 99.9% completeness was achieved for data validity: only 16 of the 21991 data points measured were rejected and therefore considered invalid or unusable.

Table 2-1 Data Validation Elements Reviewed (as Applicable to Specific Methods)

Analysis:	Metals	Mercury	Cyanide	PCBs	Pesticides	Herbicides	VOCs	SVOCs	Dioxins/ Furans
Method:	**SW6010**	**SW7470/ SW7471**	**SW9010/ SW9012**	**680**	**SW8081**	**SW8151**	**SW8260**	**SW8270**	**SW8280**
Agreement of Analyses to COC	X	X	X	X	X	X	X	X	X
Sample Holding Times	X	X	X	X	X	X	X	X	X
QC Samples:									
Laboratory Control Sample (LCS)	X	X	X	X	X	X	X	X	X
Matrix Spikes	X	X	X	X	X	X	X	X	X
Blanks - Method, Calibration	X	X	X	X	X	X	X	X	X
Field duplicates	X	X	X						
Lab duplicates, MS/MSD, LCS/LCSD	X	X	X	X	X	X	X	X	X
Performance Checks:									
Surrogate Spike Recoveries				X	X	X	X	X	X
Internal Standard Recoveries*				X	X	X	X	X	X
Interference Check Sample*	X								
Serial Dilutions*	X								
Calibration:									
Initial, continuing calibration*	X	X	X	X	X	X	X	X	X
Tuning*				X	X	X	X	X	
Compound Quantitation:									
Dual Column RPDs				X	X	X			
Sample Results and Quantitation Limits:									
Sample Quantitation Limits (SQLs)	X	X	X	X	X	X	X	X	X
Estimated Maximum Possible Concentration (EMPCs)									X
Percent Solids	X	X	X	X	X	X	X	X	X

*Included only as part of the Level IV validation.

Table 2-2 Summary of Rejected Data

Sample ID	Sample Date	Method	Analyte	Qualifier	Reason
CBS-CSB-T4-C1	11/1/2001	680	Decachlorobiphenyl	R	Low surrogate recovery
CBS-CSB-T4-C1	11/1/2001	680	Heptachlorobiphenyl	R	Low surrogate recovery
CBS-CSB-T4-C1	11/1/2001	680	Hexachlorobiphenyl	R	Low surrogate recovery
CBS-CSB-T4-C1	11/1/2001	680	Monochlorobiphenyl	R	Low surrogate recovery
CBS-CSB-T4-C1	11/1/2001	680	Nonachlorobiphenyl	R	Low surrogate recovery
CBS-CSB-T4-C1	11/1/2001	680	Octachlorobiphenyl	R	Low surrogate recovery
CBS-CSF-T15-1	1/8/2002	8081	4,4'-DDE	R	Low matrix spike recovery
CBS-CSB-T18-E1	11/9/2001	8081	4,4'-DDT	R	Low matrix spike recovery
CBS-CSF-T15-1	1/8/2002	8081	4,4'-DDT	R	Low matrix spike recovery
CBS-CSB-T7-W1	11/8/2001	8081	Endosulfan I	R	Low matrix spike recovery
CBS-CSF-T15-1	1/8/2002	8081	Heptachlor	R	Low matrix spike recovery
SED-M-S10 0-6	6/22/2001	8151	Dalapon	R	Low matrix spike recovery
SED-M-S10 0-6	6/22/2001	8151	Dinoseb	R	Low matrix spike recovery
CBS-CSE-T10-1	12/19/2001	8270	Hexachlorocyclopentadiene	R	Low matrix spike recovery
SED-M-S6-(0-6)	7/10/2001	8270	Hexachlorocyclopentadiene	R	Low matrix spike recovery
SED-M-S2 0-6	6/22/2001	8270	Hexachlorocyclopentadiene	R	Low matrix spike recovery

3.0 REFERENCES

O'Brien & Gere Engineers, Inc. 1999. Quality Assurance Project Plan (QAPP) for the Sauget Area 1 Support Sampling Plan, Sauget and Cahokia, Illinois, Volume 2B, St. Louis, Missouri.

USEPA. 1985. Determination of Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectometry. U.S. Environmental Protection Agency, Physical and Chemical Methods Branch, Environmental Monitoring and Support Laboratory, Office of Research and Development, Cincinnati, Ohio.

USEPA. 1993. Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington D.C.

USEPA. 1993. Contract Laboratory Program National Functional Guidelines for Dioxin/Furan Data Validation (draft). U.S. Environmental Protection Agency, Washington D.C.

USEPA. 1997. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, 3rd Edition, U.S. Environmental Protection Agency, Washington D.C.

USEPA. 1997. Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data. U.S. Environmental Protection Agency, Region V, Superfund Technical Support Section, Chicago, Illinois.

USEPA. 1999. Contract Laboratory Program National Functional Guidelines for Organic Data Review. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Washington D.C.

APPENDIX

APPENDIX A

DATA VALIDATION MEMOS AND VALIDATED LABORATORY SAMPLE RESULT FORMS

APPENDIX A-1

VOLATILE ORGANIC COMPOUNDS

Table A-1 Reason Code Qualifier Key

Qualifier	Meaning
U-B	Nondetected due to blank contamination
J-B	Estimated due to negative blank contamination (positive results <= absolute value of negative AL)
J-D	Estimated due to lab duplicate precision (lab duplicates, MS/MSD, LCS/LCSD)
J-F	Estimated due to field duplicate precision*
J-S	Estimated due to surrogates
J-M	Estimated due to matrix spike recovery (accuracy)
J-H	Estimated due to hold times
J-L	Estimated due to LCS recoveries
J-C	Estimated due to calibration
J-X	Estimated due to % solids being <50%
J-Y	Estimated due to serial dilution
J-I	Estimated due to internal standards
J-P	Estimated due to dual column RPDs >40%
J-A	Estimated due to interference check sample (ICS)] (positive or negative)
J-Z	Result reported as an Estimated Maximum Possible Concentration (EMPC). Homologues may be partially or entirely reported as an EMPC.
J-E	Estimated due to result exceeding calibration range
UJ-B	Estimated nondetect due to negative blank contamination (nondetect results only)
UJ-D	Estimated nondetect due to lab duplicate imprecision*
UJ-F	Estimated nondetect due to field duplicate imprecision*
UJ-S	Estimated nondetect due to surrogates
UJ-M	Estimated nondetect due to matrix spikes
UJ-H	Estimated nondetect due to hold times
UJ-L	Estimated nondetect due to LCS recoveries
UJ-C	Estimated nondetect due to calibration
UJ-X	Estimated nondetect due to % solids being <50%
UJ-I	Estimated nondetect due to internal standards
UJ-A	Estimated nondetect due to interference check sample (ICS)] (positive or negative)
UJ-N	Estimated nondetect due to negative metals result with absolute value >MDL

Qualifier	Meaning
R-S	Rejected due to surrogates
R-M	Rejected due to matnx spikes
R-H	Rejected due to hold times
R-L	Rejected due to LCS recoveries
R-C	Rejected due to calibration

ENSR

MEMORANDUM

TO: Lisa Bradley/Westford

DATE: April 22, 2002

FROM: Nancy Coe/Westford

FILE: SO001vocNC.doc
06105-012-201

RE: Data Validation
VOC Analysis
Solutia Inc., Creek Bottom Sediment Removal Action
Sauget and Cahokia, IL
STL SDG SIL070

CC: D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for 16 sediment samples analyzed for the Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 methods 5035/8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on November 8, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL070.

The analytical data were evaluated with reference to the USEPA Region V *Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services*, the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to nonconformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T6-C1	CBS-CSB-T8-W1
CBS-CSB-T6-C1-D (field duplicate of CBS-CSB-T6-C1)	CBS-CSB-T8-C1
CBS-CSB-T6-E1	CBS-CSB-T9-C1
CBS-CSB-T6-W1	CBS-CSB-T9-E1
CBS-CSB-T7-E1	CBS-CSB-T9-W1
CBS-CSB-T7-W1	CBS-CSB-T10-E1
CBS-CSB-T8-E1	CBS-CSB-T10-W1
CBS-CSB-T7-C1	CBS-CSB-T10-C1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were preserved and analyzed within the method specified holding time.

Cooler temperatures were not recorded on the COC unless they were outside the acceptable range of 4°C ± 2°C. There were no nonconformances noted for this sample set.

Laboratory Blanks

Target analytes were not detected in the laboratory blanks associated with the low-level sample analyses. Acetone and carbon disulfide were detected in the laboratory blank associated with the medium-level analysis. Since these compounds were not reported from the medium-level analysis; qualification of the data on the basis of blank contamination was therefore not required.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSB-T7-W1 was submitted for MS/MSD analyses with this sample set. The percent recovery (%R) of bromomethane (284) was above the QC acceptance limits in the MS analysis. All %Rs and relative percent differences (RPDs) exceeded the QC acceptance limits in the MSD analysis. Nondetects were reported for the unspiked sample CBS-CSB-T7-W1; these nondetects were qualified as estimated (UJ).

Field Duplicate Results

Samples CBS-CSB-T6-C1 and CBS-CSB-T6-C1-D were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	Sample (µg/Kg)	Duplicate (µg/Kg)	RPD (%)
Acetone	24 J	33 J	32
Benzene	16	6.6 U	NC
Chlorobenzene	19	3.3 J	141
NC-Not calculable due to a nondetect result in the field duplicate sample.			

LCS Results

The %R of 1,1-dichloroethane (174) exceeded the QC limits in the LCS associated with samples CBS-CSB-T6-C1, CBS-CSB-T6-C1-D, and CBS-CSB-T6-E1. The %R of bromomethane (184) exceeded the QC limits in LCS associated with the remaining samples. All other spiked analytes met the QC acceptance criteria in the LCS analyses. 1,1-Dichloroethane and bromomethane were not detected in the associated samples; qualification of the data was therefore not required.

Sample Results

Samples CBS-CSB-T9-C1 and CBS-CSB-T10-C1 were reanalyzed as medium-level due to the concentration of chlorobenzene exceeding the calibration range in the initial low-level analyses. Results from the low-level and medium-level analyses of these samples were combined in order report the lowest possible sample quantitation limits (SQLs) and all results within the calibration range.

The percent solid of all samples was greater than 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M9011

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 28 Date Analyzed: 11/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.0	U
67-64-1	ACETONE	24	J
75-15-0	CARBON DISULFIDE	6.6	U
75-09-2	METHYLENE CHLORIDE	6.6	U
75-34-3	1 1-DICHLOROETHANE	6.6	U
78-93-3	2-BUTANONE	33	U
67-66-3	CHLOROFORM	6.6	U
71-55-6	1 1 1-TRICHLOROETHANE	6.6	U
56-23-5	CARBON TETRACHLORIDE	6.6	U
71-43-2	BENZENE	16	
107-06-2	1 2-DICHLOROETHANE	6.6	U
79-01-6	TRICHLOROETHENE	6.6	U
78-87-5	1 2-DICHLOROPROPANE	6.6	U
75-27-4	BROMODICHLOROMETHANE	6.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	33	U
108-88-3	TOLUENE	6.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.2	U
79-00-5	1 1 2-TRICHLOROETHANE	6.6	U
127-18-4	TETRACHLOROETHENE	6.6	U
591-78-6	2-HEXANONE	33	U
124-48-1	DIBROMOCHLOROMETHANE	6.6	U
108-90-7	CHLOROBENZENE	19	
100-41-4	ETHYL BENZENE	6.6	U
100-42-5	STYRENE	6.6	U
75-25-2	BROMOFORM	6.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.6	U
540-59-0	1,2-DICHLOROETHENE (total)	6.6	U
1330-20-7	XYLENE (total)	6.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M9011

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 28 Date Analyzed: 11/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	0.80	12	JB
2.		UNKNOWN	1.57	16	JB
3.					
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1-D

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M9012

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 28 Date Analyzed: 11/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.0	U
67-64-1	ACETONE	33	J
75-15-0	CARBON DISULFIDE	6.6	U
75-09-2	METHYLENE CHLORIDE	6.6	U
75-34-3	1 1-DICHLOROETHANE	6.6	U
78-93-3	2-BUTANONE	33	U
67-66-3	CHLOROFORM	6.6	U
71-55-6	1 1 1-TRICHLOROETHANE	6.6	U
56-23-5	CARBON TETRACHLORIDE	6.6	U
71-43-2	BENZENE	6.6	U
107-06-2	1 2-DICHLOROETHANE	6.6	U
79-01-6	TRICHLOROETHENE	6.6	U
78-87-5	1 2-DICHLOROPROPANE	6.6	U
75-27-4	BROMODICHLOROMETHANE	6.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	33	U
108-88-3	TOLUENE	6.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.2	U
79-00-5	1 1 2-TRICHLOROETHANE	6.6	U
127-18-4	TETRACHLOROETHENE	6.6	U
591-78-6	2-HEXANONE	33	U
124-48-1	DIBROMOCHLOROMETHANE	6.6	U
108-90-7	CHLOROBENZENE	3.3	J
100-41-4	ETHYL BENZENE	6.6	U
100-42-5	STYRENE	6.6	U
75-25-2	BROMOFORM	6.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.6	U
540-59-0	1,2-DICHLOROETHENE (total)	6.6	U
1330-20-7	XYLENE (total)	6.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1-D

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M9012

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 28 Date Analyzed: 11/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	1.59	6.6	JB
2.					
3.					
4.					
5.					
6.					
7.					
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-E1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M9013

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 14 Date Analyzed: 11/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11	U
75-01-4	VINYL CHLORIDE	11	U
74-83-9	BROMOMETHANE	11	U
75-00-3	CHLOROETHANE	11	U
75-35-4	1 1-DICHLOROETHENE	5.2	U
67-64-1	ACETONE	19	J
75-15-0	CARBON DISULFIDE	5.7	U
75-09-2	METHYLENE CHLORIDE	5.7	U
75-34-3	1 1-DICHLOROETHANE	5.7	U
78-93-3	2-BUTANONE	28	U
67-66-3	CHLOROFORM	5.7	U
71-55-6	1 1 1-TRICHLOROETHANE	5.7	U
56-23-5	CARBON TETRACHLORIDE	5.7	U
71-43-2	BENZENE	5.7	U
107-06-2	1 2-DICHLOROETHANE	5.7	U
79-01-6	TRICHLOROETHENE	5.7	U
78-87-5	1 2-DICHLOROPROPANE	5.7	U
75-27-4	BROMODICHLOROMETHANE	5.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	28	U
108-88-3	TOLUENE	5.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.6	U
79-00-5	1 1 2-TRICHLOROETHANE	5.7	U
127-18-4	TETRACHLOROETHENE	5.7	U
591-78-6	2-HEXANONE	28	U
124-48-1	DIBROMOCHLOROMETHANE	5.7	U
108-90-7	CHLOROBENZENE	5.7	U
100-41-4	ETHYL BENZENE	5.7	U
100-42-5	STYRENE	5.7	U
75-25-2	BROMOFORM	5.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5.7	U
540-59-0	1,2-DICHLOROETHENE (total)	5.7	U
1330-20-7	XYLENE (total)	5.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-E1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M9013

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 14 Date Analyzed: 11/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.80	11	JB
2.				
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-W1

Sample wt/vol: 4.7 (g/mL) G Lab File ID: M9014

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 24 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	250	
75-15-0	CARBON DISULFIDE	77	
75-09-2	METHYLENE CHLORIDE	7.0	U
75-34-3	1 1-DICHLOROETHANE	7.0	U
78-93-3	2-BUTANONE	53	
67-66-3	CHLOROFORM	7.0	U
71-55-6	1 1 1-TRICHLOROETHANE	7.0	U
56-23-5	CARBON TETRACHLORIDE	7.0	U
71-43-2	BENZENE	7.0	U
107-06-2	1 2-DICHLOROETHANE	7.0	U
79-01-6	TRICHLOROETHENE	7.0	U
78-87-5	1 2-DICHLOROPROPANE	7.0	U
75-27-4	BROMODICHLOROMETHANE	7.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	7.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	7.0	U
127-18-4	TETRACHLOROETHENE	7.0	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	7.0	U
108-90-7	CHLOROBENZENE	170	
100-41-4	ETHYL BENZENE	7.0	U
100-42-5	STYRENE	7.0	U
75-25-2	BROMOFORM	7.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.0	U
540-59-0	1,2-DICHLOROETHENE (total)	7.0	U
1330-20-7	XYLENE (total)	7.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-W1

Sample wt/vol: 4.7 (g/mL) G Lab File ID: M9014

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 24 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.64	35	JB
2.	UNKNOWN ALKANE	6.17	110	J
3.	UNKNOWN	6.63	8.2	J
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-E1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: M9015

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 25 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	33	J
75-15-0	CARBON DISULFIDE	6.9	U
75-09-2	METHYLENE CHLORIDE	6.9	U
75-34-3	1 1-DICHLOROETHANE	6.9	U
78-93-3	2-BUTANONE	35	U
67-66-3	CHLOROFORM	6.9	U
71-55-6	1 1 1-TRICHLOROETHANE	6.9	U
56-23-5	CARBON TETRACHLORIDE	6.9	U
71-43-2	BENZENE	4.3	J
107-06-2	1 2-DICHLOROETHANE	6.9	U
79-01-6	TRICHLOROETHENE	6.9	U
78-87-5	1 2-DICHLOROPROPANE	6.9	U
75-27-4	BROMODICHLOROMETHANE	6.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	6.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	6.9	U
127-18-4	TETRACHLOROETHENE	6.9	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	6.9	U
108-90-7	CHLOROBENZENE	12	
100-41-4	ETHYL BENZENE	6.9	U
100-42-5	STYRENE	6.9	U
75-25-2	BROMOFORM	6.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.9	U
540-59-0	1,2-DICHLOROETHENE (total)	6.9	U
1330-20-7	XYLENE (total)	6.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-E1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: M9015

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 25 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.80	7.1	JB
2.	UNKNOWN	1.55	13	JB
3.				
4.				
5.				
6.				
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-W1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9016

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 22 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U J-M
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.0	U
67-64-1	ACETONE	76	U
75-15-0	CARBON DISULFIDE	7.6	U
75-09-2	METHYLENE CHLORIDE	7.6	U
75-34-3	1 1-DICHLOROETHANE	7.6	U
78-93-3	2-BUTANONE	38	U
67-66-3	CHLOROFORM	7.6	U
71-55-6	1 1 1-TRICHLOROETHANE	7.6	U
56-23-5	CARBON TETRACHLORIDE	7.6	U
71-43-2	BENZENE	7.6	U
107-06-2	1 2-DICHLOROETHANE	7.6	U
79-01-6	TRICHLOROETHENE	7.6	U
78-87-5	1 2-DICHLOROPROPANE	7.6	U
75-27-4	BROMODICHLOROMETHANE	7.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.1	U
79-00-5	1 1 2-TRICHLOROETHANE	7.6	U
127-18-4	TETRACHLOROETHENE	7.6	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.6	U
108-90-7	CHLOROBENZENE	7.6	U
100-41-4	ETHYL BENZENE	7.6	U
100-42-5	STYRENE	7.6	U
75-25-2	BROMOFORM	7.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.6	U
540-59-0	1,2-DICHLOROETHENE (total)	7.6	U
1330-20-7	XYLENE (total)	7.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-W1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9016

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 22 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.58	2500	JNB
2.	UNKNOWN	1.24	9.4	J
3.	UNKNOWN	1.33	12	J
4.	UNKNOWN	1.50	26	JB
5.	UNKNOWN	1.57	8.3	JB
6.	UNKNOWN	1.62	12	JB
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-E1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: M9017

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 30 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.1	U
67-64-1	ACETONE	46	J
75-15-0	CARBON DISULFIDE	7.8	U
75-09-2	METHYLENE CHLORIDE	7.8	U
75-34-3	1 1-DICHLOROETHANE	7.8	U
78-93-3	2-BUTANONE	7.7	J
67-66-3	CHLOROFORM	7.8	U
71-55-6	1 1 1-TRICHLOROETHANE	7.8	U
56-23-5	CARBON TETRACHLORIDE	7.8	U
71-43-2	BENZENE	19	
107-06-2	1 2-DICHLOROETHANE	7.8	U
79-01-6	TRICHLOROETHENE	7.8	U
78-87-5	1 2-DICHLOROPROPANE	7.8	U
75-27-4	BROMODICHLOROMETHANE	7.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	39	U
108-88-3	TOLUENE	7.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.2	U
79-00-5	1 1 2-TRICHLOROETHANE	7.8	U
127-18-4	TETRACHLOROETHENE	7.8	U
591-78-6	2-HEXANONE	39	U
124-48-1	DIBROMOCHLOROMETHANE	7.8	U
108-90-7	CHLOROBENZENE	22	
100-41-4	ETHYL BENZENE	7.8	U
100-42-5	STYRENE	7.8	U
75-25-2	BROMOFORM	7.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.8	U
540-59-0	1,2-DICHLOROETHENE (total)	7.8	U
1330-20-7	XYLENE (total)	7.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-E1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: M9017

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 30 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-C1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: M9018

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.2	U
67-64-1	ACETONE	87	
75-15-0	CARBON DISULFIDE	6.8	J
75-09-2	METHYLENE CHLORIDE	2.2	J
75-34-3	1 1-DICHLOROETHANE	7.8	U
78-93-3	2-BUTANONE	20	J
67-66-3	CHLOROFORM	7.8	U
71-55-6	1 1 1-TRICHLOROETHANE	7.8	U
56-23-5	CARBON TETRACHLORIDE	7.8	U
71-43-2	BENZENE	7.8	U
107-06-2	1 2-DICHLOROETHANE	7.8	U
79-01-6	TRICHLOROETHENE	7.8	U
78-87-5	1 2-DICHLOROPROPANE	7.8	U
75-27-4	BROMODICHLOROMETHANE	7.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	39	U
108-88-3	TOLUENE	7.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.3	U
79-00-5	1 1 2-TRICHLOROETHANE	7.8	U
127-18-4	TETRACHLOROETHENE	7.8	U
591-78-6	2-HEXANONE	39	U
124-48-1	DIBROMOCHLOROMETHANE	7.8	U
108-90-7	CHLOROBENZENE	140	
100-41-4	ETHYL BENZENE	7.8	U
100-42-5	STYRENE	7.8	U
75-25-2	BROMOFORM	7.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.8	U
540-59-0	1,2-DICHLOROETHENE (total)	7.8	U
1330-20-7	XYLENE (total)	7.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-C1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: M9018

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	1.43	18	J
2.	UNKNOWN ALKANE	6.17	74	J
3.				
4.				
5.				
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-W1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M9019

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.1	U
67-64-1	ACETONE	25	J
75-15-0	CARBON DISULFIDE	6.6	U
75-09-2	METHYLENE CHLORIDE	6.6	U
75-34-3	1 1-DICHLOROETHANE	6.6	U
78-93-3	2-BUTANONE	33	U
67-66-3	CHLOROFORM	6.6	U
71-55-6	1 1 1-TRICHLOROETHANE	6.6	U
56-23-5	CARBON TETRACHLORIDE	6.6	U
71-43-2	BENZENE	6.6	U
107-06-2	1 2-DICHLOROETHANE	6.6	U
79-01-6	TRICHLOROETHENE	6.6	U
78-87-5	1 2-DICHLOROPROPANE	6.6	U
75-27-4	BROMODICHLOROMETHANE	6.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	33	U
108-88-3	TOLUENE	6.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.3	U
79-00-5	1 1 2-TRICHLOROETHANE	6.6	U
127-18-4	TETRACHLOROETHENE	6.6	U
591-78-6	2-HEXANONE	33	U
124-48-1	DIBROMOCHLOROMETHANE	6.6	U
108-90-7	CHLOROBENZENE	6.6	U
100-41-4	ETHYL BENZENE	6.6	U
100-42-5	STYRENE	6.6	U
75-25-2	BROMOFORM	6.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.6	U
540-59-0	1,2-DICHLOROETHENE (total)	6.6	U
1330-20-7	XYLENE (total)	6.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-W1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M9019

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.58	1400	JNB
2.	UNKNOWN ALDEHYDE	1.58	9.0	J
3.	UNKNOWN ALDEHYDE	1.84	7.5	J
4.	SEPTUM BLEED	5.33	13	J
5.				
6.				
7.				
8.				
9.				
10.				
11.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-C1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: M9029

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 28 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	60	J
75-15-0	CARBON DISULFIDE	19	
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	12	J
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	3.6	J
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.8	
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	22	
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	4.7	J

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-C1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: M9029

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 28 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.61	1200	JN
2.	UNKNOWN	0.70	170	J
3.	UNKNOWN	0.76	75	J
4.	UNKNOWN	0.96	72	J
5.	UNKNOWN ALKANE	1.05	46	JB
6.	UNKNOWN	1.10	36	J
7.	UNKNOWN ALKANE	1.40	28	J
8.	UNKNOWN ALKANE	2.73	14	J
9.	BENZENE ISOMER	6.17	7.8	J
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-11

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-C1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: M9021

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.5	U
67-64-1	ACETONE	120	
75-15-0	CARBON DISULFIDE	10	
75-09-2	METHYLENE CHLORIDE	7.0	U
75-34-3	1 1-DICHLOROETHANE	7.0	U
78-93-3	2-BUTANONE	23	J
67-66-3	CHLOROFORM	7.0	U
71-55-6	1 1 1-TRICHLOROETHANE	7.0	U
56-23-5	CARBON TETRACHLORIDE	7.0	U
71-43-2	BENZENE	4.8	J
107-06-2	1 2-DICHLOROETHANE	7.0	U
79-01-6	TRICHLOROETHENE	7.0	U
78-87-5	1 2-DICHLOROPROPANE	7.0	U
75-27-4	BROMODICHLOROMETHANE	7.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	7.9	
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	7.0	U
127-18-4	TETRACHLOROETHENE	7.0	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	7.0	U
108-90-7	CHLOROBENZENE	400 ~~470~~	~~E~~
100-41-4	ETHYL BENZENE	7.0	U
100-42-5	STYRENE	7.0	U
75-25-2	BROMOFORM	7.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.0	U
540-59-0	1,2-DICHLOROETHENE (total)	7.0	U
1330-20-7	XYLENE (total)	9.0	

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-11

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-C1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: M9021

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.61	1100	JNB
2.	UNKNOWN	0.70	160	JB
3.	UNKNOWN	0.76	130	JB
4.	UNKNOWN ALKANE	0.96	44	J
5.	UNKNOWN ALKANE	1.06	36	J
6.	UNKNOWN ALKANE	1.40	27	J
7.	UNKNOWN ALKANE	2.73	25	J
8.	UNKNOWN ALKANE	6.17	9.5	J
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-11DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-C1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: P3117

Level: (low/med) MED Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	560	U
75-01-4	VINYL CHLORIDE	560	U
74-83-9	BROMOMETHANE	560	U
75-00-3	CHLOROETHANE	560	U
75-35-4	1 1-DICHLOROETHENE	250	U
67-64-1	ACETONE	2400	DBJ
75-15-0	CARBON DISULFIDE	280	U
75-09-2	METHYLENE CHLORIDE	280	U
75-34-3	1 1-DICHLOROETHANE	280	U
78-93-3	2-BUTANONE	500	DJ
67-66-3	CHLOROFORM	280	U
71-55-6	1 1 1-TRICHLOROETHANE	280	U
56-23-5	CARBON TETRACHLORIDE	280	U
71-43-2	BENZENE	280	U
107-06-2	1 2-DICHLOROETHANE	280	U
79-01-6	TRICHLOROETHENE	280	U
78-87-5	1 2-DICHLOROPROPANE	280	U
75-27-4	BROMODICHLOROMETHANE	280	U
10061-01-5	cis-1,3-DICHLOROPROPENE	220	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1400	U
108-88-3	TOLUENE	280	U
10061-02-6	trans-1,3-DICHLOROPROPENE	220	U
79-00-5	1 1 2-TRICHLOROETHANE	280	U
127-18-4	TETRACHLOROETHENE	280	U
591-78-6	2-HEXANONE	1400	U
124-48-1	DIBROMOCHLOROMETHANE	280	U
108-90-7	CHLOROBENZENE	400	D
100-41-4	ETHYL BENZENE	280	U
100-42-5	STYRENE	280	U
75-25-2	BROMOFORM	280	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	280	U
540-59-0	1,2-DICHLOROETHENE (total)	280	U
1330-20-7	XYLENE (total)	280	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-11DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-C1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: P3117

Level: (low/med) MED Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	1.02	140000	JNBD
2.	UNKNOWN	1.46	11000	JD
3.				
4.				
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-12

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-E1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9030

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 24 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.2	U
67-64-1	ACETONE	30	J
75-15-0	CARBON DISULFIDE	7.8	U
75-09-2	METHYLENE CHLORIDE	7.8	U
75-34-3	1 1-DICHLOROETHANE	7.8	U
78-93-3	2-BUTANONE	39	U
67-66-3	CHLOROFORM	7.8	U
71-55-6	1 1 1-TRICHLOROETHANE	7.8	U
56-23-5	CARBON TETRACHLORIDE	7.8	U
71-43-2	BENZENE	9.5	
107-06-2	1 2-DICHLOROETHANE	7.8	U
79-01-6	TRICHLOROETHENE	7.8	U
78-87-5	1 2-DICHLOROPROPANE	7.8	U
75-27-4	BROMODICHLOROMETHANE	7.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	39	U
108-88-3	TOLUENE	7.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.3	U
79-00-5	1 1 2-TRICHLOROETHANE	7.8	U
127-18-4	TETRACHLOROETHENE	7.8	U
591-78-6	2-HEXANONE	39	U
124-48-1	DIBROMOCHLOROMETHANE	7.8	U
108-90-7	CHLOROBENZENE	11	
100-41-4	ETHYL BENZENE	7.8	U
100-42-5	STYRENE	7.8	U
75-25-2	BROMOFORM	7.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.8	U
540-59-0	1,2-DICHLOROETHENE (total)	7.8	U
1330-20-7	XYLENE (total)	7.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-12

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-E1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9030

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 24 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.58	1600	JN
2.	UNKNOWN	1.14	28	J
3.	UNKNOWN	1.29	11	J
4.	UNKNOWN	1.46	14	J
5.	UNKNOWN	1.60	23	J
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-13

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-W1

Sample wt/vol: 4.4 (g/mL) G Lab File ID: M9031

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 23 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.8	U
67-64-1	ACETONE	31	J
75-15-0	CARBON DISULFIDE	7.4	U
75-09-2	METHYLENE CHLORIDE	7.4	U
75-34-3	1 1-DICHLOROETHANE	7.4	U
78-93-3	2-BUTANONE	37	U
67-66-3	CHLOROFORM	7.4	U
71-55-6	1 1 1-TRICHLOROETHANE	7.4	U
56-23-5	CARBON TETRACHLORIDE	7.4	U
71-43-2	BENZENE	7.4	U
107-06-2	1 2-DICHLOROETHANE	7.4	U
79-01-6	TRICHLOROETHENE	7.4	U
78-87-5	1 2-DICHLOROPROPANE	7.4	U
75-27-4	BROMODICHLOROMETHANE	7.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	7.4	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.9	U
79-00-5	1 1 2-TRICHLOROETHANE	7.4	U
127-18-4	TETRACHLOROETHENE	7.4	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.4	U
108-90-7	CHLOROBENZENE	7.4	U
100-41-4	ETHYL BENZENE	7.4	U
100-42-5	STYRENE	7.4	U
75-25-2	BROMOFORM	7.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.4	U
540-59-0	1,2-DICHLOROETHENE (total)	7.4	U
1330-20-7	XYLENE (total)	7.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-13

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-W1

Sample wt/vol: 4.4 (g/mL) G Lab File ID: M9031

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 23 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	1.07	14	J
2.	UNKNOWN	1.49	7.9	J
3.				
4.				
5.				
6.				
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-14

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-E1

Sample wt/vol: 3.6 (g/mL) G Lab File ID: M9032

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	19	U
75-01-4	VINYL CHLORIDE	19	U
74-83-9	BROMOMETHANE	19	U
75-00-3	CHLOROETHANE	19	U
75-35-4	1 1-DICHLOROETHENE	8.6	U
67-64-1	ACETONE	11	J
75-15-0	CARBON DISULFIDE	9.4	U
75-09-2	METHYLENE CHLORIDE	9.4	U
75-34-3	1 1-DICHLOROETHANE	9.4	U
78-93-3	2-BUTANONE	47	U
67-66-3	CHLOROFORM	9.4	U
71-55-6	1 1 1-TRICHLOROETHANE	9.4	U
56-23-5	CARBON TETRACHLORIDE	9.4	U
71-43-2	BENZENE	9.4	U
107-06-2	1 2-DICHLOROETHANE	9.4	U
79-01-6	TRICHLOROETHENE	9.4	U
78-87-5	1 2-DICHLOROPROPANE	9.4	U
75-27-4	BROMODICHLOROMETHANE	9.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	47	U
108-88-3	TOLUENE	9.4	U
10061-02-6	trans-1,3-DICHLOROPROPENE	7.5	U
79-00-5	1 1 2-TRICHLOROETHANE	9.4	U
127-18-4	TETRACHLOROETHENE	9.4	U
591-78-6	2-HEXANONE	47	U
124-48-1	DIBROMOCHLOROMETHANE	9.4	U
108-90-7	CHLOROBENZENE	9.4	U
100-41-4	ETHYL BENZENE	9.4	U
100-42-5	STYRENE	9.4	U
75-25-2	BROMOFORM	9.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	9.4	U
540-59-0	1,2-DICHLOROETHENE (total)	9.4	U
1330-20-7	XYLENE (total)	9.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-14

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-E1

Sample wt/vol: 3.6 (g/mL) G Lab File ID: M9032

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	1.12	13	J
2.	UNKNOWN	1.49	20	J
3.	UNKNOWN	1.74	15	J
4.				
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-15

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-W1

Sample wt/vol: 4.4 (g/mL) G Lab File ID: M9033

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.1	U
67-64-1	ACETONE	29	J
75-15-0	CARBON DISULFIDE	7.7	U
75-09-2	METHYLENE CHLORIDE	7.7	U
75-34-3	1 1-DICHLOROETHANE	7.7	U
78-93-3	2-BUTANONE	38	U
67-66-3	CHLOROFORM	7.7	U
71-55-6	1 1 1-TRICHLOROETHANE	7.7	U
56-23-5	CARBON TETRACHLORIDE	7.7	U
71-43-2	BENZENE	7.7	U
107-06-2	1 2-DICHLOROETHANE	7.7	U
79-01-6	TRICHLOROETHENE	7.7	U
78-87-5	1 2-DICHLOROPROPANE	7.7	U
75-27-4	BROMODICHLOROMETHANE	7.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.1	U
79-00-5	1 1 2-TRICHLOROETHANE	7.7	U
127-18-4	TETRACHLOROETHENE	7.7	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.7	U
108-90-7	CHLOROBENZENE	7.7	U
100-41-4	ETHYL BENZENE	7.7	U
100-42-5	STYRENE	7.7	U
75-25-2	BROMOFORM	7.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.7	U
540-59-0	1,2-DICHLOROETHENE (total)	7.7	U
1330-20-7	XYLENE (total)	7.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-15

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-W1

Sample wt/vol: 4.4 (g/mL) G Lab File ID: M9033

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 26 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.58	1300	JN
2.				
3.				
4.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-16

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-C1

Sample wt/vol: 4.7 (g/mL) G Lab File ID: M9034

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 30 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.0	U
67-64-1	ACETONE	83	
75-15-0	CARBON DISULFIDE	7.6	U
75-09-2	METHYLENE CHLORIDE	7.6	U
75-34-3	1 1-DICHLOROETHANE	7.6	U
78-93-3	2-BUTANONE	19	J
67-66-3	CHLOROFORM	7.6	U
71-55-6	1 1 1-TRICHLOROETHANE	7.6	U
56-23-5	CARBON TETRACHLORIDE	7.6	U
71-43-2	BENZENE	7.6	U
107-06-2	1 2-DICHLOROETHANE	7.6	U
79-01-6	TRICHLOROETHENE	7.6	U
78-87-5	1 2-DICHLOROPROPANE	7.6	U
75-27-4	BROMODICHLOROMETHANE	7.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	3.0	J
10061-02-6	trans-1,3-DICHLOROPROPENE	6.1	U
79-00-5	1 1 2-TRICHLOROETHANE	7.6	U
127-18-4	TETRACHLOROETHENE	7.6	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.6	U
108-90-7	CHLOROBENZENE	530 ~~360~~	~~E~~
100-41-4	ETHYL BENZENE	7.6	U
100-42-5	STYRENE	7.6	U
75-25-2	BROMOFORM	7.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.6	U
540-59-0	1,2-DICHLOROETHENE (total)	7.6	U
1330-20-7	XYLENE (total)	7.6	U

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-16

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-C1

Sample wt/vol: 4.7 (g/mL) G Lab File ID: M9034

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: not dec. 30 Date Analyzed: 11/16/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALKANE	0.75	18	J
2.	UNKNOWN ALKANE	1.69	14	J
3.	UNKNOWN CYCLOALKANE	2.33	15	J
4.	UNKNOWN CYCLOALKANE	2.39	28	J
5.	UNKNOWN CYCLOALKANE	2.73	16	J
6.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-16DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-C1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: P3118

Level: (low/med) MED Date Received: 11/09/01

% Moisture: not dec. 30 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	620	U
75-01-4	VINYL CHLORIDE	620	U
74-83-9	BROMOMETHANE	620	U
75-00-3	CHLOROETHANE	620	U
75-35-4	1 1-DICHLOROETHENE	280	U
67-64-1	ACETONE	1400	DBJ
75-15-0	CARBON DISULFIDE	310	U
75-09-2	METHYLENE CHLORIDE	310	U
75-34-3	1 1-DICHLOROETHANE	310	U
78-93-3	2-BUTANONE	1600	U
67-66-3	CHLOROFORM	310	U
71-55-6	1 1 1-TRICHLOROETHANE	310	U
56-23-5	CARBON TETRACHLORIDE	310	U
71-43-2	BENZENE	310	U
107-06-2	1 2-DICHLOROETHANE	310	U
79-01-6	TRICHLOROETHENE	310	U
78-87-5	1 2-DICHLOROPROPANE	310	U
75-27-4	BROMODICHLOROMETHANE	310	U
10061-01-5	cis-1,3-DICHLOROPROPENE	250	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1600	U
108-88-3	TOLUENE	310	U
10061-02-6	trans-1,3-DICHLOROPROPENE	250	U
79-00-5	1 1 2-TRICHLOROETHANE	310	U
127-18-4	TETRACHLOROETHENE	310	U
591-78-6	2-HEXANONE	1600	U
124-48-1	DIBROMOCHLOROMETHANE	310	U
108-90-7	CHLOROBENZENE	530	D
100-41-4	ETHYL BENZENE	310	U
100-42-5	STYRENE	310	U
75-25-2	BROMOFORM	310	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	310	U
540-59-0	1,2-DICHLOROETHENE (total)	310	U
1330-20-7	XYLENE (total)	310	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-16DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-C1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: P3118

Level: (low/med) MED Date Received: 11/09/01

% Moisture: not dec. 30 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	1.02	130000	JNBD
2.				
3.				
4.				
5.				
6.				
7.				
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FORM I VOA-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Nancy Coe/Westford	**FILE:**	SO007NCvoc.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL062	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for four sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 5035/8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on June 22, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL062.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

The data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to nonconformances of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications
SED-M-S2 0-6"
SED-M-S5 0-6"
SED-M-S8 0-6"
SED-M-S10 0-6"

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were preserved and analyzed within the method specified holding time.

Cooler temperatures were not recorded on the COC unless they were outside the acceptable range of 4°C ± 2°C. There were no nonconformances noted for this sample set.

Laboratory Blanks

There were no target analytes detected in the laboratory blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample SED-M-S2 0-6" was submitted for MS/MSD analyses with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds were within the QC acceptance limits.

Field Duplicate Results

There were no field duplicates submitted with this sample set.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results

Sample SED-M-S8 0-6" was rerun using a different encore vial due to the concentration of chlorobenzene which exceeded the calibration range. The reanalysis result for chlorobenzene did not concur with the initial analysis. It was the opinion of the validator to report the results from the initial analysis since more target analytes were reported. During validation the "E" qualifier for chlorobenzene was removed and the result for chlorobenzene was qualified as estimated (J).

It should be noted that the %R of internal standard 1,4-dichlorobenzene-d_4 in sample SED-M-S8 0-6" was outside the QC acceptance criteria. The sample was re-extracted and re-analyzed yielding acceptable internal standard recovery. The initial analysis was reported (see statement above). It was the opinion of the validator to qualify all positive results and nondetects as estimated (J, UJ) for all sample analyses.

For all samples the percent solid was greater than 50.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S2 0-6"

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M7848

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: not dec. 27 Date Analyzed: 07/02/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.3	U
75-09-2	METHYLENE CHLORIDE	6.8	U
75-34-3	1 1-DICHLOROETHANE	6.8	U
67-66-3	CHLOROFORM	6.8	U
71-55-6	1 1 1-TRICHLOROETHANE	6.8	U
56-23-5	CARBON TETRACHLORIDE	6.8	U
71-43-2	BENZENE	6.8	U
107-06-2	1 2-DICHLOROETHANE	6.8	U
79-01-6	TRICHLOROETHENE	6.8	U
78-87-5	1 2-DICHLOROPROPANE	6.8	U
75-27-4	BROMODICHLOROMETHANE	6.8	U
108-88-3	TOLUENE	6.8	U
79-00-5	1 1 2-TRICHLOROETHANE	6.8	U
127-18-4	TETRACHLOROETHENE	6.8	U
124-48-1	DIBROMOCHLOROMETHANE	6.8	U
108-90-7	CHLOROBENZENE	7.2	
100-41-4	ETHYL BENZENE	6.8	U
100-42-5	STYRENE	6.8	U
75-25-2	BROMOFORM	6.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.8	U
67-64-1	ACETONE	17	J
75-15-0	CARBON DISULFIDE	6.8	U
78-93-3	2-BUTANONE	11	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.5	U
591-78-6	2-HEXANONE	34	U
540-59-0	1,2-DICHLOROETHENE (total)	6.8	U
1330-20-7	XYLENE (total)	6.8	U

FORM I

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-1

Lab Name: [illegible] SAVANNAH Contract:

Lab Code: [illegible] Case No. SAS No. SDG No.: SIL062

Matrix: [illegible] water [illegible] Lab Sample ID: SED-M-S2 0-6"

Sample wt/vol: [illegible] g Lab File ID: M7848

Level: low med LOW Date Received: 06/25/01

% Moisture: not dec. 27 Date Analyzed: 07/02/01

GC Column: [illegible] & W DB-624 ID: [illegible] (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ ml Soil Aliquot Volume: _____ (uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-38-9	CARBON DIOXIDE	0.62	1200	JNB
2.		UNKNOWN	0.68	84	J
3.		UNKNOWN	0.75	34	J
4.		UNKNOWN	0.81	28	JB
5.		UNKNOWN	0.86	22	JB
6.		UNKNOWN	1.01	24	JB
7.		UNKNOWN	1.12	17	JB
8.		UNKNOWN	1.48	21	JB
9.		UNKNOWN	1.58	11	J
10.		SEPTUM BLEED	5.45	7.4	J
11.					
12.					
13.					
14.					
15.					
16.					
17.					
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S5 0-6"

Sample wt/vol: 5.4 (g/mL) G Lab File ID: M7849

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: not dec. 20 Date Analyzed: 07/02/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.3	U
75-09-2	METHYLENE CHLORIDE	5.8	U
75-34-3	1 1-DICHLOROETHANE	5.8	U
67-66-3	CHLOROFORM	5.8	U
71-55-6	1 1 1-TRICHLOROETHANE	5.8	U
56-23-5	CARBON TETRACHLORIDE	5.8	U
71-43-2	BENZENE	5.8	U
107-06-2	1 2-DICHLOROETHANE	5.8	U
79-01-6	TRICHLOROETHENE	5.8	U
78-87-5	1 2-DICHLOROPROPANE	5.8	U
75-27-4	BROMODICHLOROMETHANE	5.8	U
108-88-3	TOLUENE	3.8	J
79-00-5	1 1 2-TRICHLOROETHANE	5.8	U
127-18-4	TETRACHLOROETHENE	5.8	U
124-48-1	DIBROMOCHLOROMETHANE	5.8	U
108-90-7	CHLOROBENZENE	6.7	
100-41-4	ETHYL BENZENE	5.8	U
100-42-5	STYRENE	5.8	U
75-25-2	BROMOFORM	5.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5.8	U
67-64-1	ACETONE	32	J
75-15-0	CARBON DISULFIDE	9.2	
78-93-3	2-BUTANONE	16	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	29	U
10061-01-5	cis-1,3 DICHLOROPROPENE	4.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.6	U
591-78-6	2-HEXANONE	29	U
540-59-0	1,2-DICHLOROETHENE (total)	5.8	U
1330-20-7	XYLENE (total)	5.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-2

Lab Name: STL SAVANNAH Contract

Lab Code: SL Case No. SAS No.: SDG No.: SIL062

Matrix: soil (water) SOIL Lab Sample ID: SED-M-S5 0-6"

Sample wt/vol: 5.4 (g/mL) G Lab File ID: M7849

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: not dec 20 Date Analyzed: 07/02/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-38-9	CARBON DIOXIDE	0.62	1400	JNB
2.		UNKNOWN	0.75	46	J
3.		UNKNOWN	0.81	26	JB
4.		UNKNOWN	0.86	46	JB
5.		UNKNOWN	1.02	29	JB
6.		UNKNOWN	1.12	12	JB
7.		UNKNOWN	1.60	14	J
8.		SEPTUM BLEED	5.45	7.3	J
9.		UNKNOWN	7.98	41	J
10.					
11.					
12.					
13.					
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S8 0-6"

Sample wt/vol: 4.5 (g/mL) G Lab File ID: M7850

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: not dec. 33 Date Analyzed: 07/02/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U J
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.6	U
75-09-2	METHYLENE CHLORIDE	8.3	U
75-34-3	1 1-DICHLOROETHANE	8.3	U
67-66-3	CHLOROFORM	8.3	U
71-55-6	1 1 1-TRICHLOROETHANE	8.3	U
56-23-5	CARBON TETRACHLORIDE	8.3	U
71-43-2	BENZENE	4.7	J
107-06-2	1 2-DICHLOROETHANE	8.3	U J
79-01-6	TRICHLOROETHENE	8.3	U
78-87-5	1 2-DICHLOROPROPANE	8.3	U
75-27-4	BROMODICHLOROMETHANE	8.3	U
108-88-3	TOLUENE	8.1	J
79-00-5	1 1 2-TRICHLOROETHANE	8.3	U J
127-18-4	TETRACHLOROETHENE	8.3	U
124-48-1	DIBROMOCHLOROMETHANE	8.3	U
108-90-7	CHLOROBENZENE	840	~~E~~ J
100-41-4	ETHYL BENZENE	4.4	J
100-42-5	STYRENE	8.3	U J
75-25-2	BROMOFORM	8.3	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	8.3	U
67-64-1	ACETONE	180	J
75-15-0	CARBON DISULFIDE	14	J
78-93-3	2-BUTANONE	100	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	41	U J
10061-01-5	cis-1,3-DICHLOROPROPENE	6.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.6	U
591-78-6	2-HEXANONE	41	U
540-59-0	1,2-DICHLOROETHENE (total)	8.3	U
1330-20-7	XYLENE (total)	74	J

FORM I
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S8 0-6"

Sample wt./vol: 4.5 (g/mL) G Lab File ID: M7850

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: not dec. 33 Date Analyzed: 07/02/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-38-9	CARBON DIOXIDE	0.61	3200	JNB
2.		UNKNOWN ALKENE	1.51	330	J
3.		UNKNOWN ALKENE	3.56	40	J
4.		UNKNOWN	5.03	57	J
5.		UNKNOWN	5.50	81	J
6.		UNKNOWN	5.55	52	J
7.		UNKNOWN	5.59	56	J
8.		UNKNOWN	5.71	60	J
9.		BENZENE ISOMER	5.85	100	J
10.		UNKNOWN	5.98	62	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-3RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S8 0-6"

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M7883

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: not dec. 33 Date Analyzed: 07/06/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Do Not Report 4/25/02

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
75-09-2	METHYLENE CHLORIDE	7.2	U
75-34-3	1 1-DICHLOROETHANE	7.2	U
67-66-3	CHLOROFORM	7.2	U
71-55-6	1 1 1-TRICHLOROETHANE	7.2	U
56-23-5	CARBON TETRACHLORIDE	7.2	U
71-43-2	BENZENE	7.2	U
107-06-2	1 2-DICHLOROETHANE	7.2	U
79-01-6	TRICHLOROETHENE	7.2	U
78-87-5	1 2-DICHLOROPROPANE	7.2	U
75-27-4	BROMODICHLOROMETHANE	7.2	U
108-88-3	TOLUENE	2.6	J
79-00-5	1 1 2-TRICHLOROETHANE	7.2	U
127-18-4	TETRACHLOROETHENE	7.2	U
124-48-1	DIBROMOCHLOROMETHANE	7.2	U
108-90-7	CHLOROBENZENE	12	
100-41-4	ETHYL BENZENE	7.2	U
100-42-5	STYRENE	7.2	U
75-25-2	BROMOFORM	7.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.2	U
67-64-1	ACETONE	13	J
75-15-0	CARBON DISULFIDE	7.2	U
78-93-3	2-BUTANONE	7.8	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
591-78-6	2-HEXANONE	36	U
540-59-0	1,2-DICHLOROETHENE (total)	7.2	U
1330-20-7	XYLENE (total)	7.2	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-3RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S8 0-6"

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M7883

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: not dec. 33 Date Analyzed: 07/06/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.62	840	JNB
2.	UNKNOWN	0.75	29	JB
3.	UNKNOWN	0.81	23	JB
4.	UNKNOWN	0.86	17	JB
5.	UNKNOWN	1.03	21	JB
6.	UNKNOWN	1.12	10	JB
7.	UNKNOWN	1.51	8.2	J
8.	SEPTUM BLEED	5.45	9.2	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S10 0-6"

Sample wt/vol: 4.9 (g/mL) G Lab File ID: M7851

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: not dec. 34 Date Analyzed: 07/02/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.1	U
75-09-2	METHYLENE CHLORIDE	7.7	U
75-34-3	1 1-DICHLOROETHANE	7.7	U
67-66-3	CHLOROFORM	7.7	U
71-55-6	1 1 1-TRICHLOROETHANE	7.7	U
56-23-5	CARBON TETRACHLORIDE	7.7	U
71-43-2	BENZENE	7.7	U
107-06-2	1 2-DICHLOROETHANE	7.7	U
79-01-6	TRICHLOROETHENE	7.7	U
78-87-5	1 2-DICHLOROPROPANE	7.7	U
75-27-4	BROMODICHLOROMETHANE	7.7	U
108-88-3	TOLUENE	3.8	J
79-00-5	1 1 2-TRICHLOROETHANE	7.7	U
127-18-4	TETRACHLOROETHENE	7.7	U
124-48-1	DIBROMOCHLOROMETHANE	7.7	U
108-90-7	CHLOROBENZENE	80	
100-41-4	ETHYL BENZENE	7.7	U
100-42-5	STYRENE	7.7	U
75-25-2	BROMOFORM	7.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.7	U
67-64-1	ACETONE	38	J
75-15-0	CARBON DISULFIDE	6.3	J
78-93-3	2-BUTANONE	20	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	39	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.2	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.2	U
591-78-6	2-HEXANONE	39	U
540-59-0	1,2-DICHLOROETHENE (total)	7.7	U
1330-20-7	XYLENE (total)	11	

FORM I

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-4

Lab Name: [illegible] SAVANNAH Contract

Lab Code: [illegible] Case No. SAS No.. SDG No.: SIL062

Matrix (soil/water) SOIL Lab Sample ID: SED-M-S10 0-6"

Sample wt/vol: 4.9 (g/ml) G Lab File ID: M7851

Level (low/med) LOW Date Received: 06/25/01

% Moisture: not dec. 34 Date Analyzed: 07/02/01

GC Column: J & W DB-624 ID: [illegible] (mm) Dilution Factor: 1.0

Soil Extract Volume: [illegible] (ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 10 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-38-9	CARBON DIOXIDE	0.62	1900	JNB
2.		UNKNOWN	0.75	46	J
3.		UNKNOWN	5.03	16	J
4.		UNKNOWN	5.34	19	J
5.		UNKNOWN	5.57	18	J
6.		UNKNOWN	5.71	13	J
7.		BENZENE ISOMER	6.05	15	J
8.		UNKNOWN	6.31	29	J
9.		UNKNOWN	6.54	13	J
10.		UNKNOWN	6.77	12	J
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FORM I VOA-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Nancy Coe/Westford	**FILE:**	SO008NCvoc.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL063	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for three sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 5035/8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on July 10, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL063.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications
SED-M-S3-(0-6")
SED-M-S6-(0-6")
SED-M-S9-(0-6")

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were preserved and analyzed within the method specified holding time.

Cooler temperatures were not recorded on the COC unless they were outside the acceptable range of 4°C ± 2 C. There were no nonconformances noted for this sample set.

Laboratory Blanks

Acetone was detected in the low-level soil laboratory blanks. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. Action Levels (ALs) were established at 10x the concentration for acetone detected in the blank. The following tables summarize the ALs.

Laboratory Blank	Compound	Concentration Detected (µg/Kg)	Action Level (µg/Kg)
1M0716MB	Acetone	12	120
Associated samples: SED-M-S3-(0-6")			

Laboratory Blank	Compound	Concentration Detected (µg/Kg)	Action Level (µg/Kg)
2M0717MB	Acetone	10	100
Associated samples: SED-M-S6-(0-6") and SED-M-S9-(0-6").			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as nondetect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as nondetect (U) at the reported concentration.
- If the sample result was > AL, the result was accepted unqualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample SED-M-S6-(0-6") was submitted for MS/MSD analyses with this sample set. The relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were all within the QC acceptance limits. The following table summarizes the percent recoveries (%Rs) that were outside the QC acceptance limits. The positive result for acetone was qualified as estimated (J) in sample SED-M-S6-(0-6"). Qualification of the data was not required for the remaining analytes since positive results are affected and no positive results were reported.

ENSR

Compound	MS (%)	MSD (%)	QC Limits
1,1,2,2-Tetrachloroethane	176	154	49-144
Acetone	0	0	43-154
4-Methyl-2-Pentanone	171	169	34-159
2-Hexanone	186	177	45-127

Field Duplicate Results

A field duplicate pair was not submitted with this sample set.

LCS Results

The %R for 2-hexanone (130) was slightly above the QC acceptance limit., all other spiked analytes met the QC acceptance criteria in the LCS analysis. No validation action was required in the associated samples since 2-hexanone was undetected.

Sample Results

Sample SED-M-S3-(0-6") was reanalyzed at a 200-fold dilution (high-level) due to target analytes that exceeded the calibration range in the initial undiluted analysis. Both the diluted and undiluted analyses were combined in order to report the lowest possible sample quantitation limits (SQLs) and all results within the calibration range. The laboratory elevated the SQLs accordingly.

For all samples the percent solid was greater than 50.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S3-(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M7926

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: not dec. 22 Date Analyzed: 07/16/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.7	U
75-09-2	METHYLENE CHLORIDE	6.2	U
75-34-3	1 1-DICHLOROETHANE	6.2	U
67-66-3	CHLOROFORM	6.2	U
71-55-6	1 1 1-TRICHLOROETHANE	6.2	U
56-23-5	CARBON TETRACHLORIDE	6.2	U
71-43-2	BENZENE	37	
107-06-2	1 2-DICHLOROETHANE	6.2	U
79-01-6	TRICHLOROETHENE	6.2	U
78-87-5	1 2-DICHLOROPROPANE	6.2	U
75-27-4	BROMODICHLOROMETHANE	6.2	U
108-88-3	TOLUENE	42	
79-00-5	1 1 2-TRICHLOROETHANE	6.2	U
127-18-4	TETRACHLOROETHENE	6.2	U
124-48-1	DIBROMOCHLOROMETHANE	6.2	U
108-90-7	CHLOROBENZENE	35C ~~1100~~	~~E~~
100-41-4	ETHYL BENZENE	7.9	
100-42-5	STYRENE	6.2	U
75-25-2	BROMOFORM	6.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.2	U
67-64-1	ACETONE	260	B
75-15-0	CARBON DISULFIDE	12	
78-93-3	2-BUTANONE	59	
108-10-1	4-METHYL-2-PENTANONE (MIBK)	31	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.9	U
591-78-6	2-HEXANONE	31	U
540-59-0	1,2-DICHLOROETHENE (total)	6.2	U
1330-20-7	XYLENE (total)	160	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14342-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S3-(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M7926

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: not dec. 22 Date Analyzed: 07/16/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.66	580	JNB
2.	UNKNOWN	0.72	140	JB
3.	UNKNOWN ALKENE	1.52	60	J
4.	UNKNOWN CYCLOALKANE	2.87	120	J
5.	UNKNOWN	3.57	19	J
6.	UNKNOWN	5.34	64	J
7.	BENZENE ISOMER	5.57	80	J
8.	BENZENE ISOMER	6.12	420	J
9.	UNKNOWN	6.31	170	J
10.	BENZENE ISOMER	7.05	63	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-1DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S3-(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: B4846

Level: (low/med) MED Date Received: 07/11/01

% Moisture: not dec. 22 Date Analyzed: 07/20/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	490	U
75-01-4	VINYL CHLORIDE	490	U
74-83-9	BROMOMETHANE	490	U
75-00-3	CHLOROETHANE	490	U
75-35-4	1 1-DICHLOROETHENE	220	U
75-09-2	METHYLENE CHLORIDE	250	U
156-60-5	trans-1 2-DICHLOROETHENE	250	U
75-34-3	1 1-DICHLOROETHANE	250	U
67-66-3	CHLOROFORM	250	U
71-55-6	1 1 1-TRICHLOROETHANE	250	U
56-23-5	CARBON TETRACHLORIDE	250	U
71-43-2	BENZENE	250	U
107-06-2	1 2-DICHLOROETHANE	250	U
79-01-6	TRICHLOROETHENE	250	U
78-87-5	1 2-DICHLOROPROPANE	250	U
75-27-4	BROMODICHLOROMETHANE	250	U
108-88-3	TOLUENE	250	U
79-00-5	1 1 2-TRICHLOROETHANE	250	U
127-18-4	TETRACHLOROETHENE	250	U
124-48-1	DIBROMOCHLOROMETHANE	250	U
108-90-7	CHLOROBENZENE	380	D
100-41-4	ETHYL BENZENE	250	U
100-42-5	STYRENE	250	U
75-25-2	BROMOFORM	250	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	250	U
67-64-1	ACETONE	2500	U
75-15-0	CARBON DISULFIDE	250	U
78-93-3	2-BUTANONE	1200	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1200	U
10061-01-5	cis-1,3-DICHLOROPROPENE	200	U
10061-02-6	trans-1,3-DICHLOROPROPENE	200	U
591-78-6	2-HEXANONE	1200	U
540-59-0	1,2-DICHLOROETHENE (total)	250	U
1330-20-7	XYLENE (total)	250	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14342-1DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S3-(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: B4846

Level: (low/med) MED Date Received: 07/11/01

% Moisture: not dec. 22 Date Analyzed: 07/20/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-38-9	CARBON DIOXIDE	0.68	110000	JNB
2.		UNKNOWN	1.03	2200	JB
3.		UNKNOWN	1.27	1500	J
4.					
5.					
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S6-(0-6")

Sample wt/vol: 4.6 (g/mL) G Lab File ID: M7933

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: not dec. 22 Date Analyzed: 07/17/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
75-09-2	METHYLENE CHLORIDE	7.0	U
75-34-3	1 1-DICHLOROETHANE	7.0	U
67-66-3	CHLOROFORM	7.0	U
71-55-6	1 1 1-TRICHLOROETHANE	7.0	U
56-23-5	CARBON TETRACHLORIDE	7.0	U
71-43-2	BENZENE	7.0	U
107-06-2	1 2-DICHLOROETHANE	7.0	U
79-01-6	TRICHLOROETHENE	7.0	U
78-87-5	1 2-DICHLOROPROPANE	7.0	U
75-27-4	BROMODICHLOROMETHANE	7.0	U
108-88-3	TOLUENE	2.5	J
79-00-5	1 1 2-TRICHLOROETHANE	7.0	U
127-18-4	TETRACHLOROETHENE	7.0	U
124-48-1	DIBROMOCHLOROMETHANE	7.0	U
108-90-7	CHLOROBENZENE	7.0	U
100-41-4	ETHYL BENZENE	7.0	U
100-42-5	STYRENE	7.0	U
75-25-2	BROMOFORM	7.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.0	U
67-64-1	ACETONE	310	~~B~~ J-M
75-15-0	CARBON DISULFIDE	15	
78-93-3	2-BUTANONE	61	
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
591-78-6	2-HEXANONE	35	U
540-59-0	1,2-DICHLOROETHENE (total)	7.0	U
1330-20-7	XYLENE (total)	7.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14342-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S6-(0-6")

Sample wt/vol: 4.6 (g/mL) G Lab File ID: M7933

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: not dec. 22 Date Analyzed: 07/17/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.62	2500	JNB
2.	UNKNOWN	0.73	320	JB
3.	UNKNOWN	0.82	63	JB
4.	UNKNOWN	0.98	160	JB
5.	UNKNOWN ALKANE	1.04	130	J
6.	UNKNOWN	1.14	130	JB
7.	UNKNOWN	1.22	22	JB
8.	UNKNOWN	1.89	11	J
9.	UNKNOWN	3.56	14	J
10.	SEPTUM BLEED	5.44	28	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S9-(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M7934

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: not dec. 19 Date Analyzed: 07/17/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.5	U
75-09-2	METHYLENE CHLORIDE	5.9	U
75-34-3	1 1-DICHLOROETHANE	5.9	U
67-66-3	CHLOROFORM	5.9	U
71-55-6	1 1 1-TRICHLOROETHANE	5.9	U
56-23-5	CARBON TETRACHLORIDE	5.9	U
71-43-2	BENZENE	5.9	U
107-06-2	1 2-DICHLOROETHANE	5.9	U
79-01-6	TRICHLOROETHENE	5.9	U
78-87-5	1 2-DICHLOROPROPANE	5.9	U
75-27-4	BROMODICHLOROMETHANE	5.9	U
108-88-3	TOLUENE	2.6	J
79-00-5	1 1 2-TRICHLOROETHANE	5.9	U
127-18-4	TETRACHLOROETHENE	5.9	U
124-48-1	DIBROMOCHLOROMETHANE	5.9	U
108-90-7	CHLOROBENZENE	3.2	J
100-41-4	ETHYL BENZENE	5.9	U
100-42-5	STYRENE	5.9	U
75-25-2	BROMOFORM	5.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5.9	U
67-64-1	ACETONE	50 ~~47~~ JB	B
75-15-0	CARBON DISULFIDE	4.2	J
78-93-3	2-BUTANONE	9.3	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	30	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.7	U
591-78-6	2-HEXANONE	30	U
540-59-0	1,2-DICHLOROETHENE (total)	5.9	U
1330-20-7	XYLENE (total)	5.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14342-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S9-(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M7934

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: not dec. 19 Date Analyzed: 07/17/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.62	1900	JNB
2.	UNKNOWN	0.82	97	JB
3.	UNKNOWN	0.97	30	JB
4.	UNKNOWN	1.03	46	JB
5.	UNKNOWN	1.13	40	JB
6.	UNKNOWN	1.50	12	J
7.	SEPTUM BLEED	5.45	41	J
8.	UNKNOWN	6.91	6.6	J
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FORM I VOA-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Nancy Coe/Westford	**FILE:**	SO009NCvoc.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL065	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for three sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 5035/8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on August 1, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under SDG SIL065.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes.

SAMPLES

The samples included in this review are listed below:

Sample Identifications
SED-M-S4-(0-6")
SED-M-S7-(0-6")
SED-M-S7-FD(0-6") (dupe of SED-M-S7-(0-6"))

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were preserved and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of (4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

There were no target analytes detected in any laboratory blanks for this sample set.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

There were no MS/MSD analyses performed for this sample set. See LCS results for QC.

Field Duplicate Results

Samples SED-M-S7-(0-6")/SED-M-S7-FD(0-6") were submitted as the field duplicate pair with this sample set. The following table summarizes the RPD of the detected analytes in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	Sample (µg/L)	Duplicate (µg/L)	RPD (%)
Benzene	6.3	5.4	15
Toluene	8.9	8.4	6
Chlorobenzene	510	540	6
Ethylbenzene	4.5	4.4	2
Acetone	550	580	5
Carbon disulfide	81	78	4
2-Butanone	100	94	6
Xylene (total)	39	53	30

LCS Results

The %R for 1,1-dichloroethane (130) was slightly above the QC limit for the medium level LCS analysis (1B0815MBLCS). All other spiked analytes met the QC acceptance criteria in the LCS analyses. No qualification action was applied. 1,1-dichloroethane was not reported as a medium level soil.

Sample Results

All samples were reanalyzed at a 200-fold dilution (high-level) due to target analytes that exceeded the calibration range in the initial undiluted analysis. Both the diluted and undiluted analyses were combined in order to report the lowest possible sample quantitation limits (SQLs) and all results within the calibration range. The laboratory elevated the SQLs accordingly.

It should be noted that the %Rs of several internal standards in all the associated samples were outside the QC acceptance criteria. The samples were re-extracted and re-analyzed yielding similar nonconformances. It was the opinion of the validator to qualify all positive results and nondetects as estimated (J, UJ) for all sample analyses.

For all samples the percent solid was greater than 50.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-1

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M8176

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 24 Date Analyzed: 08/11/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	5.9	U
75-09-2	METHYLENE CHLORIDE	6.4	U
75-34-3	1 1-DICHLOROETHANE	6.4	U
67-66-3	CHLOROFORM	6.4	U
71-55-6	1 1 1-TRICHLOROETHANE	6.4	U
56-23-5	CARBON TETRACHLORIDE	6.4	U
71-43-2	BENZENE	11	J
107-06-2	1 2-DICHLOROETHANE	6.4	UJ
79-01-6	TRICHLOROETHENE	6.4	U
78-87-5	1 2-DICHLOROPROPANE	6.4	U
75-27-4	BROMODICHLOROMETHANE	6.4	U
108-88-3	TOLUENE	16	J
79-00-5	1 1 2-TRICHLOROETHANE	6.4	UJ
127-18-4	TETRACHLOROETHENE	6.4	U
124-48-1	DIBROMOCHLOROMETHANE	6.4	U
108-90-7	CHLOROBENZENE	~~12000~~ 750	~~E~~
100-41-4	ETHYL BENZENE	11	J
100-42-5	STYRENE	6.4	UJ
75-25-2	BROMOFORM	6.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.4	U
67-64-1	ACETONE	440	J
75-15-0	CARBON DISULFIDE	67	J
78-93-3	2-BUTANONE	78	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	32	UJ
10061-01-5	cis-1,3-DICHLOROPROPENE	5.2	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.2	U
591-78-6	2-HEXANONE	32	U
540-59-0	1,2-DICHLOROETHENE (total)	6.4	U
1330-20-7	XYLENE (total)	92	J

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-1

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M8176

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 24 Date Analyzed: 08/11/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.77	160	J
2.	UNKNOWN	5.18	8.1	J
3.	UNKNOWN	5.34	12	J
4.	BENZENE ISOMER	5.40	14	J
5.	BENZENE ISOMER	5.69	16	J
6.	BENZENE ISOMER	5.88	8.0	J
7.	BENZENE ISOMER	5.95	34	J
8.	UNKNOWN	6.15	9.7	J
9.	BENZENE ISOMER	6.23	12	J
10.	UNKNOWN ALKANE	6.37	7.4	J
11.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-1DL

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt/vol: 4.8 (g/mL) G Lab File ID: B5309

Level: (low/med) MED Date Received: 08/02/01

% Moisture: not dec. 24 Date Analyzed: 08/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	550	U
75-01-4	VINYL CHLORIDE	550	U
74-83-9	BROMOMETHANE	550	U
75-00-3	CHLOROETHANE	550	U
75-35-4	1 1-DICHLOROETHENE	250	U
75-09-2	METHYLENE CHLORIDE	270	U
75-34-3	1 1-DICHLOROETHANE	270	U
67-66-3	CHLOROFORM	270	U
71-55-6	1 1 1-TRICHLOROETHANE	270	U
56-23-5	CARBON TETRACHLORIDE	270	U
71-43-2	BENZENE	270	U
107-06-2	1 2-DICHLOROETHANE	270	U
79-01-6	TRICHLOROETHENE	270	U
78-87-5	1 2-DICHLOROPROPANE	270	U
75-27-4	BROMODICHLOROMETHANE	270	U
108-88-3	TOLUENE	270	U
79-00-5	1 1 2-TRICHLOROETHANE	270	U
127-18-4	TETRACHLOROETHENE	270	U
124-48-1	DIBROMOCHLOROMETHANE	270	U
108-90-7	CHLOROBENZENE	1200	D
100-41-4	ETHYL BENZENE	270	U
100-42-5	STYRENE	270	U
75-25-2	BROMOFORM	270	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	270	U
67-64-1	ACETONE	2700	U
75-15-0	CARBON DISULFIDE	270	U
78-93-3	2-BUTANONE	1400	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1400	U
10061-01-5	cis-1,3-DICHLOROPROPENE	220	U
10061-02-6	trans-1,3-DICHLOROPROPENE	220	U
591-78-6	2-HEXANONE	1400	U
540-59-0	1,2-DICHLOROETHENE (total)	270	U
1330-20-7	XYLENE (total)	140	DJ

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-1DL

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt/vol: 4.8 (g/mL) G Lab File ID: B5309

Level: (low/med) MED Date Received: 08/02/01

% Moisture: not dec. 24 Date Analyzed: 08/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.69	130000	JNBD
2.	UNKNOWN	6.00	2900	JD
3.	UNKNOWN ALKANE	6.68	1600	JD
4.				
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FORM I VOA-TIC

FORM I
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-1RE

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt/vol: 4.4 (g/mL) G Lab File ID: M8247

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 24 Date Analyzed: 08/15/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1,1-DICHLOROETHENE	6.9	U
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1,1-DICHLOROETHANE	7.5	U
67-66-3	CHLOROFORM	7.5	U
71-55-6	1,1,1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	11	
107-06-2	1,2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1,2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
108-88-3	TOLUENE	12	
79-00-5	1,1,2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	~~1400~~	~~E~~
100-41-4	ETHYL BENZENE	19	
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	7.5	U
67-64-1	ACETONE	340	
75-15-0	CARBON DISULFIDE	35	
78-93-3	2-BUTANONE	80	
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
591-78-6	2-HEXANONE	37	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	120	

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-1RE

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt/vol: 4.4 (g/mL) G Lab File ID: M8247

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 24 Date Analyzed: 08/15/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	0.70	140	J
2.		UNKNOWN ALKENE	1.43	170	J
3.		BENZENE ISOMER	5.41	9.9	J
4.		BENZENE ISOMER	5.68	10	J
5.		BENZENE ISOMER	5.95	38	J
6.		UNKNOWN	6.14	7.6	J
7.		BENZENE ISOMER	6.24	9.1	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-2

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M8177

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 22 Date Analyzed: 08/11/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	UJ-I
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.7	U
75-09-2	METHYLENE CHLORIDE	6.2	U
75-34-3	1 1-DICHLOROETHANE	6.2	U
67-66-3	CHLOROFORM	6.2	U
71-55-6	1 1 1-TRICHLOROETHANE	6.2	U
56-23-5	CARBON TETRACHLORIDE	6.2	U
71-43-2	BENZENE	6.3	J
107-06-2	1 2-DICHLOROETHANE	6.2	UJ
79-01-6	TRICHLOROETHENE	6.2	U
78-87-5	1 2-DICHLOROPROPANE	6.2	U
75-27-4	BROMODICHLOROMETHANE	6.2	U
108-88-3	TOLUENE	8.9	J
79-00-5	1 1 2-TRICHLOROETHANE	6.2	UJ
127-18-4	TETRACHLOROETHENE	6.2	U
124-48-1	DIBROMOCHLOROMETHANE	6.2	U
108-90-7	CHLOROBENZENE	5.0J ~~430~~	~~E~~
100-41-4	ETHYL BENZENE	4.5	J
100-42-5	STYRENE	6.2	UJ
75-25-2	BROMOFORM	6.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.2	U
67-64-1	ACETONE	550	J
75-15-0	CARBON DISULFIDE	81	J
78-93-3	2-BUTANONE	100	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	31	UJ
10061-01-5	cis-1,3-DICHLOROPROPENE	4.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.9	U
591-78-6	2-HEXANONE	31	U
540-59-0	1,2-DICHLOROETHENE (total)	6.2	U
1330-20-7	XYLENE (total)	39	J

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-2

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M8177

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 22 Date Analyzed: 08/11/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.70	150	J
2.	UNKNOWN	5.18	12	J
3.	UNKNOWN	5.34	13	J
4.	UNKNOWN	5.67	12	J
5.	BENZENE ISOMER	5.95	35	J
6.	UNKNOWN ALKANE	6.37	13	J
7.	BENZENE ISOMER	6.88	9.5	J
8.	UNKNOWN ALKANE	7.37	11	J
9.	NAPTHALENE ISOMER	7.69	13	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-2DL

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt/vol: 5.6 (g/mL) G Lab File ID: B5310

Level: (low/med) MED Date Received: 08/02/01

% Moisture: not dec. 22 Date Analyzed: 08/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	460	U
75-01-4	VINYL CHLORIDE	460	U
74-83-9	BROMOMETHANE	460	U
75-00-3	CHLOROETHANE	460	U
75-35-4	1 1-DICHLOROETHENE	210	U
75-09-2	METHYLENE CHLORIDE	230	U
75-34-3	1 1-DICHLOROETHANE	230	U
67-66-3	CHLOROFORM	230	U
71-55-6	1 1 1-TRICHLOROETHANE	230	U
56-23-5	CARBON TETRACHLORIDE	230	U
71-43-2	BENZENE	230	U
107-06-2	1 2-DICHLOROETHANE	230	U
79-01-6	TRICHLOROETHENE	230	U
78-87-5	1 2-DICHLOROPROPANE	230	U
75-27-4	BROMODICHLOROMETHANE	230	U
108-88-3	TOLUENE	230	U
79-00-5	1 1 2-TRICHLOROETHANE	230	U
127-18-4	TETRACHLOROETHENE	230	U
124-48-1	DIBROMOCHLOROMETHANE	230	U
108-90-7	CHLOROBENZENE	510	D
100-41-4	ETHYL BENZENE	230	U
100-42-5	STYRENE	230	U
75-25-2	BROMOFORM	230	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	230	U
67-64-1	ACETONE	2300	U
75-15-0	CARBON DISULFIDE	230	U
78-93-3	2-BUTANONE	1100	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1100	U
10061-01-5	cis-1,3-DICHLOROPROPENE	180	U
10061-02-6	trans-1,3-DICHLOROPROPENE	180	U
591-78-6	2-HEXANONE	1100	U
540-59-0	1,2-DICHLOROETHENE (total)	230	U
1330-20-7	XYLENE (total)	230	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-2DL

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt/vol: 5.6 (g/mL) G Lab File ID: B5310

Level: (low/med) MED Date Received: 08/02/01

% Moisture: not dec. 22 Date Analyzed: 08/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.69	110000	JNBD
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FORM I
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-2RE

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt/vol: 5.4 (g/mL) G Lab File ID: M8248

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 22 Date Analyzed: 08/15/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1,1-DICHLOROETHENE	5.5	U
75-09-2	METHYLENE CHLORIDE	5.9	U
75-34-3	1,1-DICHLOROETHANE	5.9	U
67-66-3	CHLOROFORM	5.9	U
71-55-6	1,1,1-TRICHLOROETHANE	5.9	U
56-23-5	CARBON TETRACHLORIDE	5.9	U
71-43-2	BENZENE	4.7	J
107-06-2	1,2-DICHLOROETHANE	5.9	U
79-01-6	TRICHLOROETHENE	5.9	U
78-87-5	1,2-DICHLOROPROPANE	5.9	U
75-27-4	BROMODICHLOROMETHANE	5.9	U
108-88-3	TOLUENE	6.2	
79-00-5	1,1,2-TRICHLOROETHANE	5.9	U
127-18-4	TETRACHLOROETHENE	5.9	U
124-48-1	DIBROMOCHLOROMETHANE	5.9	U
108-90-7	CHLOROBENZENE	~~380~~	~~E~~
100-41-4	ETHYL BENZENE	3.4	J
100-42-5	STYRENE	5.9	U
75-25-2	BROMOFORM	5.9	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	5.9	U
67-64-1	ACETONE	410	
75-15-0	CARBON DISULFIDE	88	
78-93-3	2-BUTANONE	92	
108-10-1	4-METHYL-2-PENTANONE (MIBK)	30	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.7	U
591-78-6	2-HEXANONE	30	U
540-59-0	1,2-DICHLOROETHENE (total)	5.9	U
1330-20-7	XYLENE (total)	34	

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-2RE

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt/vol: 5.4 (g/mL) G Lab File ID: M8248

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 22 Date Analyzed: 08/15/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.70	76	J
2.	UNKNOWN	4.87	11	J
3.	UNKNOWN CYCLOALKANE	5.18	13	J
4.	UNKNOWN	5.34	12	J
5.	UNKNOWN	5.67	12	J
6.	BENZENE ISOMER	5.88	11	J
7.	BENZENE ISOMER	5.95	37	J
8.	UNKNOWN	6.37	14	J
9.	UNKNOWN	7.37	13	J
10.	NAPTHALENE ISOMER	7.70	14	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-3

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M8178

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 23 Date Analyzed: 08/11/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	UJ
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.7	U
75-09-2	METHYLENE CHLORIDE	6.2	U
75-34-3	1 1-DICHLOROETHANE	6.2	U
67-66-3	CHLOROFORM	6.2	U
71-55-6	1 1 1-TRICHLOROETHANE	6.2	U
56-23-5	CARBON TETRACHLORIDE	6.2	U
71-43-2	BENZENE	5.4	J
107-06-2	1 2-DICHLOROETHANE	6.2	UJ
79-01-6	TRICHLOROETHENE	6.2	U
78-87-5	1 2-DICHLOROPROPANE	6.2	U
75-27-4	BROMODICHLOROMETHANE	6.2	U
108-88-3	TOLUENE	8.4	J
79-00-5	1 1 2-TRICHLOROETHANE	6.2	UJ
127-18-4	TETRACHLOROETHENE	6.2	U
124-48-1	DIBROMOCHLOROMETHANE	6.2	U
108-90-7	CHLOROBENZENE	540J ~~620~~	~~E~~
100-41-4	ETHYL BENZENE	4.4	J
100-42-5	STYRENE	6.2	UJ
75-25-2	BROMOFORM	6.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.2	U
67-64-1	ACETONE	580	J
75-15-0	CARBON DISULFIDE	78	J
78-93-3	2-BUTANONE	94	J
108-10-1	4-METHYL-2-PENTANONE (MIBK)	31	UJ
10061-01-5	cis-1,3-DICHLOROPROPENE	5.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.0	U
591-78-6	2-HEXANONE	31	U
540-59-0	1,2-DICHLOROETHENE (total)	6.2	U
1330-20-7	XYLENE (total)	53	J

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-3

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M8178

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 23 Date Analyzed: 08/11/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.87	12	J
2.	UNKNOWN CYCLOALKANE	5.18	14	J
3.	UNKNOWN	5.34	13	J
4.	UNKNOWN	5.67	12	J
5.	BENZENE ISOMER	5.95	33	J
6.	UNKNOWN	6.37	14	J
7.	UNKNOWN	6.64	9.1	J
8.	BENZENE ISOMER	6.88	10	J
9.	NAPTHALENE ISOMER	7.69	13	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-3DL

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B5306

Level: (low/med) MED Date Received: 08/02/01

% Moisture: not dec. 23 Date Analyzed: 08/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	520	U
75-01-4	VINYL CHLORIDE	520	U
74-83-9	BROMOMETHANE	520	U
75-00-3	CHLOROETHANE	520	U
75-35-4	1 1-DICHLOROETHENE	230	U
75-09-2	METHYLENE CHLORIDE	260	U
75-34-3	1 1-DICHLOROETHANE	260	U
67-66-3	CHLOROFORM	260	U
71-55-6	1 1 1-TRICHLOROETHANE	260	U
56-23-5	CARBON TETRACHLORIDE	260	U
71-43-2	BENZENE	260	U
107-06-2	1 2-DICHLOROETHANE	260	U
79-01-6	TRICHLOROETHENE	260	U
78-87-5	1 2-DICHLOROPROPANE	260	U
75-27-4	BROMODICHLOROMETHANE	260	U
108-88-3	TOLUENE	260	U
79-00-5	1 1 2-TRICHLOROETHANE	260	U
127-18-4	TETRACHLOROETHENE	260	U
124-48-1	DIBROMOCHLOROMETHANE	260	U
108-90-7	CHLOROBENZENE	540	D
100-41-4	ETHYL BENZENE	260	U
100-42-5	STYRENE	260	U
75-25-2	BROMOFORM	260	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	260	U
67-64-1	ACETONE	2600	U
75-15-0	CARBON DISULFIDE	260	U
78-93-3	2-BUTANONE	1300	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1300	U
10061-01-5	cis-1,3-DICHLOROPROPENE	210	U
10061-02-6	trans-1,3-DICHLOROPROPENE	210	U
591-78-6	2-HEXANONE	1300	U
540-59-0	1,2-DICHLOROETHENE (total)	260	U
1330-20-7	XYLENE (total)	260	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-3DL

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B5306

Level: (low/med) MED Date Received: 08/02/01

% Moisture: not dec. 23 Date Analyzed: 08/15/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.69	120000	JNBD
2.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-3RE

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M8249

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 23 Date Analyzed: 08/15/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.6	U
75-09-2	METHYLENE CHLORIDE	6.1	U
75-34-3	1 1-DICHLOROETHANE	6.1	U
67-66-3	CHLOROFORM	6.1	U
71-55-6	1 1 1-TRICHLOROETHANE	6.1	U
56-23-5	CARBON TETRACHLORIDE	6.1	U
71-43-2	BENZENE	4.4	J
107-06-2	1 2-DICHLOROETHANE	6.1	U
79-01-6	TRICHLOROETHENE	6.1	U
78-87-5	1 2-DICHLOROPROPANE	6.1	U
75-27-4	BROMODICHLOROMETHANE	6.1	U
108-88-3	TOLUENE	7.0	
79-00-5	1 1 2-TRICHLOROETHANE	6.1	U
127-18-4	TETRACHLOROETHENE	6.1	U
124-48-1	DIBROMOCHLOROMETHANE	6.1	U
108-90-7	CHLOROBENZENE	~~590~~	~~E~~
100-41-4	ETHYL BENZENE	4.1	J
100-42-5	STYRENE	6.1	U
75-25-2	BROMOFORM	6.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.1	U
67-64-1	ACETONE	370	
75-15-0	CARBON DISULFIDE	59	
78-93-3	2-BUTANONE	89	
108-10-1	4-METHYL-2-PENTANONE (MIBK)	31	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.9	U
591-78-6	2-HEXANONE	31	U
540-59-0	1,2-DICHLOROETHENE (total)	6.1	U
1330-20-7	XYLENE (total)	48	

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-3RE

Lab Name: SAVANNAH LABORATORIES Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M8249

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: not dec. 23 Date Analyzed: 08/15/01

GC Column: J & W DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.86	11	J
2.	UNKNOWN	5.18	10	J
3.	UNKNOWN	5.34	10	J
4.	UNKNOWN	5.44	12	J
5.	UNKNOWN	5.67	8.7	J
6.	BENZENE ISOMER	5.88	8.8	J
7.	BENZENE ISOMER	5.95	31	J
8.	UNKNOWN	6.37	10	J
9.	UNKNOWN ALKANE	7.37	8.7	J
10.	NAPTHALENE ISOMER	7.69	9.8	J
11.				
12.				
13.				
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15.				
16.				
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FORM I VOA-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Nancy Coe/Westford	**FILE:**	SO010NCvoc.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL069	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for 16 sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 5035/8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on October 31 and November 1, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL069.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

The data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T1-C1	CBS-CSB-T3-W1
CBS-CSB-T1-E1	CBS-CSB-T0-E1
CBS-CSB-T1-W1	CBS-CSB-T4-C1
CBS-CSB-T2-C1	CBS-CSB-T4-E1
CBS-CSB-T2-E1	CBS-CSB-T4-W1
CBS-CSB-T2-W1	CBS-CSB-T5-C1
CBS-CSB-T3-C1	CBS-CSB-T5-E1
CBS-CSB-T3-E1	CBS-CSB-T5-W1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries

- Matrix spike matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were preserved and analyzed within the method specified holding time.

Cooler temperatures were not recorded on the COC unless they were outside the acceptable range of 4°C ± 2 C. There were no nonconformances noted for this sample set.

Laboratory Blanks

Acetone was detected in low-level soil laboratory blank 1L1105MB. Acetone, methylene chloride, and toluene were detected in the high-level soil blank. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at 10x the concentration for acetone and methylene chloride detected in the blank, and at 5x the concentration for toluene detected in the blank. The following tables summarize the ALs.

Laboratory Blank	Compound	Concentration Detected (µg/Kg)	Action Level (µg/Kg)
1L1105MB	Acetone	7.6	76
Associated samples CBS-CSB-T1-C1, CBS-CSB-T1-E1, CBS-CSB-T1-W1, CBS-CSB-T2-C1, CBS-CSB-T2-E1, CBS-CSB-T2-W1, CBS-CSB-T3-C1 CBS-CSB-T3-E1, and CBS-CSB-T3-W1.			

Laboratory Blank	Compound	Concentration Detected (µg/Kg)	Action Level (µg/Kg)
1A1106MB	Acetone	890	8900
	Methylene chloride	85	850
	Toluene	77	385
Associated samples CBS-CSB-T0-E1			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as nondetect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as nondetect (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

ENSR

MS/MSD Results

There were no MS/MSD analyses performed for this sample set. See LCS results for QC.

Field Duplicate Results

There were no field duplicates submitted with this sample set.

LCS Results

The %Rs of the control spike compounds met the QC acceptance criteria in the LCS analyses.

Sample Results

Samples CBS-CSB-T1-C1, CBS-CSB-T4-W1, CBS-CSB-T5-W1, CBS-CSB-T3-C1, and CBS-CSB-T3-E1 were reanalyzed at a 200-fold dilution (high-level) due to target analytes that exceeded the calibration range in the initial undiluted analysis. Both the diluted and undiluted analyses were combined in order to report the lowest possible sample quantitation limits (SQLs) and all results within the calibration range. The laboratory elevated the SQLs accordingly.

Sample CBS-CSB-T0-E1 was analyzed at a 200-fold dilution due to target analytes which would have exceeded the calibration range if analyzed undiluted. The laboratory elevated SQLs accordingly.

For all samples the percent solid was greater than 50.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-C1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: L0453

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 34 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.6	U
67-64-1	ACETONE	290	~~B~~
75-15-0	CARBON DISULFIDE	8.2	U
75-09-2	METHYLENE CHLORIDE	8.2	U
75-34-3	1 1-DICHLOROETHANE	8.2	U
78-93-3	2-BUTANONE	29	J
67-66-3	CHLOROFORM	8.2	U
71-55-6	1 1 1-TRICHLOROETHANE	8.2	U
56-23-5	CARBON TETRACHLORIDE	8.2	U
71-43-2	BENZENE	7.2	J
107-06-2	1 2-DICHLOROETHANE	8.2	U
79-01-6	TRICHLOROETHENE	8.2	U
78-87-5	1 2-DICHLOROPROPANE	8.2	U
75-27-4	BROMODICHLOROMETHANE	8.2	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	41	U
108-88-3	TOLUENE	8.2	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.6	U
79-00-5	1 1 2-TRICHLOROETHANE	8.2	U
127-18-4	TETRACHLOROETHENE	8.2	U
591-78-6	2-HEXANONE	41	U
124-48-1	DIBROMOCHLOROMETHANE	8.2	U
108-90-7	CHLOROBENZENE	530 ~~490~~	E
100-41-4	ETHYL BENZENE	10	
100-42-5	STYRENE	8.2	U
75-25-2	BROMOFORM	8.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	8.2	U
540-59-0	1,2-DICHLOROETHENE (total)	8.2	U
1330-20-7	XYLENE (total)	80	

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-C1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: L0453

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 34 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.92	2000	JNB
2.	BENZENE ISOMER	7.73	95	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-1DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-C1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: A6962

Level: (low/med) MED Date Received: 11/01/01

% Moisture: not dec. 34 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	660	U
75-01-4	VINYL CHLORIDE	660	U
74-83-9	BROMOMETHANE	660	U
75-00-3	CHLOROETHANE	660	U
75-35-4	1 1-DICHLOROETHENE	300	U
67-64-1	ACETONE	1100	DBJ
75-15-0	CARBON DISULFIDE	330	U
75-09-2	METHYLENE CHLORIDE	170	DBJ
75-34-3	1 1-DICHLOROETHANE	330	U
78-93-3	2-BUTANONE	1600	U
67-66-3	CHLOROFORM	330	U
71-55-6	1 1 1-TRICHLOROETHANE	330	U
56-23-5	CARBON TETRACHLORIDE	330	U
71-43-2	BENZENE	330	U
107-06-2	1 2-DICHLOROETHANE	330	U
79-01-6	TRICHLOROETHENE	330	U
78-87-5	1 2-DICHLOROPROPANE	330	U
75-27-4	BROMODICHLOROMETHANE	330	U
10061-01-5	cis-1,3-DICHLOROPROPENE	260	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1600	U
108-88-3	TOLUENE	200	DBJ
10061-02-6	trans-1,3-DICHLOROPROPENE	260	U
79-00-5	1 1 2-TRICHLOROETHANE	330	U
127-18-4	TETRACHLOROETHENE	330	U
591-78-6	2-HEXANONE	1600	U
124-48-1	DIBROMOCHLOROMETHANE	330	U
108-90-7	CHLOROBENZENE	580	~~U~~
100-41-4	ETHYL BENZENE	330	U
100-42-5	STYRENE	330	U
75-25-2	BROMOFORM	330	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	330	U
540-59-0	1,2-DICHLOROETHENE (total)	330	U
1330-20-7	XYLENE (total)	330	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-1DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-C1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: A6962

Level: (low/med) MED Date Received: 11/01/01

% Moisture: not dec. 34 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	1.14	81000	JNBD
2.	UNKNOWN	1.50	2100	JBD
3.				
4.				
5.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-E1

Sample wt/vol: 4.9 (g/mL) G Lab File ID: L0454

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 32 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	75	U
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	38	U
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	3.5	J
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-E1

Sample wt/vol: 4.9 (g/mL) G Lab File ID: L0454

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 32 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.93	2700	JNB
2.	BENZENE ISOMER	7.22	30	J
3.	BENZENE ISOMER	7.41	40	J
4.	BENZENE ISOMER	7.62	67	J
5.	BENZENE ISOMER	7.78	26	J
6.	UNKNOWN	7.94	56	J
7.	UNKNOWN	8.07	18	J
8.	UNKNOWN	8.95	20	J
9.	UNKNOWN	9.48	16	J
10.				
11.				
12.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-W1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: L0455

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 28 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	100	~~U~~ U-B
75-15-0	CARBON DISULFIDE	14	
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	5.2	J
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	6.1	J
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-W1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: L0455

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 28 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.93	1700	JNB
2.	UNKNOWN	1.04	21	J
3.	UNKNOWN ALCOHOL	1.82	17	J
4.	BENZENE ISOMER	7.73	9.8	J
5.	BENZENE ISOMER	7.82	12	J
6.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-C1

Sample wt/vol: 4.5 (g/mL) G Lab File ID: L0456

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 37 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	18	U
75-01-4	VINYL CHLORIDE	18	U
74-83-9	BROMOMETHANE	18	U
75-00-3	CHLOROETHANE	18	U
75-35-4	1 1-DICHLOROETHENE	8.1	U
67-64-1	ACETONE	240	~~B~~
75-15-0	CARBON DISULFIDE	25	
75-09-2	METHYLENE CHLORIDE	8.8	U
75-34-3	1 1-DICHLOROETHANE	8.8	U
78-93-3	2-BUTANONE	42	J
67-66-3	CHLOROFORM	8.8	U
71-55-6	1 1 1-TRICHLOROETHANE	8.8	U
56-23-5	CARBON TETRACHLORIDE	8.8	U
71-43-2	BENZENE	8.8	U
107-06-2	1 2-DICHLOROETHANE	8.8	U
79-01-6	TRICHLOROETHENE	8.8	U
78-87-5	1 2-DICHLOROPROPANE	8.8	U
75-27-4	BROMODICHLOROMETHANE	8.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	44	U
108-88-3	TOLUENE	8.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	7.0	U
79-00-5	1 1 2-TRICHLOROETHANE	8.8	U
127-18-4	TETRACHLOROETHENE	8.8	U
591-78-6	2-HEXANONE	44	U
124-48-1	DIBROMOCHLOROMETHANE	8.8	U
108-90-7	CHLOROBENZENE	80	
100-41-4	ETHYL BENZENE	8.8	U
100-42-5	STYRENE	8.8	U
75-25-2	BROMOFORM	8.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	8.8	U
540-59-0	1,2-DICHLOROETHENE (total)	8.8	U
1330-20-7	XYLENE (total)	8.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-C1

Sample wt/vol: 4.5 (g/mL) G Lab File ID: L0456

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 37 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-38-9	CARBON DIOXIDE	0.92	1200	JNB
2.		UNKNOWN	0.99	160	J
3.		UNKNOWN	1.04	440	J
4.		UNKNOWN	1.15	470	J
5.		UNKNOWN	1.32	330	J
6.		SEPTUM BLEED	5.00	22	J
7.		SEPTUM BLEED	6.75	16	J
8.		BENZENE ISOMER	7.83	9.4	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-E1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: L0462

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 28 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
67-64-1	ACETONE	~~56~~	~~JB~~ U
75-15-0	CARBON DISULFIDE	7.2	U
75-09-2	METHYLENE CHLORIDE	7.2	U
75-34-3	1 1-DICHLOROETHANE	7.2	U
78-93-3	2-BUTANONE	8.0	J
67-66-3	CHLOROFORM	7.2	U
71-55-6	1 1 1-TRICHLOROETHANE	7.2	U
56-23-5	CARBON TETRACHLORIDE	7.2	U
71-43-2	BENZENE	7.2	U
107-06-2	1 2-DICHLOROETHANE	7.2	U
79-01-6	TRICHLOROETHENE	7.2	U
78-87-5	1 2-DICHLOROPROPANE	7.2	U
75-27-4	BROMODICHLOROMETHANE	7.2	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.8	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	7.2	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.8	U
79-00-5	1 1 2-TRICHLOROETHANE	7.2	U
127-18-4	TETRACHLOROETHENE	7.2	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.2	U
108-90-7	CHLOROBENZENE	3.8	J
100-41-4	ETHYL BENZENE	7.2	U
100-42-5	STYRENE	7.2	U
75-25-2	BROMOFORM	7.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.2	U
540-59-0	1,2-DICHLOROETHENE (total)	7.2	U
1330-20-7	XYLENE (total)	7.2	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-E1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: L0462

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 28 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.92	1400	JNB
2.	UNKNOWN	1.04	40	J
3.	UNKNOWN	1.23	8.0	J
4.	UNKNOWN	1.33	24	J
5.	UNKNOWN	1.59	13	J
6.	UNKNOWN	1.75	7.6	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-W1

Sample wt/vol: 7.3 (g/mL) G Lab File ID: L0458

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 25 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	9.1	U
75-01-4	VINYL CHLORIDE	9.1	U
74-83-9	BROMOMETHANE	9.1	U
75-00-3	CHLOROETHANE	9.1	U
75-35-4	1 1-DICHLOROETHENE	4.2	U
67-64-1	ACETONE	58	B
75-15-0	CARBON DISULFIDE	3.3	J
75-09-2	METHYLENE CHLORIDE	4.6	U
75-34-3	1 1-DICHLOROETHANE	4.6	U
78-93-3	2-BUTANONE	8.5	J
67-66-3	CHLOROFORM	4.6	U
71-55-6	1 1 1-TRICHLOROETHANE	4.6	U
56-23-5	CARBON TETRACHLORIDE	4.6	U
71-43-2	BENZENE	2.4	J
107-06-2	1 2-DICHLOROETHANE	4.6	U
79-01-6	TRICHLOROETHENE	4.6	U
78-87-5	1 2-DICHLOROPROPANE	4.6	U
75-27-4	BROMODICHLOROMETHANE	4.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	3.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	23	U
108-88-3	TOLUENE	4.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	3.6	U
79-00-5	1 1 2-TRICHLOROETHANE	4.6	U
127-18-4	TETRACHLOROETHENE	4.6	U
591-78-6	2-HEXANONE	23	U
124-48-1	DIBROMOCHLOROMETHANE	4.6	U
108-90-7	CHLOROBENZENE	54	
100-41-4	ETHYL BENZENE	4.6	U
100-42-5	STYRENE	4.6	U
75-25-2	BROMOFORM	4.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	4.6	U
540-59-0	1,2-DICHLOROETHENE (total)	4.6	U
1330-20-7	XYLENE (total)	4.6	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-W1

Sample wt/vol: 7.3 (g/mL) G Lab File ID: L0458

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 25 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.93	1200	JNB
2.	UNKNOWN	1.04	22	J
3.	UNKNOWN	1.17	110	J
4.	UNKNOWN	1.33	31	J
5.	UNKNOWN	1.44	54	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt/vol: 3.8 (g/mL) G Lab File ID: L0459

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 42 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	23	U
75-01-4	VINYL CHLORIDE	23	U
74-83-9	BROMOMETHANE	23	U
75-00-3	CHLOROETHANE	23	U
75-35-4	1 1-DICHLOROETHENE	10	U
67-64-1	ACETONE	470	~~B~~
75-15-0	CARBON DISULFIDE	20	
75-09-2	METHYLENE CHLORIDE	11	U
75-34-3	1 1-DICHLOROETHANE	11	U
78-93-3	2-BUTANONE	610	
67-66-3	CHLOROFORM	11	U
71-55-6	1 1 1-TRICHLOROETHANE	23	
56-23-5	CARBON TETRACHLORIDE	11	U
71-43-2	BENZENE	4.0	J
107-06-2	1 2-DICHLOROETHANE	11	U
79-01-6	TRICHLOROETHENE	8.8	J
78-87-5	1 2-DICHLOROPROPANE	11	U
75-27-4	BROMODICHLOROMETHANE	11	U
10061-01-5	cis-1,3-DICHLOROPROPENE	9.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	110	
108-88-3	TOLUENE	290	
10061-02-6	trans-1,3-DICHLOROPROPENE	9.1	U
79-00-5	1 1 2-TRICHLOROETHANE	11	U
127-18-4	TETRACHLOROETHENE	70	
591-78-6	2-HEXANONE	57	U
124-48-1	DIBROMOCHLOROMETHANE	11	U
108-90-7	CHLOROBENZENE	4500 ~~1900~~	~~E~~
100-41-4	ETHYL BENZENE	3700 ~~920~~	~~E~~
100-42-5	STYRENE	11	U
75-25-2	BROMOFORM	11	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	11	U
540-59-0	1,2-DICHLOROETHENE (total)	12	
1330-20-7	XYLENE (total)	39000 ~~5300~~	~~E~~

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt/vol: 3.8 (g/mL) G Lab File ID: L0459

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 42 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.92	1700	JNB
2.	BENZENE ISOMER	7.54	360	J
3.	BENZENE ISOMER	7.87	970	J
4.	BENZENE ISOMER	9.16	610	J
5.	BENZENE ISOMER	9.54	200	J
6.	BENZENE ISOMER	9.86	85	J
7.	BENZENE ISOMER	9.96	82	J
8.	BENZENE ISOMER	10.14	47	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-7DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt vol: 4.5 (g/mL) G Lab File ID: A6963

Level: (low/med) MED Date Received: 11/01/01

% Moisture: not dec. 42 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	770	U
75-01-4	VINYL CHLORIDE	770	U
74-83-9	BROMOMETHANE	770	U
75-00-3	CHLOROETHANE	770	U
75-35-4	1 1-DICHLOROETHENE	340	U
67-64-1	ACETONE	1000	DBJ
75-15-0	CARBON DISULFIDE	380	U
75-09-2	METHYLENE CHLORIDE	110	DBJ
75-34-3	1 1-DICHLOROETHANE	380	U
78-93-3	2-BUTANONE	1900	U
67-66-3	CHLOROFORM	380	U
71-55-6	1 1 1-TRICHLOROETHANE	380	U
56-23-5	CARBON TETRACHLORIDE	380	U
71-43-2	BENZENE	380	U
107-06-2	1 2-DICHLOROETHANE	380	U
79-01-6	TRICHLOROETHENE	380	U
78-87-5	1 2-DICHLOROPROPANE	380	U
75-27-4	BROMODICHLOROMETHANE	380	U
10061-01-5	cis-1,3-DICHLOROPROPENE	310	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1900	U
108-88-3	TOLUENE	820	DB
10061-02-6	trans-1,3-DICHLOROPROPENE	310	U
79-00-5	1 1 2-TRICHLOROETHANE	380	U
127-18-4	TETRACHLOROETHENE	240	DJ
591-78-6	2-HEXANONE	1900	U
124-48-1	DIBROMOCHLOROMETHANE	380	U
108-90-7	CHLOROBENZENE	4500	D
100-41-4	ETHYL BENZENE	3200	D
100-42-5	STYRENE	380	U
75-25-2	BROMOFORM	380	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	380	U
540-59-0	1,2-DICHLOROETHENE (total)	380	U
1330-20-7	XYLENE (total)	29000	D

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-7DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt/vol: 4.5 (g/mL) G Lab File ID: A6963

Level: (low/med) MED Date Received: 11/01/01

% Moisture: not dec. 42 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	1.16	63000	JNBD
2.	BENZENE ISOMER	6.85	1900	JD
3.	BENZENE ISOMER	7.22	350000	JD
4.	BENZENE ISOMER	8.63	500000	JD
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: L0460

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 21 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.1	U
67-64-1	ACETONE	~~63~~	~~BJ~~
75-15-0	CARBON DISULFIDE	6.6	U
75-09-2	METHYLENE CHLORIDE	6.6	U
75-34-3	1 1-DICHLOROETHANE	6.6	U
78-93-3	2-BUTANONE	15	J
67-66-3	CHLOROFORM	6.6	U
71-55-6	1 1 1-TRICHLOROETHANE	6.6	U
56-23-5	CARBON TETRACHLORIDE	6.6	U
71-43-2	BENZENE	6.6	U
107-06-2	1 2-DICHLOROETHANE	6.6	U
79-01-6	TRICHLOROETHENE	6.6	U
78-87-5	1 2-DICHLOROPROPANE	6.6	U
75-27-4	BROMODICHLOROMETHANE	6.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	15	J
108-88-3	TOLUENE	14	
10061-02-6	trans-1,3-DICHLOROPROPENE	5.3	U
79-00-5	1 1 2-TRICHLOROETHANE	6.6	U
127-18-4	TETRACHLOROETHENE	9.9	
591-78-6	2-HEXANONE	77	
124-48-1	DIBROMOCHLOROMETHANE	6.6	U
108-90-7	CHLOROBENZENE	320 ~~520~~	~~E~~
100-41-4	ETHYL BENZENE	150	
100-42-5	STYRENE	6.6	U
75-25-2	BROMOFORM	6.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.6	U
540-59-0	1,2-DICHLOROETHENE (total)	6.6	U
1330-20-7	XYLENE (total)	1000 ~~950~~	~~E~~

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt/vol: 4.8 (g/mL) G Lab File ID: L0460

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 21 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	BENZENE ISOMER	6.95	280	J
2.	UNKNOWN	7.43	330	J
3.	BENZENE ISOMER	7.84	1500	J
4.	BENZENE ISOMER	7.91	260	J
5.	BENZENE ISOMER	8.05	390	J
6.	BENZENE ISOMER	8.80	420	J
7.	BENZENE ISOMER	9.14	470	J
8.	BENZENE ISOMER	9.87	480	J
9.	BENZENE ISOMER	10.17	820	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-8DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt/vol: 4.5 (g/mL) G Lab File ID: A6964

Level: (low/med) MED Date Received: 11/01/01

% Moisture: not dec. 21 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	560	U
75-01-4	VINYL CHLORIDE	560	U
74-83-9	BROMOMETHANE	560	U
75-00-3	CHLOROETHANE	560	U
75-35-4	1 1-DICHLOROETHENE	250	U
67-64-1	ACETONE	2800	U
75-15-0	CARBON DISULFIDE	280	U
75-09-2	METHYLENE CHLORIDE	140	DBJ
75-34-3	1 1-DICHLOROETHANE	280	U
78-93-3	2-BUTANONE	1400	U
67-66-3	CHLOROFORM	280	U
71-55-6	1 1 1-TRICHLOROETHANE	280	U
56-23-5	CARBON TETRACHLORIDE	280	U
71-43-2	BENZENE	280	U
107-06-2	1 2-DICHLOROETHANE	280	U
79-01-6	TRICHLOROETHENE	280	U
78-87-5	1 2-DICHLOROPROPANE	280	U
75-27-4	BROMODICHLOROMETHANE	280	U
10061-01-5	cis-1,3-DICHLOROPROPENE	220	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1400	U
108-88-3	TOLUENE	280	U
10061-02-6	trans-1,3-DICHLOROPROPENE	220	U
79-00-5	1 1 2-TRICHLOROETHANE	280	U
127-18-4	TETRACHLOROETHENE	280	U
591-78-6	2-HEXANONE	1400	U
124-48-1	DIBROMOCHLOROMETHANE	280	U
108-90-7	CHLOROBENZENE	360	D
100-41-4	ETHYL BENZENE	160	DJ
100-42-5	STYRENE	280	U
75-25-2	BROMOFORM	280	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	280	U
540-59-0	1,2-DICHLOROETHENE (total)	280	U
1330-20-7	XYLENE (total)	1000	D

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-8DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt/vol: 4.5 (g/mL) G Lab File ID: A6964

Level: (low/med) MED Date Received: 11/01/01

% Moisture: not dec. 21 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	1.14	80000	JNBD
2.	BENZENE ISOMER	7.22	100000	JD
3.	BENZENE ISOMER	7.60	3300	JD
4.	BENZENE ISOMER	8.28	29000	JD
5.	BENZENE ISOMER	8.62	59000	JD
6.	BENZENE ISOMER	8.72	3700	JD
7.	UNKNOWN	9.01	3000	JD
8.	BENZENE ISOMER	9.11	4400	JD
9.	BENZENE ISOMER	9.17	14000	JD
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-W1

Sample wt/vol: 3.6 (g/mL) G Lab File ID: L0461

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 27 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	19	U
75-01-4	VINYL CHLORIDE	19	U
74-83-9	BROMOMETHANE	19	U
75-00-3	CHLOROETHANE	19	U
75-35-4	1 1-DICHLOROETHENE	8.8	U
67-64-1	ACETONE	120	~~B~~ U-B
75-15-0	CARBON DISULFIDE	9.5	U
75-09-2	METHYLENE CHLORIDE	9.5	U
75-34-3	1 1-DICHLOROETHANE	9.5	U
78-93-3	2-BUTANONE	8.8	J
67-66-3	CHLOROFORM	9.5	U
71-55-6	1 1 1-TRICHLOROETHANE	9.5	U
56-23-5	CARBON TETRACHLORIDE	9.5	U
71-43-2	BENZENE	9.5	U
107-06-2	1 2-DICHLOROETHANE	9.5	U
79-01-6	TRICHLOROETHENE	9.5	U
78-87-5	1 2-DICHLOROPROPANE	9.5	U
75-27-4	BROMODICHLOROMETHANE	9.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	48	U
108-88-3	TOLUENE	5.1	J
10061-02-6	trans-1,3-DICHLOROPROPENE	7.6	U
79-00-5	1 1 2-TRICHLOROETHANE	9.5	U
127-18-4	TETRACHLOROETHENE	8.3	J
591-78-6	2-HEXANONE	48	U
124-48-1	DIBROMOCHLOROMETHANE	9.5	U
108-90-7	CHLOROBENZENE	4.1	J
100-41-4	ETHYL BENZENE	9.5	U
100-42-5	STYRENE	9.5	U
75-25-2	BROMOFORM	9.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	9.5	U
540-59-0	1,2-DICHLOROETHENE (total)	9.5	U
1330-20-7	XYLENE (total)	9.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17083-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-W1

Sample wt/vol: 3.6 (g/mL) G Lab File ID: L0461

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: not dec. 27 Date Analyzed: 11/05/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.93	2700	JNB
2.	UNKNOWN	1.03	110	J
3.	UNKNOWN	1.15	47	J
4.	UNKNOWN	1.25	22	J
5.	UNKNOWN	2.95	17	J
6.	SEPTUM BLEED	6.76	19	J
7.	BENZENE ISOMER	7.94	15	J
8.	BENZENE ISOMER	9.13	19	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T0-E1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: A6960

Level: (low/med) MED Date Received: 11/02/01

% Moisture: not dec. 32 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	680	U
75-01-4	VINYL CHLORIDE	680	U
74-83-9	BROMOMETHANE	680	U
75-00-3	CHLOROETHANE	680	U
75-35-4	1 1-DICHLOROETHENE	310	U
67-64-1	ACETONE	1300	~~BJ~~ 4-B
75-15-0	CARBON DISULFIDE	340	U
75-09-2	METHYLENE CHLORIDE	160	~~BJ~~ 4-B
75-34-3	1 1-DICHLOROETHANE	340	U
78-93-3	2-BUTANONE	1700	U
67-66-3	CHLOROFORM	340	U
71-55-6	1 1 1-TRICHLOROETHANE	340	U
56-23-5	CARBON TETRACHLORIDE	340	U
71-43-2	BENZENE	180	J
107-06-2	1 2-DICHLOROETHANE	340	U
79-01-6	TRICHLOROETHENE	340	U
78-87-5	1 2-DICHLOROPROPANE	340	U
75-27-4	BROMODICHLOROMETHANE	340	U
10061-01-5	cis-1,3-DICHLOROPROPENE	270	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1700	U
108-88-3	TOLUENE	300	~~BJ~~ 4-B
10061-02-6	trans-1,3-DICHLOROPROPENE	270	U
79-00-5	1 1 2-TRICHLOROETHANE	340	U
127-18-4	TETRACHLOROETHENE	340	U
591-78-6	2-HEXANONE	1700	U
124-48-1	DIBROMOCHLOROMETHANE	340	U
108-90-7	CHLOROBENZENE	9700	
100-41-4	ETHYL BENZENE	2000	
100-42-5	STYRENE	340	U
75-25-2	BROMOFORM	340	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	340	U
540-59-0	1,2-DICHLOROETHENE (total)	340	U
1330-20-7	XYLENE (total)	7000	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T0-E1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: A6960

Level: (low/med) MED Date Received: 11/02/01

% Moisture: not dec. 32 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	1.14	89000	JNB
2.	BENZENE ISOMER	6.27	3400	J
3.	BENZENE ISOMER	6.62	7500	
4.	BENZENE ISOMER	6.96	2300	J
5.	BENZENE ISOMER	7.13	15000	J
6.	BENZENE ISOMER	7.18	2600	J
7.	BENZENE ISOMER	8.24	2000	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-C1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: L0470

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 39 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	20	U
75-01-4	VINYL CHLORIDE	20	U
74-83-9	BROMOMETHANE	20	U
75-00-3	CHLOROETHANE	20	U
75-35-4	1 1-DICHLOROETHENE	9.0	U
67-64-1	ACETONE	340	
75-15-0	CARBON DISULFIDE	9.8	U
75-09-2	METHYLENE CHLORIDE	9.8	U
75-34-3	1 1-DICHLOROETHANE	9.8	U
78-93-3	2-BUTANONE	72	
67-66-3	CHLOROFORM	9.8	U
71-55-6	1 1 1-TRICHLOROETHANE	9.8	U
56-23-5	CARBON TETRACHLORIDE	9.8	U
71-43-2	BENZENE	9.8	U
107-06-2	1 2-DICHLOROETHANE	9.8	U
79-01-6	TRICHLOROETHENE	9.8	U
78-87-5	1 2-DICHLOROPROPANE	9.8	U
75-27-4	BROMODICHLOROMETHANE	9.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.8	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	19	J
108-88-3	TOLUENE	9.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	7.8	U
79-00-5	1 1 2-TRICHLOROETHANE	9.8	U
127-18-4	TETRACHLOROETHENE	9.8	U
591-78-6	2-HEXANONE	49	U
124-48-1	DIBROMOCHLOROMETHANE	9.8	U
108-90-7	CHLOROBENZENE	150	
100-41-4	ETHYL BENZENE	4.7	J
100-42-5	STYRENE	9.8	U
75-25-2	BROMOFORM	9.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	9.8	U
540-59-0	1,2-DICHLOROETHENE (total)	9.8	U
1330-20-7	XYLENE (total)	19	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-C1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: L0470

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 39 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.92	1700	JNB
2.	UNKNOWN	0.99	430	JB
3.	UNKNOWN	1.03	580	JB
4.	UNKNOWN	1.16	410	JB
5.	UNKNOWN	1.25	110	JB
6.	UNKNOWN	1.37	96	J
7.	UNKNOWN	1.45	110	JB
8.	BENZENE ISOMER	7.82	230	J
9.	BENZENE ISOMER	9.12	28	J
10.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-E1

Sample wt/vol: 5.9 (g/mL) G Lab File ID: L0471

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 28 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.4	U
67-64-1	ACETONE	86	
75-15-0	CARBON DISULFIDE	5.9	U
75-09-2	METHYLENE CHLORIDE	5.9	U
75-34-3	1 1-DICHLOROETHANE	5.9	U
78-93-3	2-BUTANONE	6.2	J
67-66-3	CHLOROFORM	5.9	U
71-55-6	1 1 1-TRICHLOROETHANE	3.8	J
56-23-5	CARBON TETRACHLORIDE	5.9	U
71-43-2	BENZENE	5.9	U
107-06-2	1 2-DICHLOROETHANE	5.9	U
79-01-6	TRICHLOROETHENE	5.9	U
78-87-5	1 2-DICHLOROPROPANE	5.9	U
75-27-4	BROMODICHLOROMETHANE	5.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	29	U
108-88-3	TOLUENE	5.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.7	U
79-00-5	1 1 2-TRICHLOROETHANE	5.9	U
127-18-4	TETRACHLOROETHENE	5.9	U
591-78-6	2-HEXANONE	29	U
124-48-1	DIBROMOCHLOROMETHANE	5.9	U
108-90-7	CHLOROBENZENE	15	
100-41-4	ETHYL BENZENE	5.9	U
100-42-5	STYRENE	5.9	U
75-25-2	BROMOFORM	5.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5.9	U
540-59-0	1,2-DICHLOROETHENE (total)	5.9	U
1330-20-7	XYLENE (total)	3.5	J

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-E1

Sample wt/vol: 5.9 (g/mL) G Lab File ID: L0471

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 28 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.93	820	JNB
2.	UNKNOWN	1.03	13	JB
3.	UNKNOWN	1.24	8.1	JB
4.	UNKNOWN	1.33	13	JB
5.	BENZENE ISOMER	7.82	140	J
6.	BENZENE ISOMER	9.12	20	J
7.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-W1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0472

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 33 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.5	U
67-64-1	ACETONE	200	
75-15-0	CARBON DISULFIDE	73	
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	57	
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	3.3	J
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	34	
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	J
108-88-3	TOLUENE	16	
10061-02-6	trans-1,3-DICHLOROPROPENE	7.5	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	502 ~~600~~	~~E~~
100-41-4	ETHYL BENZENE	43	
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	140	

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-W1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0472

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 33 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.92	1200	JNB
2.	UNKNOWN	1.04	62	JB
3.	UNKNOWN	1.16	350	JB
4.	UNKNOWN ALDEHYDE	1.32	94	J
5.	BENZENE ISOMER	7.73	48	J
6.	BENZENE ISOMER	7.82	260	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-4DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-W1

Sample wt/vol: 3.9 (g/mL) G Lab File ID: A6961

Level: (low/med) MED Date Received: 11/02/01

% Moisture: not dec. 33 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	360	DJ
75-01-4	VINYL CHLORIDE	760	U
74-83-9	BROMOMETHANE	760	U
75-00-3	CHLOROETHANE	760	U
75-35-4	1 1-DICHLOROETHENE	340	U
67-64-1	ACETONE	1300	DBJ
75-15-0	CARBON DISULFIDE	630	D
75-09-2	METHYLENE CHLORIDE	190	DBJ
75-34-3	1 1-DICHLOROETHANE	380	U
78-93-3	2-BUTANONE	1900	U
67-66-3	CHLOROFORM	380	U
71-55-6	1 1 1-TRICHLOROETHANE	380	U
56-23-5	CARBON TETRACHLORIDE	380	U
71-43-2	BENZENE	380	U
107-06-2	1 2-DICHLOROETHANE	380	U
79-01-6	TRICHLOROETHENE	380	U
78-87-5	1 2-DICHLOROPROPANE	380	U
75-27-4	BROMODICHLOROMETHANE	380	U
10061-01-5	cis-1,3-DICHLOROPROPENE	310	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1900	U
108-88-3	TOLUENE	380	U
10061-02-6	trans-1,3-DICHLOROPROPENE	310	U
79-00-5	1 1 2-TRICHLOROETHANE	380	U
127-18-4	TETRACHLOROETHENE	380	U
591-78-6	2-HEXANONE	1900	U
124-48-1	DIBROMOCHLOROMETHANE	380	U
108-90-7	CHLOROBENZENE	500	D
100-41-4	ETHYL BENZENE	380	U
100-42-5	STYRENE	380	U
75-25-2	BROMOFORM	380	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	380	U
540-59-0	1,2-DICHLOROETHENE (total)	380	U
1330-20-7	XYLENE (total)	380	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-4DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-W1

Sample wt/vol: 3.9 (g/mL) G Lab File ID: A6961

Level: (low/med) MED Date Received: 11/02/01

% Moisture: not dec. 33 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	1.16	94000	JNBD
2.	UNKNOWN	1.52	3500	JBD
3.	BENZENE ISOMER	6.35	6000	JD
4.	BENZENE ISOMER	7.22	6000	JD
5.	BENZENE ISOMER	8.29	3200	JD
6.	BENZENE ISOMER	8.47	15000	JD
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-C1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0478

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 32 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.8	U
67-64-1	ACETONE	360	
75-15-0	CARBON DISULFIDE	42	
75-09-2	METHYLENE CHLORIDE	7.4	U
75-34-3	1 1-DICHLOROETHANE	7.4	U
78-93-3	2-BUTANONE	86	
67-66-3	CHLOROFORM	7.4	U
71-55-6	1 1 1-TRICHLOROETHANE	7.4	U
56-23-5	CARBON TETRACHLORIDE	7.4	U
71-43-2	BENZENE	7.4	U
107-06-2	1 2-DICHLOROETHANE	7.4	U
79-01-6	TRICHLOROETHENE	7.4	U
78-87-5	1 2-DICHLOROPROPANE	7.4	U
75-27-4	BROMODICHLOROMETHANE	7.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	3.4	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.9	U
79-00-5	1 1 2-TRICHLOROETHANE	7.4	U
127-18-4	TETRACHLOROETHENE	7.4	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.4	U
108-90-7	CHLOROBENZENE	110	
100-41-4	ETHYL BENZENE	7.4	U
100-42-5	STYRENE	7.4	U
75-25-2	BROMOFORM	7.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.4	U
540-59-0	1,2-DICHLOROETHENE (total)	7.4	U
1330-20-7	XYLENE (total)	7.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-C1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0478

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 32 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.93	2200	JNB
2.	UNKNOWN	0.99	370	JB
3.	UNKNOWN	1.03	660	JB
4.	UNKNOWN	1.15	370	JB
5.	UNKNOWN	1.25	110	JB
6.	UNKNOWN	1.32	190	JB
7.	UNKNOWN	1.59	36	JB
8.	BENZENE ISOMER	7.82	12	J
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-E1

Sample wt/vol: 4.4 (g/mL) G Lab File ID: L0479

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 24 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	90	
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	6.2	J
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	9.3	J
108-88-3	TOLUENE	7.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	4.6	J
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-E1

Sample wt/vol: 4.4 (g/mL) G Lab File ID: L0479

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 24 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.92	1100	JNB
2.	UNKNOWN	1.13	140	JB
3.	UNKNOWN	1.30	52	JB
4.	UNKNOWN	1.48	37	JB
5.	BENZENE ISOMER	7.82	490	J
6.	BENZENE ISOMER	9.12	90	J
7.	BENZENE ISOMER	9.52	21	J
8.	BENZENE ISOMER	9.95	12	J
9.	BENZENE ISOMER	10.14	17	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-W1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0475

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 27 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.3	U
67-64-1	ACETONE	150	
75-15-0	CARBON DISULFIDE	8.8	
75-09-2	METHYLENE CHLORIDE	6.8	U
75-34-3	1 1-DICHLOROETHANE	6.8	U
78-93-3	2-BUTANONE	13	J
67-66-3	CHLOROFORM	6.8	U
71-55-6	1 1 1-TRICHLOROETHANE	6.8	U
56-23-5	CARBON TETRACHLORIDE	6.8	U
71-43-2	BENZENE	6.8	U
107-06-2	1 2-DICHLOROETHANE	6.8	U
79-01-6	TRICHLOROETHENE	6.8	U
78-87-5	1 2-DICHLOROPROPANE	6.8	U
75-27-4	BROMODICHLOROMETHANE	6.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	6.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.5	U
79-00-5	1 1 2-TRICHLOROETHANE	6.8	U
127-18-4	TETRACHLOROETHENE	6.8	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.8	U
108-90-7	CHLOROBENZENE	1502 ~~850~~	~~E~~
100-41-4	ETHYL BENZENE	6.8	U
100-42-5	STYRENE	6.8	U
75-25-2	BROMOFORM	6.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.8	U
540-59-0	1,2-DICHLOROETHENE (total)	6.8	U
1330-20-7	XYLENE (total)	3.1	J

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-W1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0475

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: not dec. 27 Date Analyzed: 11/06/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.93	1500	JNB
2.	UNKNOWN	1.13	170	J
3.	UNKNOWN	1.24	270	JB
4.	UNKNOWN	1.46	120	JB
5.	BENZENE ISOMER	7.72	24	J
6.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-7DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-W1

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 07891

Level: (low/med) MED Date Received: 11/02/01

% Moisture: not dec. 27 Date Analyzed: 11/07/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	530	U
75-01-4	VINYL CHLORIDE	530	U
74-83-9	BROMOMETHANE	530	U
75-00-3	CHLOROETHANE	530	U
75-35-4	1 1-DICHLOROETHENE	240	U
67-64-1	ACETONE	970	DJB
75-15-0	CARBON DISULFIDE	260	U
75-09-2	METHYLENE CHLORIDE	230	J
75-34-3	1 1-DICHLOROETHANE	260	U
78-93-3	2-BUTANONE	1300	U
67-66-3	CHLOROFORM	260	U
71-55-6	1 1 1-TRICHLOROETHANE	260	U
56-23-5	CARBON TETRACHLORIDE	260	U
71-43-2	BENZENE	260	U
107-06-2	1 2-DICHLOROETHANE	260	U
79-01-6	TRICHLOROETHENE	260	U
78-87-5	1 2-DICHLOROPROPANE	260	U
75-27-4	BROMODICHLOROMETHANE	260	U
10061-01-5	cis-1,3-DICHLOROPROPENE	210	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1300	U
108-88-3	TOLUENE	260	U
10061-02-6	trans-1,3-DICHLOROPROPENE	210	U
79-00-5	1 1 2-TRICHLOROETHANE	260	U
127-18-4	TETRACHLOROETHENE	260	U
591-78-6	2-HEXANONE	1300	U
124-48-1	DIBROMOCHLOROMETHANE	260	U
108-90-7	CHLOROBENZENE	1500	D
100-41-4	ETHYL BENZENE	260	U
100-42-5	STYRENE	260	U
75-25-2	BROMOFORM	260	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	260	U
540-59-0	1,2-DICHLOROETHENE (total)	260	U
1330-20-7	XYLENE (total)	260	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17116-7DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-W1

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 07891

Level: (low/med) MED Date Received: 11/02/01

% Moisture: not dec. 27 Date Analyzed: 11/07/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.97	96000	JNBD
2.	UNKNOWN	1.12	1600	JBD
3.				
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ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO011vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL073	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for three sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on December 11, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL073.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSF-T2-1	CBS-CSF-T4-1
CBS-CSF-T3-1	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

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DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC, with the exception of sample SP-010, which was not included in the scope of this data validation effort.

The laboratory reported the full field sample identification (ID) in the lab ID field on the Form Is in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Acetone was detected in the laboratory method blank. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. An Action Level (AL) was established at 10x the concentration detected in the blank for acetone. The following table summarizes the AL.

Type of Blank	Compound	Concentration Detected (µg/kg)	Action Level (µg/kg)
Laboratory Blank-12/21/01	Acetone	20	200
Associated samples: CBS-CSF-T2-1, CBS-CSF-T3-1 and CBS-CSF-T4-1.			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as nondetect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as nondetect (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSF-T4-1 was submitted for MS/MSD analyses with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits.

Field Duplicate Results

Field duplicates were not submitted with this sample set.

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LCS Results

The %Rs in the soil LCS analysis were within the QC acceptance criteria except as noted below.

LCS	Compound	%R	QC Limits (%)
Soil LCS-12/21/01	2-Hexanone	130	45-127
Associated samples: CBS-CSF-T2-1, CBS-CSF-T3-1 and CBS-CSF-T4-1.			

Qualification was not required since this analyte was not detected in the associated samples and the %R indicates a positive bias.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T2-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0913

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: not dec. 32 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.8	U
67-64-1	ACETONE	140	~~B~~ U-B
75-15-0	CARBON DISULFIDE	7.4	U
75-09-2	METHYLENE CHLORIDE	7.4	U
75-34-3	1 1-DICHLOROETHANE	7.4	U
78-93-3	2-BUTANONE	14	J
67-66-3	CHLOROFORM	7.4	U
71-55-6	1 1 1-TRICHLOROETHANE	7.4	U
56-23-5	CARBON TETRACHLORIDE	7.4	U
71-43-2	BENZENE	7.4	U
107-06-2	1 2-DICHLOROETHANE	7.4	U
79-01-6	TRICHLOROETHENE	7.4	U
78-87-5	1 2-DICHLOROPROPANE	7.4	U
75-27-4	BROMODICHLOROMETHANE	7.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	3.2	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.9	U
79-00-5	1 1 2-TRICHLOROETHANE	7.4	U
127-18-4	TETRACHLOROETHENE	7.4	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.4	U
108-90-7	CHLOROBENZENE	8.6	
100-41-4	ETHYL BENZENE	7.4	U
100-42-5	STYRENE	7.4	U
75-25-2	BROMOFORM	7.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.4	U
540-59-0	1,2-DICHLOROETHENE (total)	7.4	U
1330-20-7	XYLENE (total)	7.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T3-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0914

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: not dec. 35 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.1	U
67-64-1	ACETONE	~~26~~	~~JB~~ 774-B
75-15-0	CARBON DISULFIDE	7.7	U
75-09-2	METHYLENE CHLORIDE	3.0	J
75-34-3	1 1-DICHLOROETHANE	7.7	U
78-93-3	2-BUTANONE	38	U
67-66-3	CHLOROFORM	7.7	U
71-55-6	1 1 1-TRICHLOROETHANE	7.7	U
56-23-5	CARBON TETRACHLORIDE	7.7	U
71-43-2	BENZENE	7.7	U
107-06-2	1 2-DICHLOROETHANE	7.7	U
79-01-6	TRICHLOROETHENE	7.7	U
78-87-5	1 2-DICHLOROPROPANE	7.7	U
75-27-4	BROMODICHLOROMETHANE	7.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.2	U
79-00-5	1 1 2-TRICHLOROETHANE	7.7	U
127-18-4	TETRACHLOROETHENE	7.7	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.7	U
108-90-7	CHLOROBENZENE	14	
100-41-4	ETHYL BENZENE	7.7	U
100-42-5	STYRENE	7.7	U
75-25-2	BROMOFORM	7.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.7	U
540-59-0	1,2-DICHLOROETHENE (total)	7.7	U
1330-20-7	XYLENE (total)	7.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T4-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0915

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: not dec. 27 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.3	U
67-64-1	ACETONE	~~56~~ JB6841-B	
75-15-0	CARBON DISULFIDE	6.8	U
75-09-2	METHYLENE CHLORIDE	4.3	J
75-34-3	1 1-DICHLOROETHANE	6.8	U
78-93-3	2-BUTANONE	7.5	J
67-66-3	CHLOROFORM	6.8	U
71-55-6	1 1 1-TRICHLOROETHANE	6.8	U
56-23-5	CARBON TETRACHLORIDE	6.8	U
71-43-2	BENZENE	6.8	U
107-06-2	1 2-DICHLOROETHANE	6.8	U
79-01-6	TRICHLOROETHENE	6.8	U
78-87-5	1 2-DICHLOROPROPANE	6.8	U
75-27-4	BROMODICHLOROMETHANE	6.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	6.2	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.5	U
79-00-5	1 1 2-TRICHLOROETHANE	6.8	U
127-18-4	TETRACHLOROETHENE	6.8	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.8	U
108-90-7	CHLOROBENZENE	6.8	U
100-41-4	ETHYL BENZENE	6.8	U
100-42-5	STYRENE	6.8	U
75-25-2	BROMOFORM	6.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.8	U
540-59-0	1,2-DICHLOROETHENE (total)	6.8	U
1330-20-7	XYLENE (total)	6.8	U

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 18, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO012vocjas.doc 06105-012-202
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG# SIL071	**CC:**	D. McGrath/Westford

SUMMARY

Full validation was performed on the data for eight sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 5035/8260B. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on November 9, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL071.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to nonconformances of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T17-C1	CBS-CSB-T17-E1
CBS-CSB-T17-E1D (field duplicate of CBS-CSB-T17-E1)	CBS-CSB-T17-W1
CBS-CSB-T18-C1	CBS-CSB-T18-W1
CBS-CSB-T18-W1D (field duplicate of CBS-CSB-T18-W1)	CBS-CSB-T18-E1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes
- Initial and continuing calibrations
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results

- Internal standard performance
- Field duplicate results
- Laboratory control sample (LCS) results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were prepared and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of (4°C ± 2°C). Non-conformances were not observed for this sample set.

GC/MS Tunes

The frequency and abundance of the bromofluorobenzene (BFB) tunes were within the QC acceptance criteria. All samples were analyzed within 12 hours from the BFB tune.

Initial and Continuing Calibrations

The relative percent standard deviations (%RSDs) and/or the correlation coefficients (r^2), and/or response factors (RFs) were within the QC acceptance criteria in the initial calibration standards.

The following table summarizes the percent difference (%D) that was outside the QC acceptance criteria in the continuing calibration standard.

Calibration	Compound	%Ds
CCAL (09/10/01) Instrument MSM5972	Acetone	35.2
Associated sample: All sediment samples		

Sample results were qualified as follows:

- If a compound had a %D >20, both positive results and nondetects for the associated compound were qualified as estimated (J/UJ).

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

ENSR

MS/MSD Results

Sample CBS-CSB-T18-E1 was submitted for MS/MSD analyses with this sample set. The following table summarizes the percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target analytes that did not meet the acceptance criteria. Positive results and nondetects were qualified as estimated (J, UJ) for sample CBS-CSB-T18-E1.

Compound	MS/MSD (%R)	RPD (%)
4-Methyl-2-pentanone	169/178	37
2-Hexanone	162/172	32
Bromomethane	117/180	79

Internal Standard Performance

The %R of internal standard chlorobenzene-d_5 (41%) fell below the QC acceptance criteria in sample CBS-CSB-T17-E1D. The sample was reanalyzed yielding similar internal standard nonconformance. The initial analysis was reported. Positive results and nondetects quantitated from the above internal standard were qualified as estimated (J, UJ).

Field Duplicate Results

Samples CBS-CSB-T17-E1/CBS-CSB-T17-E1D and CBS-CSB-T18-W1/CBS-CSB-T18-W1D were submitted as the field duplicate pairs with this sample set. The following tables summarize the RPDs of the detected analytes in the field duplicate pairs. One RPD was not calculable (NC) due to a nondetect result in the sample. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	CBS-CSB-T17-E1 (µg/Kg)	CBS-CSB-T17-E1D (µg/Kg)	RPD (%)
Acetone	120	210	55
2-Butanone	8.8	22	86
Benzene	4.4	5.1	15
Toluene	3.2	4.6	36
Chlorobenzene	37	110	99
Carbon disulfide	7.7 U	5.1	NC

Compound	CBS-CSB-T18-W1 (µg/Kg)	CBS-CSB-T18-W1D (µg/Kg)	RPD (%)
Acetone	85	160	61
2-Butanone	8.2	21	88
Chlorobenzene	3.2	6.4	67

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analyses with the exception of 1,1-dichloroethane (132%) associated with all the sediment samples. Validation of the data was not required since only positive results were affected and no positive results for 1,1-dichloroethane were reported in the sediment samples.

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Quantitation Limits and Sample Results

Sample CBS-CSB-T18-C1 was analyzed at a 200-fold dilution due to the concentration of chlorobenzene which exceeded the calibration range in the initial undiluted low level soil analysis. Both the diluted and undiluted analyses were combined during validation in order to report the lowest possible sample quantitation limits (SQLs) and all results within the calibration range. The laboratory elevated SQLs accordingly.

Calculations were spot-checked. There were no discrepancies noted.

There were no samples reported with percent solids <50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-C1

Sample wt/vol: 4.0 (g/mL) G Lab File ID: M9083

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 38 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	20	U
75-01-4	VINYL CHLORIDE	20	U
74-83-9	BROMOMETHANE	20	U
75-00-3	CHLOROETHANE	20	U
75-35-4	1 1-DICHLOROETHENE	9.3	U
67-64-1	ACETONE	340	J-C
75-15-0	CARBON DISULFIDE	30	
75-09-2	METHYLENE CHLORIDE	10	U
75-34-3	1 1-DICHLOROETHANE	10	U
78-93-3	2-BUTANONE	59	
67-66-3	CHLOROFORM	10	U
71-55-6	1 1 1-TRICHLOROETHANE	10	U
56-23-5	CARBON TETRACHLORIDE	10	U
71-43-2	BENZENE	10	U
107-06-2	1 2-DICHLOROETHANE	10	U
79-01-6	TRICHLOROETHENE	10	U
78-87-5	1 2-DICHLOROPROPANE	10	U
75-27-4	BROMODICHLOROMETHANE	10	U
10061-01-5	cis-1,3-DICHLOROPROPENE	8.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	50	U
108-88-3	TOLUENE	10	U
10061-02-6	trans-1,3-DICHLOROPROPENE	8.1	U
79-00-5	1 1 2-TRICHLOROETHANE	10	U
127-18-4	TETRACHLOROETHENE	10	U
591-78-6	2-HEXANONE	50	U
124-48-1	DIBROMOCHLOROMETHANE	10	U
108-90-7	CHLOROBENZENE	110	
100-41-4	ETHYL BENZENE	10	U
100-42-5	STYRENE	10	U
75-25-2	BROMOFORM	10	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	10	U
540-59-0	1,2-DICHLOROETHENE (total)	10	U
1330-20-7	XYLENE (total)	10	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-C1

Sample wt/vol: 4.0 (g/mL) G Lab File ID: M9083

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 38 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.54	2400	JNB
2.	UNKNOWN	0.63	270	J
3.	UNKNOWN ALDEHYDE	0.77	23	J
4.	UNKNOWN ALKANE	1.01	16	J
5.	UNKNOWN	1.52	25	J
6.	UNKNOWN	7.28	14	J
7.	BENZENE ISOMER	8.13	12	J
8.	BENZENE ISOMER	8.22	19	J
9.	BENZENE ISOMER	8.38	49	J
10.	BENZENE ISOMER	9.11	61	J
11.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1

Sample wt/vol: 4.7 (g/mL) G Lab File ID: M9089

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 31 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.1	U
67-64-1	ACETONE	120	J-C
75-15-0	CARBON DISULFIDE	7.7	U
75-09-2	METHYLENE CHLORIDE	7.7	U
75-34-3	1 1-DICHLOROETHANE	7.7	U
78-93-3	2-BUTANONE	8.8	J
67-66-3	CHLOROFORM	7.7	U
71-55-6	1 1 1-TRICHLOROETHANE	7.7	U
56-23-5	CARBON TETRACHLORIDE	7.7	U
71-43-2	BENZENE	4.4	J
107-06-2	1 2-DICHLOROETHANE	7.7	U
79-01-6	TRICHLOROETHENE	7.7	U
78-87-5	1 2-DICHLOROPROPANE	7.7	U
75-27-4	BROMODICHLOROMETHANE	7.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	3.2	J
10061-02-6	trans-1,3-DICHLOROPROPENE	6.2	U
79-00-5	1 1 2-TRICHLOROETHANE	7.7	U
127-18-4	TETRACHLOROETHENE	7.7	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.7	U
108-90-7	CHLOROBENZENE	37	
100-41-4	ETHYL BENZENE	7.7	U
100-42-5	STYRENE	7.7	U
75-25-2	BROMOFORM	7.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.7	U
540-59-0	1,2-DICHLOROETHENE (total)	7.7	U
1330-20-7	XYLENE (total)	7.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1

Sample wt/vol: 4.7 (g/mL) G Lab File ID: M9089

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 31 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-38-9	CARBON DIOXIDE	0.55	1900	JNB
2.		UNKNOWN	0.77	9.3	J
3.		UNKNOWN	1.04	20	J
4.		UNKNOWN	1.52	11	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1D

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M9090

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 28 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	210	J-C
75-15-0	CARBON DISULFIDE	5.1	J
75-09-2	METHYLENE CHLORIDE	6.9	U
75-34-3	1 1-DICHLOROETHANE	6.9	U
78-93-3	2-BUTANONE	22	J
67-66-3	CHLOROFORM	6.9	U
71-55-6	1 1 1-TRICHLOROETHANE	6.9	U
56-23-5	CARBON TETRACHLORIDE	6.9	U
71-43-2	BENZENE	5.1	J
107-06-2	1 2-DICHLOROETHANE	6.9	U
79-01-6	TRICHLOROETHENE	6.9	U
78-87-5	1 2-DICHLOROPROPANE	6.9	U
75-27-4	BROMODICHLOROMETHANE	6.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	4.6	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	6.9	U
127-18-4	TETRACHLOROETHENE	6.9	UJ-I
591-78-6	2-HEXANONE	35	UJ-I
124-48-1	DIBROMOCHLOROMETHANE	6.9	UJ-I
108-90-7	CHLOROBENZENE	110	J-I
100-41-4	ETHYL BENZENE	6.9	UJ-I
100-42-5	STYRENE	6.9	UJ-I
75-25-2	BROMOFORM	6.9	UJ-I
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.9	UJ-I
540-59-0	1,2-DICHLOROETHENE (total)	6.9	U
1330-20-7	XYLENE (total)	6.9	UJ-I

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1D

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M9090

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 28 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	2400	JNB
2.	UNKNOWN	0.67	12	J
3.	UNKNOWN	0.77	16	J
4.	UNKNOWN	1.05	17	J
5.	UNKNOWN ALDEHYDE	3.75	8.2	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-WI

Sample wt/vol: 4.9 (g/mL) G Lab File ID: M9086

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 29 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
67-64-1	ACETONE	110	J-C
75-15-0	CARBON DISULFIDE	4.7	J
75-09-2	METHYLENE CHLORIDE	7.2	U
75-34-3	1 1-DICHLOROETHANE	7.2	U
78-93-3	2-BUTANONE	14	J
67-66-3	CHLOROFORM	7.2	U
71-55-6	1 1 1-TRICHLOROETHANE	7.2	U
56-23-5	CARBON TETRACHLORIDE	7.2	U
71-43-2	BENZENE	3.8	J
107-06-2	1 2-DICHLOROETHANE	7.2	U
79-01-6	TRICHLOROETHENE	7.2	U
78-87-5	1 2-DICHLOROPROPANE	7.2	U
75-27-4	BROMODICHLOROMETHANE	7.2	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	6.3	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.2	U
127-18-4	TETRACHLOROETHENE	7.2	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.2	U
108-90-7	CHLOROBENZENE	13	
100-41-4	ETHYL BENZENE	7.2	U
100-42-5	STYRENE	7.2	U
75-25-2	BROMOFORM	7.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.2	U
540-59-0	1,2-DICHLOROETHENE (total)	7.2	U
1330-20-7	XYLENE (total)	7.2	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-WI

Sample wt/vol: 4.9 (g/mL) G Lab File ID: M9086

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 29 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	3900	JNB
2.	UNKNOWN	0.67	150	J
3.	UNKNOWN ALKANE	0.73	140	J
4.	UNKNOWN ALKANE	0.92	54	J
5.	UNKNOWN ALKANE	1.01	38	J
6.	UNKNOWN ALKANE	1.34	18	J
7.	UNKNOWN ALKANE	1.54	30	J
8.	UNKNOWN CYCLOALKANE	2.09	12	J
9.	UNKNOWN CYCLOALKANE	2.65	10	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-C1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: M9096

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 26 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.2	U
67-64-1	ACETONE	180	J-C
75-15-0	CARBON DISULFIDE	7.2	J
75-09-2	METHYLENE CHLORIDE	7.8	U
75-34-3	1 1-DICHLOROETHANE	7.8	U
78-93-3	2-BUTANONE	32	J
67-66-3	CHLOROFORM	7.8	U
71-55-6	1 1 1-TRICHLOROETHANE	7.8	U
56-23-5	CARBON TETRACHLORIDE	7.8	U
71-43-2	BENZENE	18	
107-06-2	1 2-DICHLOROETHANE	7.8	U
79-01-6	TRICHLOROETHENE	7.8	U
78-87-5	1 2-DICHLOROPROPANE	7.8	U
75-27-4	BROMODICHLOROMETHANE	7.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	39	U
108-88-3	TOLUENE	3.2	J
10061-02-6	trans-1,3-DICHLOROPROPENE	6.3	U
79-00-5	1 1 2-TRICHLOROETHANE	7.8	U
127-18-4	TETRACHLOROETHENE	7.8	U
591-78-6	2-HEXANONE	39	U
124-48-1	DIBROMOCHLOROMETHANE	7.8	U
108-90-7	CHLOROBENZENE	2700 ~~1600~~	~~E~~
100-41-4	ETHYL BENZENE	7.8	U
100-42-5	STYRENE	7.8	U
75-25-2	BROMOFORM	7.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.8	U
540-59-0	1,2-DICHLOROETHENE (total)	7.8	U
1330-20-7	XYLENE (total)	11	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-C1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: M9096

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 26 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	3200	JNB
2.	UNKNOWN	0.67	91	J
3.	UNKNOWN	0.73	66	J
4.	UNKNOWN ALKANE	1.34	43	J
5.	UNKNOWN CYCLOALKANE	1.80	46	J
6.	UNKNOWN CYCLOALKANE	2.10	49	J
7.	UNKNOWN CYCLOALKANE	2.65	25	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-5DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-C1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: P3121 Do Not Report P

Level: (low/med) MED Date Received: 11/12/01

% Moisture: not dec. 26 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	640	U
75-01-4	VINYL CHLORIDE	640	U
74-83-9	BROMOMETHANE	640	U
75-00-3	CHLOROETHANE	640	U
75-35-4	1 1-DICHLOROETHENE	290	U
67-64-1	ACETONE	1800	DJ
75-15-0	CARBON DISULFIDE	290	DJ
75-09-2	METHYLENE CHLORIDE	170	J
75-34-3	1 1-DICHLOROETHANE	320	U
78-93-3	2-BUTANONE	1600	U
67-66-3	CHLOROFORM	320	U
71-55-6	1 1 1-TRICHLOROETHANE	320	U
56-23-5	CARBON TETRACHLORIDE	320	U
71-43-2	BENZENE	320	U
107-06-2	1 2-DICHLOROETHANE	320	U
79-01-6	TRICHLOROETHENE	320	U
78-87-5	1 2-DICHLOROPROPANE	320	U
75-27-4	BROMODICHLOROMETHANE	320	U
10061-01-5	cis-1,3-DICHLOROPROPENE	260	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	1600	U
108-88-3	TOLUENE	320	U
10061-02-6	trans-1,3-DICHLOROPROPENE	260	U
79-00-5	1 1 2-TRICHLOROETHANE	320	U
127-18-4	TETRACHLOROETHENE	320	U
591-78-6	2-HEXANONE	1600	U
124-48-1	DIBROMOCHLOROMETHANE	320	U
108-90-7	CHLOROBENZENE	2700	D
100-41-4	ETHYL BENZENE	320	U
100-42-5	STYRENE	320	U
75-25-2	BROMOFORM	320	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	320	U
540-59-0	1,2-DICHLOROETHENE (total)	320	U
1330-20-7	XYLENE (total)	320	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-5DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-C1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: P3121

Level: (low/med) MED Date Received: 11/12/01

% Moisture: not dec. 26 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5(mL) Soil Aliquot Volume: 25(uL)

Do not Report

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.99	2000	JD
2. 124-38-9	CARBON DIOXIDE	1.02	150000	JNBD
3.	UNKNOWN	1.46	20000	JD
4.	BENZENE ISOMER	7.42	16000	JD
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: M9091

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 27 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.3	U
67-64-1	ACETONE	85	J-C
75-15-0	CARBON DISULFIDE	8.0	U
75-09-2	METHYLENE CHLORIDE	8.0	U
75-34-3	1 1-DICHLOROETHANE	8.0	U
78-93-3	2-BUTANONE	8.2	J
67-66-3	CHLOROFORM	8.0	U
71-55-6	1 1 1-TRICHLOROETHANE	8.0	U
56-23-5	CARBON TETRACHLORIDE	8.0	U
71-43-2	BENZENE	8.0	U
107-06-2	1 2-DICHLOROETHANE	8.0	U
79-01-6	TRICHLOROETHENE	8.0	U
78-87-5	1 2-DICHLOROPROPANE	8.0	U
75-27-4	BROMODICHLOROMETHANE	8.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.4	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	40	U
108-88-3	TOLUENE	8.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.4	U
79-00-5	1 1 2-TRICHLOROETHANE	8.0	U
127-18-4	TETRACHLOROETHENE	8.0	U
591-78-6	2-HEXANONE	40	U
124-48-1	DIBROMOCHLOROMETHANE	8.0	U
108-90-7	CHLOROBENZENE	3.2	J
100-41-4	ETHYL BENZENE	8.0	U
100-42-5	STYRENE	8.0	U
75-25-2	BROMOFORM	8.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	8.0	U
540-59-0	1,2-DICHLOROETHENE (total)	8.0	U
1330-20-7	XYLENE (total)	8.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: M9091

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 27 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	1800	JNB
2.	UNKNOWN	0.76	15	J
3.	UNKNOWN	0.92	9.9	J
4.	UNKNOWN	1.09	14	J
5.	UNKNOWN	1.64	16	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1D

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M9092

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 26 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	5.9	U
67-64-1	ACETONE	160	J-C
75-15-0	CARBON DISULFIDE	6.4	U
75-09-2	METHYLENE CHLORIDE	6.4	U
75-34-3	1 1-DICHLOROETHANE	6.4	U
78-93-3	2-BUTANONE	21	J
67-66-3	CHLOROFORM	6.4	U
71-55-6	1 1 1-TRICHLOROETHANE	6.4	U
56-23-5	CARBON TETRACHLORIDE	6.4	U
71-43-2	BENZENE	6.4	U
107-06-2	1 2-DICHLOROETHANE	6.4	U
79-01-6	TRICHLOROETHENE	6.4	U
78-87-5	1 2-DICHLOROPROPANE	6.4	U
75-27-4	BROMODICHLOROMETHANE	6.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	32	U
108-88-3	TOLUENE	6.4	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.1	U
79-00-5	1 1 2-TRICHLOROETHANE	6.4	U
127-18-4	TETRACHLOROETHENE	6.4	U
591-78-6	2-HEXANONE	32	U
124-48-1	DIBROMOCHLOROMETHANE	6.4	U
108-90-7	CHLOROBENZENE	6.4	
100-41-4	ETHYL BENZENE	6.4	U
100-42-5	STYRENE	6.4	U
75-25-2	BROMOFORM	6.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.4	U
540-59-0	1,2-DICHLOROETHENE (total)	6.4	U
1330-20-7	XYLENE (total)	6.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1D

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M9092

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 26 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-38-9	CARBON DIOXIDE	0.55	1400	JNB
2.		UNKNOWN	0.67	10	J
3.		UNKNOWN	0.77	9.1	J
4.					
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-E1

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M9093

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 28 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	UJ-M
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.0	U
67-64-1	ACETONE	53	J
75-15-0	CARBON DISULFIDE	6.6	U
75-09-2	METHYLENE CHLORIDE	6.6	U
75-34-3	1 1-DICHLOROETHANE	6.6	U
78-93-3	2-BUTANONE	33	U
67-66-3	CHLOROFORM	6.6	U
71-55-6	1 1 1-TRICHLOROETHANE	6.6	U
56-23-5	CARBON TETRACHLORIDE	6.6	U
71-43-2	BENZENE	6.6	U
107-06-2	1 2-DICHLOROETHANE	6.6	U
79-01-6	TRICHLOROETHENE	6.6	U
78-87-5	1 2-DICHLOROPROPANE	6.6	U
75-27-4	BROMODICHLOROMETHANE	6.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	33	UJ-M
108-88-3	TOLUENE	6.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.2	U
79-00-5	1 1 2-TRICHLOROETHANE	6.6	U
127-18-4	TETRACHLOROETHENE	6.6	U
591-78-6	2-HEXANONE	33	UJ-M
124-48-1	DIBROMOCHLOROMETHANE	6.6	U
108-90-7	CHLOROBENZENE	6.6	U
100-41-4	ETHYL BENZENE	6.6	U
100-42-5	STYRENE	6.6	U
75-25-2	BROMOFORM	6.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.6	U
540-59-0	1,2-DICHLOROETHENE (total)	6.6	U
1330-20-7	XYLENE (total)	6.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-E1

Sample wt/vol: 5.3 (g/mL) G Lab File ID: M9093

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: not dec. 28 Date Analyzed: 11/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	1300	JNB
2.	UNKNOWN	0.76	7.6	J
3.	UNKNOWN	1.01	10	J
4.	SEPTUM BLEED	5.23	7.1	J
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FORM I VOA-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Nancy Coe/Westford	**FILE:**	SO013NCvoc.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL072	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for ten sediment samples analyzed for Target List Compound (TCL) volatile organic compounds (VOCs) using SW-846 method 5035/8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on November 19, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under SDG SIL072.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

The data are valid as reported and may be used for decision making purposes.

SAMPLES

The samples included in this review are listed below:

Sample Identifications
CBS-CSB-T11-C1
CBS-CSB-T11-C1-D (duplicate of CBS-CSB-T11-C1)
CBS-CSB-T11-W1
CBS-CSB-T11-E1
CBS-CSB-T12-C1
CBS-CSB-T12-W1
CBS-CSB-T12-E1
CBS-CSB-T13-C1
CBS-CSB-T13-W1
CBS-CSB-T13-E1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks

- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were preserved and analyzed within the method specified holding time.

Cooler temperatures were not recorded on the COC unless they were outside the acceptable range of 4°C ± 2°C. There were no nonconformances noted for this sample set.

Laboratory Blanks

Methylene chloride was detected in laboratory blank 1M1130MB. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. An Action Level (AL) was established at 10x the concentration for methylene chloride detected in the blank. The following table summarizes the AL.

Laboratory Blank	Compound	Concentration Detected (µg/Kg)	Action Level (µg/Kg)
1M1130MB	Methylene chloride	1.7	17
Associated samples: CBS-CSB-T12-C1			

Methylene chloride was not detected in the associated sample. No validation action was taken.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSB-T13-E1 was submitted for MS/MSD analyses with this sample set. The relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were all within the QC acceptance limits. The following table summarizes the percent recoveries (%Rs) that exceeded the QC acceptance limits. No validation action was taken since positive results were not detected in the unspiked sample.

Compound	MS (%)	MSD (%)
Acetone	175	180
4-Methyl-2-Pentanone	200	200
2-Hexanone	200	207
Bromoform	ok	147
1,1,2,2-Tetrachloroethane	146	147

ENSR

Field Duplicate Results

Samples CBS-CSB-T11-C1 and CBS-CSB-T11-C1-D were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. This is for informational purposes only.

Compound	Sample (µg/L)	Duplicate (µg/L)	RPD (%)
Acetone	93	140	40.3
Carbon disulfide	16	27	51.2
2-Butanone	17 J	26 J	41.8
Benzene	3.6 J	4.0 J	10.5
Toluene	7.1 J	7.0	1.4
Chlorobenzene	15	19	23.5
Xylene (total)	7.6	10	27.2

LCS Results

The %R of 1,1-dichloroethane (138) was slightly above the QC limits in the LCS. This compound was not detected in all associated samples, therefore no validation action was applied. All other spiked analytes met the QC acceptance criteria in the LCS analyses.

Sample Results

For all samples the percent solid was greater than 50.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1

Sample wt/vol: 4.9 (g/mL) G Lab File ID: M9150

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 29 Date Analyzed: 11/27/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
67-64-1	ACETONE	93	
75-15-0	CARBON DISULFIDE	16	
75-09-2	METHYLENE CHLORIDE	7.2	U
75-34-3	1 1-DICHLOROETHANE	7.2	U
78-93-3	2-BUTANONE	17	J
67-66-3	CHLOROFORM	7.2	U
71-55-6	1 1 1-TRICHLOROETHANE	7.2	U
56-23-5	CARBON TETRACHLORIDE	7.2	U
71-43-2	BENZENE	3.6	J
107-06-2	1 2-DICHLOROETHANE	7.2	U
79-01-6	TRICHLOROETHENE	7.2	U
78-87-5	1 2-DICHLOROPROPANE	7.2	U
75-27-4	BROMODICHLOROMETHANE	7.2	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	7.1	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.2	U
127-18-4	TETRACHLOROETHENE	7.2	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.2	U
108-90-7	CHLOROBENZENE	15	
100-41-4	ETHYL BENZENE	7.2	U
100-42-5	STYRENE	7.2	U
75-25-2	BROMOFORM	7.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.2	U
540-59-0	1,2-DICHLOROETHENE (total)	7.2	U
1330-20-7	XYLENE (total)	7.6	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1

Sample wt/vol: 4.9 (g/mL) G Lab File ID: M9150

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 29 Date Analyzed: 11/27/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.67	260	JB
2.	UNKNOWN	0.73	120	JB
3.	UNKNOWN	0.92	50	JB
4.	UNKNOWN ALKANE	1.01	31	JB
5.	UNKNOWN	1.09	52	JB
6.	UNKNOWN ALKANE	1.34	19	J
7.	UNKNOWN	1.43	13	JB
8.	UNKNOWN CYCLOALKANE	1.80	11	J
9.	UNKNOWN CYCLOALKANE	2.10	12	J
10.	UNKNOWN CYCLOALKANE	2.65	9.8	J
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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1-D

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M9151

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 27 Date Analyzed: 11/27/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.2	U
67-64-1	ACETONE	140	
75-15-0	CARBON DISULFIDE	27	
75-09-2	METHYLENE CHLORIDE	6.7	U
75-34-3	1 1-DICHLOROETHANE	6.7	U
78-93-3	2-BUTANONE	26	J
67-66-3	CHLOROFORM	6.7	U
71-55-6	1 1 1-TRICHLOROETHANE	6.7	U
56-23-5	CARBON TETRACHLORIDE	6.7	U
71-43-2	BENZENE	4.0	J
107-06-2	1 2-DICHLOROETHANE	6.7	U
79-01-6	TRICHLOROETHENE	6.7	U
78-87-5	1 2-DICHLOROPROPANE	6.7	U
75-27-4	BROMODICHLOROMETHANE	6.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.4	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	7.0	
10061-02-6	trans-1,3-DICHLOROPROPENE	5.4	U
79-00-5	1 1 2-TRICHLOROETHANE	6.7	U
127-18-4	TETRACHLOROETHENE	6.7	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.7	U
108-90-7	CHLOROBENZENE	19	
100-41-4	ETHYL BENZENE	6.7	U
100-42-5	STYRENE	6.7	U
75-25-2	BROMOFORM	6.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.7	U
540-59-0	1,2-DICHLOROETHENE (total)	6.7	U
1330-20-7	XYLENE (total)	10	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1-D

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M9151

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 27 Date Analyzed: 11/27/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	0.66	340	JB
2.	UNKNOWN	0.72	170	JB
3.	UNKNOWN ALKANE	0.92	46	JB
4.	UNKNOWN ALKANE	1.01	37	JB
5.	UNKNOWN	1.08	49	JB
6.	UNKNOWN ALKANE	1.34	16	J
7.	UNKNOWN CYCLOALKANE	1.80	11	J
8.	UNKNOWN CYCLOALKANE	2.65	9.9	J
9.	UNKNOWN ALKENE	3.34	17	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-W1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M9152

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 21 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	5.8	U
67-64-1	ACETONE	57	J
75-15-0	CARBON DISULFIDE	6.3	U
75-09-2	METHYLENE CHLORIDE	6.3	U
75-34-3	1 1-DICHLOROETHANE	6.3	U
78-93-3	2-BUTANONE	32	U
67-66-3	CHLOROFORM	6.3	U
71-55-6	1 1 1-TRICHLOROETHANE	6.3	U
56-23-5	CARBON TETRACHLORIDE	6.3	U
71-43-2	BENZENE	6.3	U
107-06-2	1 2-DICHLOROETHANE	6.3	U
79-01-6	TRICHLOROETHENE	6.3	U
78-87-5	1 2-DICHLOROPROPANE	6.3	U
75-27-4	BROMODICHLOROMETHANE	6.3	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	32	U
108-88-3	TOLUENE	6.3	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.1	U
79-00-5	1 1 2-TRICHLOROETHANE	6.3	U
127-18-4	TETRACHLOROETHENE	6.3	U
591-78-6	2-HEXANONE	32	U
124-48-1	DIBROMOCHLOROMETHANE	6.3	U
108-90-7	CHLOROBENZENE	6.3	U
100-41-4	ETHYL BENZENE	6.3	U
100-42-5	STYRENE	6.3	U
75-25-2	BROMOFORM	6.3	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.3	U
540-59-0	1,2-DICHLOROETHENE (total)	6.3	U
1330-20-7	XYLENE (total)	6.3	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-W1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M9152

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 21 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	1500	JNB
2.	UNKNOWN	0.77	11	JB
3.	UNKNOWN	1.04	47	J
4.	UNKNOWN	1.64	9.3	JB
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-E1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: M9153

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 18 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.5	U
67-64-1	ACETONE	77	
75-15-0	CARBON DISULFIDE	7.1	U
75-09-2	METHYLENE CHLORIDE	7.1	U
75-34-3	1 1-DICHLOROETHANE	7.1	U
78-93-3	2-BUTANONE	35	U
67-66-3	CHLOROFORM	7.1	U
71-55-6	1 1 1-TRICHLOROETHANE	7.1	U
56-23-5	CARBON TETRACHLORIDE	7.1	U
71-43-2	BENZENE	5.6	J
107-06-2	1 2-DICHLOROETHANE	7.1	U
79-01-6	TRICHLOROETHENE	7.1	U
78-87-5	1 2-DICHLOROPROPANE	7.1	U
75-27-4	BROMODICHLOROMETHANE	7.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	7.1	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.1	U
127-18-4	TETRACHLOROETHENE	7.1	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	7.1	U
108-90-7	CHLOROBENZENE	11	
100-41-4	ETHYL BENZENE	7.1	U
100-42-5	STYRENE	7.1	U
75-25-2	BROMOFORM	7.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.1	U
540-59-0	1,2-DICHLOROETHENE (total)	7.1	U
1330-20-7	XYLENE (total)	7.1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-E1

Sample wt/vol: 4.3 (g/mL) G Lab File ID: M9153

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 18 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	1900	JNB
2.	UNKNOWN	0.72	8.0	JB
3.	UNKNOWN	0.76	11	JB
4.	UNKNOWN	1.06	25	J
5.	UNKNOWN	1.45	7.5	JB
6.	UNKNOWN	1.54	8.9	JB
7.	UNKNOWN	1.58	9.5	JB
8.	UNKNOWN	1.66	7.2	JB
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-C1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9176

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 33 Date Analyzed: 11/30/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	18	U
75-01-4	VINYL CHLORIDE	18	U
74-83-9	BROMOMETHANE	18	U
75-00-3	CHLOROETHANE	18	U
75-35-4	1 1-DICHLOROETHENE	8.2	U
67-64-1	ACETONE	400	
75-15-0	CARBON DISULFIDE	45	
75-09-2	METHYLENE CHLORIDE	8.9	U
75-34-3	1 1-DICHLOROETHANE	8.9	U
78-93-3	2-BUTANONE	73	
67-66-3	CHLOROFORM	8.9	U
71-55-6	1 1 1-TRICHLOROETHANE	8.9	U
56-23-5	CARBON TETRACHLORIDE	8.9	U
71-43-2	BENZENE	8.9	U
107-06-2	1 2-DICHLOROETHANE	8.9	U
79-01-6	TRICHLOROETHENE	8.9	U
78-87-5	1 2-DICHLOROPROPANE	8.9	U
75-27-4	BROMODICHLOROMETHANE	8.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	44	U
108-88-3	TOLUENE	8.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	7.1	U
79-00-5	1 1 2-TRICHLOROETHANE	8.9	U
127-18-4	TETRACHLOROETHENE	8.9	U
591-78-6	2-HEXANONE	44	U
124-48-1	DIBROMOCHLOROMETHANE	8.9	U
108-90-7	CHLOROBENZENE	53	
100-41-4	ETHYL BENZENE	8.9	U
100-42-5	STYRENE	8.9	U
75-25-2	BROMOFORM	8.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	8.9	U
540-59-0	1,2-DICHLOROETHENE (total)	8.9	U
1330-20-7	XYLENE (total)	8.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-C1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9176

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 33 Date Analyzed: 11/30/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.54	2800	JNB
2.	UNKNOWN	0.63	440	JB
3.	UNKNOWN	0.77	24	JB
4.	UNKNOWN ALKENE	3.34	16	J
5.	SEPTUM BLEED	5.24	9.1	J
6.	BENZENE ISOMER	6.15	8.9	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-W1

Sample wt/vol: 4.5 (g/mL) G Lab File ID: M9155

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 24 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.7	U
67-64-1	ACETONE	72	J
75-15-0	CARBON DISULFIDE	7.3	U
75-09-2	METHYLENE CHLORIDE	7.3	U
75-34-3	1 1-DICHLOROETHANE	7.3	U
78-93-3	2-BUTANONE	36	U
67-66-3	CHLOROFORM	7.3	U
71-55-6	1 1 1-TRICHLOROETHANE	7.3	U
56-23-5	CARBON TETRACHLORIDE	7.3	U
71-43-2	BENZENE	7.3	U
107-06-2	1 2-DICHLOROETHANE	7.3	U
79-01-6	TRICHLOROETHENE	7.3	U
78-87-5	1 2-DICHLOROPROPANE	7.3	U
75-27-4	BROMODICHLOROMETHANE	7.3	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.8	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	7.3	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.8	U
79-00-5	1 1 2-TRICHLOROETHANE	7.3	U
127-18-4	TETRACHLOROETHENE	7.3	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.3	U
108-90-7	CHLOROBENZENE	7.3	U
100-41-4	ETHYL BENZENE	7.3	U
100-42-5	STYRENE	7.3	U
75-25-2	BROMOFORM	7.3	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.3	U
540-59-0	1,2-DICHLOROETHENE (total)	7.3	U
1330-20-7	XYLENE (total)	7.3	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-W1

Sample wt/vol: 4.5 (g/mL) G Lab File ID: M9155

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 24 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.54	1600	JNB
2.	UNKNOWN	0.92	11	JB
3.	UNKNOWN	1.04	58	J
4.	UNKNOWN	1.64	12	JB
5.	SEPTUM BLEED	5.23	11	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-E1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9156

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 15 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	70	U
75-15-0	CARBON DISULFIDE	7.0	U
75-09-2	METHYLENE CHLORIDE	7.0	U
75-34-3	1 1-DICHLOROETHANE	7.0	U
78-93-3	2-BUTANONE	35	U
67-66-3	CHLOROFORM	7.0	U
71-55-6	1 1 1-TRICHLOROETHANE	7.0	U
56-23-5	CARBON TETRACHLORIDE	7.0	U
71-43-2	BENZENE	3.5	J
107-06-2	1 2-DICHLOROETHANE	7.0	U
79-01-6	TRICHLOROETHENE	7.0	U
78-87-5	1 2-DICHLOROPROPANE	7.0	U
75-27-4	BROMODICHLOROMETHANE	7.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	7.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	7.0	U
127-18-4	TETRACHLOROETHENE	7.0	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	7.0	U
108-90-7	CHLOROBENZENE	4.4	J
100-41-4	ETHYL BENZENE	7.0	U
100-42-5	STYRENE	7.0	U
75-25-2	BROMOFORM	7.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.0	U
540-59-0	1,2-DICHLOROETHENE (total)	7.0	U
1330-20-7	XYLENE (total)	7.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-E1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9156

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 15 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	1000	JNB
2.	UNKNOWN	1.03	46	J
3.	UNKNOWN	1.18	7.6	JB
4.	UNKNOWN	1.54	8.2	JB
5.	UNKNOWN	1.65	8.3	JB
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-C1

Sample wt/vol: 4.9 (g/mL) G Lab File ID: M9157

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 28 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.5	U
67-64-1	ACETONE	91	
75-15-0	CARBON DISULFIDE	4.2	J
75-09-2	METHYLENE CHLORIDE	7.1	U
75-34-3	1 1-DICHLOROETHANE	7.1	U
78-93-3	2-BUTANONE	35	U
67-66-3	CHLOROFORM	7.1	U
71-55-6	1 1 1-TRICHLOROETHANE	7.1	U
56-23-5	CARBON TETRACHLORIDE	7.1	U
71-43-2	BENZENE	3.5	J
107-06-2	1 2-DICHLOROETHANE	7.1	U
79-01-6	TRICHLOROETHENE	7.1	U
78-87-5	1 2-DICHLOROPROPANE	7.1	U
75-27-4	BROMODICHLOROMETHANE	7.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	3.8	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.1	U
127-18-4	TETRACHLOROETHENE	7.1	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	7.1	U
108-90-7	CHLOROBENZENE	74	
100-41-4	ETHYL BENZENE	7.1	U
100-42-5	STYRENE	7.1	U
75-25-2	BROMOFORM	7.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.1	U
540-59-0	1,2-DICHLOROETHENE (total)	7.1	U
1330-20-7	XYLENE (total)	7.1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-C1

Sample wt/vol: 4.9 (g/mL) G Lab File ID: M9157

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 28 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.57	2800	JNB
2.	UNKNOWN	0.67	68	JB
3.	UNKNOWN	0.72	36	JB
4.	UNKNOWN	0.77	39	JB
5.	UNKNOWN ALKANE	0.92	28	JB
6.	UNKNOWN ALKANE	1.01	18	JB
7.	UNKNOWN	1.07	27	J
8.	UNKNOWN ALKANE	1.34	18	J
9.	UNKNOWN	1.44	14	JB
10.	UNKNOWN ALKANE	2.65	7.4	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-W1

Sample wt/vol: 4.4 (g/mL) G Lab File ID: M9158

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 26 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.1	U
67-64-1	ACETONE	230	
75-15-0	CARBON DISULFIDE	7.7	U
75-09-2	METHYLENE CHLORIDE	7.7	U
75-34-3	1 1-DICHLOROETHANE	7.7	U
78-93-3	2-BUTANONE	38	U
67-66-3	CHLOROFORM	7.7	U
71-55-6	1 1 1-TRICHLOROETHANE	7.7	U
56-23-5	CARBON TETRACHLORIDE	7.7	U
71-43-2	BENZENE	7.7	U
107-06-2	1 2-DICHLOROETHANE	7.7	U
79-01-6	TRICHLOROETHENE	7.7	U
78-87-5	1 2-DICHLOROPROPANE	7.7	U
75-27-4	BROMODICHLOROMETHANE	7.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.1	U
79-00-5	1 1 2-TRICHLOROETHANE	7.7	U
127-18-4	TETRACHLOROETHENE	7.7	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.7	U
108-90-7	CHLOROBENZENE	7.7	U
100-41-4	ETHYL BENZENE	7.7	U
100-42-5	STYRENE	7.7	U
75-25-2	BROMOFORM	7.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.7	U
540-59-0	1,2-DICHLOROETHENE (total)	7.7	U
1330-20-7	XYLENE (total)	7.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-W1

Sample wt/vol: 4.4 (g/mL) G Lab File ID: M9158

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 26 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.55	2800	JNB
2.	UNKNOWN	0.67	22	JB
3.	UNKNOWN	0.73	13	JB
4.	UNKNOWN	0.76	9.2	JB
5.	UNKNOWN ALKANE	0.92	14	JB
6.	UNKNOWN	1.01	8.7	J
7.	UNKNOWN	1.05	28	J
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-E1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9159

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 15 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	70	U
75-15-0	CARBON DISULFIDE	7.0	U
75-09-2	METHYLENE CHLORIDE	7.0	U
75-34-3	1 1-DICHLOROETHANE	7.0	U
78-93-3	2-BUTANONE	35	U
67-66-3	CHLOROFORM	7.0	U
71-55-6	1 1 1-TRICHLOROETHANE	7.0	U
56-23-5	CARBON TETRACHLORIDE	7.0	U
71-43-2	BENZENE	4.1	J
107-06-2	1 2-DICHLOROETHANE	7.0	U
79-01-6	TRICHLOROETHENE	7.0	U
78-87-5	1 2-DICHLOROPROPANE	7.0	U
75-27-4	BROMODICHLOROMETHANE	7.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	7.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	7.0	U
127-18-4	TETRACHLOROETHENE	7.0	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	7.0	U
108-90-7	CHLOROBENZENE	8.9	
100-41-4	ETHYL BENZENE	7.0	U
100-42-5	STYRENE	7.0	U
75-25-2	BROMOFORM	7.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.0	U
540-59-0	1,2-DICHLOROETHENE (total)	7.0	U
1330-20-7	XYLENE (total)	7.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17553-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-E1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9159

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: not dec. 15 Date Analyzed: 11/28/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.54	1200	JNB
2.	UNKNOWN	0.72	7.3	JB
3.	UNKNOWN	0.79	13	JB
4.	UNKNOWN ALKANE	0.92	36	JB
5.	UNKNOWN ALKANE	1.01	23	JB
6.	UNKNOWN	1.04	19	J
7.	UNKNOWN	1.24	10	JB
8.	UNKNOWN	1.54	12	JB
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FORM I VOA-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley	**DATE:**	April 17, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO014vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL074	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for sixteen sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on December 12 and 13, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL074.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSD-T1-1	CBS-CSC-T3-1
CBS-CSD-T2-1	CBS-CSC-T4-1
CBS-CSD-T3-1	CBS-CSC-T4-1-FD (field duplicate of CBS-CSC-T4-1)
CBS-CSD-T4-1	CBS-CSC-T5-1
CBS-CSD-T5-1	CBS-CSC-T6-1
CBS-CSD-T6-1	CBS-CSC-T7-1
CBS-CSC-T1-1	CBS-CSC-T8-1
CBS-CSC-T2-1	CBS-CSC-T9-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results

- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Acetone was detected in the laboratory method blanks. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. Action Levels (ALs) were established at 10x the concentration detected in the blank for acetone. The following tables summarize the ALs.

Type of Blank	Compound	Concentration Detected (µg/kg)	Action Level (µg/kg)
Laboratory Blank-12/21/01	Acetone	20	200
Associated samples: CBS-CSD-T1-1, CBS-CSD-T2-1, CBS-CSD-T3-1, CBS-CSD-T4-1, CBS-CSD-T5-1, CBS-CSD-T6-1 and CBS-CSC-T1-1.			

Type of Blank	Compound	Concentration Detected (µg/kg)	Action Level (µg/kg)
Laboratory Blank-12/23/01	Acetone	6.6	66
Associated samples: CBS-CSC-T3-1, CBS-CSC-T7-1 and CBS-CSC-T8-1.			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as nondetect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as nondetect (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

ENSR

MS/MSD Results

MS/MSD analyses were performed on sample CBS-CSD-T1-1 with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits.

Field Duplicate Results

Samples CBS-CSC-T4-1/CBS-CSC-T4-1-FD were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	Sample (µg/kg)	Duplicate (µg/kg)	RPD (%)
Acetone	14 J	13 J	7.4
Methylene chloride	2.6 J	7.6 U	NC
Toluene	4.6 J	7.6 U	NC
Chlorobenzene	22	10	75
NC – Not calculable due to a non-detect in the sample or field duplicate.			

LCS Results

The %Rs in the soil LCS analysis were within the QC acceptance criteria except as noted below.

LCS	Compound	%R	QC Limits (%)
Soil LCS-12/21/01	2-Hexanone	130	45-127
Associated samples: CBS-CSD-T1-1, CBS-CSD-T2-1, CBS-CSD-T3-1, CBS-CSD-T4-1, CBS-CSD-T5-1, CBS-CSD-T6-1 and CBS-CSC-T1-1.			

Qualification was not required since this analyte was not detected in the associated samples and the %R indicates a positive bias.

Sample Results

Dilutions were performed on samples CBS-CSC-T1-1 (2x) and CBS-CSC-T6-1 (5X) due to a target analyte that exceeded calibration range. Results from the dilution analysis and the initial analysis were combined during validation in order to report the lowest SQLs and all results within the calibration range.

The percent solids for all samples in the data set were > 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T1-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0918

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: not dec. 33 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	~~41 JB~~ 75	U-B
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	2.3	J
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	10	J
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	7.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	150	
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T2-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0919

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: not dec. 34 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.0	U
67-64-1	ACETONE	76	U-X
75-15-0	CARBON DISULFIDE	7.6	U
75-09-2	METHYLENE CHLORIDE	2.3	J
75-34-3	1 1-DICHLOROETHANE	7.6	U
78-93-3	2-BUTANONE	38	U
67-66-3	CHLOROFORM	7.6	U
71-55-6	1 1 1-TRICHLOROETHANE	7.6	U
56-23-5	CARBON TETRACHLORIDE	7.6	U
71-43-2	BENZENE	7.6	U
107-06-2	1 2-DICHLOROETHANE	7.6	U
79-01-6	TRICHLOROETHENE	7.6	U
78-87-5	1 2-DICHLOROPROPANE	7.6	U
75-27-4	BROMODICHLOROMETHANE	7.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.1	U
79-00-5	1 1 2-TRICHLOROETHANE	7.6	U
127-18-4	TETRACHLOROETHENE	7.6	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.6	U
108-90-7	CHLOROBENZENE	3.4	J
100-41-4	ETHYL BENZENE	7.6	U
100-42-5	STYRENE	7.6	U
75-25-2	BROMOFORM	7.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.6	U
540-59-0	1,2-DICHLOROETHENE (total)	7.6	U
1330-20-7	XYLENE (total)	7.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T3-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0920

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: not dec. 30 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
67-64-1	ACETONE	~~48~~ ~~JB~~ 71-U-B	
75-15-0	CARBON DISULFIDE	7.1	U
75-09-2	METHYLENE CHLORIDE	7.1	U
75-34-3	1 1-DICHLOROETHANE	7.1	U
78-93-3	2-BUTANONE	7.9	J
67-66-3	CHLOROFORM	7.1	U
71-55-6	1 1 1-TRICHLOROETHANE	7.1	U
56-23-5	CARBON TETRACHLORIDE	7.1	U
71-43-2	BENZENE	7.1	U
107-06-2	1 2-DICHLOROETHANE	7.1	U
79-01-6	TRICHLOROETHENE	7.1	U
78-87-5	1 2-DICHLOROPROPANE	7.1	U
75-27-4	BROMODICHLOROMETHANE	7.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	7.1	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.1	U
127-18-4	TETRACHLOROETHENE	7.1	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.1	U
108-90-7	CHLOROBENZENE	21	
100-41-4	ETHYL BENZENE	7.1	U
100-42-5	STYRENE	7.1	U
75-25-2	BROMOFORM	7.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.1	U
540-59-0	1,2-DICHLOROETHENE (total)	7.1	U
1330-20-7	XYLENE (total)	7.1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T4-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0921

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: not dec. 33 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	~~16~~ 75	~~JB~~ 65-U-B
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	2.9	J
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	37	U
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	7.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	7.7	
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T5-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0922

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: not dec. 27 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.3	U
67-64-1	ACETONE	~~12~~ JB 6811-B	
75-15-0	CARBON DISULFIDE	6.8	U
75-09-2	METHYLENE CHLORIDE	6.8	U
75-34-3	1 1-DICHLOROETHANE	6.8	U
78-93-3	2-BUTANONE	34	U
67-66-3	CHLOROFORM	6.8	U
71-55-6	1 1 1-TRICHLOROETHANE	6.8	U
56-23-5	CARBON TETRACHLORIDE	6.8	U
71-43-2	BENZENE	6.8	U
107-06-2	1 2-DICHLOROETHANE	6.8	U
79-01-6	TRICHLOROETHENE	6.8	U
78-87-5	1 2-DICHLOROPROPANE	6.8	U
75-27-4	BROMODICHLOROMETHANE	6.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	6.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.5	U
79-00-5	1 1 2-TRICHLOROETHANE	6.8	U
127-18-4	TETRACHLOROETHENE	6.8	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.8	U
108-90-7	CHLOROBENZENE	6.8	U
100-41-4	ETHYL BENZENE	6.8	U
100-42-5	STYRENE	6.8	U
75-25-2	BROMOFORM	6.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.8	U
540-59-0	1,2-DICHLOROETHENE (total)	6.8	U
1330-20-7	XYLENE (total)	6.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-6

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T6-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0923

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: not dec. 31 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.7	U
67-64-1	ACETONE	~~34~~	~~JB~~ 72 U-B
75-15-0	CARBON DISULFIDE	7.2	U
75-09-2	METHYLENE CHLORIDE	3.2	J
75-34-3	1 1-DICHLOROETHANE	7.2	U
78-93-3	2-BUTANONE	6.3	J
67-66-3	CHLOROFORM	7.2	U
71-55-6	1 1 1-TRICHLOROETHANE	7.2	U
56-23-5	CARBON TETRACHLORIDE	7.2	U
71-43-2	BENZENE	7.2	U
107-06-2	1 2-DICHLOROETHANE	7.2	U
79-01-6	TRICHLOROETHENE	7.2	U
78-87-5	1 2-DICHLOROPROPANE	7.2	U
75-27-4	BROMODICHLOROMETHANE	7.2	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.8	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	2.9	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.8	U
79-00-5	1 1 2-TRICHLOROETHANE	7.2	U
127-18-4	TETRACHLOROETHENE	7.2	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.2	U
108-90-7	CHLOROBENZENE	2.0	J
100-41-4	ETHYL BENZENE	7.2	U
100-42-5	STYRENE	7.2	U
75-25-2	BROMOFORM	7.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.2	U
540-59-0	1,2-DICHLOROETHENE (total)	7.2	U
1330-20-7	XYLENE (total)	7.2	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T1-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0924

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 27 Date Analyzed: 12/21/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.3	U
67-64-1	ACETONE	~~58~~	~~JB~~ 68 U-B
75-15-0	CARBON DISULFIDE	6.8	U
75-09-2	METHYLENE CHLORIDE	2.3	J
75-34-3	1 1-DICHLOROETHANE	6.8	U
78-93-3	2-BUTANONE	7.2	J
67-66-3	CHLOROFORM	6.8	U
71-55-6	1 1 1-TRICHLOROETHANE	6.8	U
56-23-5	CARBON TETRACHLORIDE	6.8	U
71-43-2	BENZENE	6.8	U
107-06-2	1 2-DICHLOROETHANE	6.8	U
79-01-6	TRICHLOROETHENE	6.8	U
78-87-5	1 2-DICHLOROPROPANE	6.8	U
75-27-4	BROMODICHLOROMETHANE	6.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	6.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.5	U
79-00-5	1 1 2-TRICHLOROETHANE	6.8	U
127-18-4	TETRACHLOROETHENE	6.8	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.8	U
108-90-7	CHLOROBENZENE	~~220~~	~~E~~ 230
100-41-4	ETHYL BENZENE	6.8	U
100-42-5	STYRENE	6.8	U
75-25-2	BROMOFORM	6.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.8	U
540-59-0	1,2-DICHLOROETHENE (total)	6.8	U
1330-20-7	XYLENE (total)	6.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-1DL

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T1-1

Sample wt/vol: 2.6 (g/mL) G Lab File ID: L0975

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 27 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Do Not Report LW 4/17/02

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	26	U
75-01-4	VINYL CHLORIDE	26	U
74-83-9	BROMOMETHANE	26	U
75-00-3	CHLOROETHANE	26	U
75-35-4	1 1-DICHLOROETHENE	12	U
67-64-1	ACETONE	55	DJB
75-15-0	CARBON DISULFIDE	13	U
75-09-2	METHYLENE CHLORIDE	13	U
75-34-3	1 1-DICHLOROETHANE	13	U
78-93-3	2-BUTANONE	8.9	DJ
67-66-3	CHLOROFORM	13	U
71-55-6	1 1 1-TRICHLOROETHANE	13	U
56-23-5	CARBON TETRACHLORIDE	13	U
71-43-2	BENZENE	13	U
107-06-2	1 2-DICHLOROETHANE	13	U
79-01-6	TRICHLOROETHENE	13	U
78-87-5	1 2-DICHLOROPROPANE	13	U
75-27-4	BROMODICHLOROMETHANE	13	U
10061-01-5	cis-1,3-DICHLOROPROPENE	10	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	66	U
108-88-3	TOLUENE	13	U
10061-02-6	trans-1,3-DICHLOROPROPENE	10	U
79-00-5	1 1 2-TRICHLOROETHANE	13	U
127-18-4	TETRACHLOROETHENE	13	U
591-78-6	2-HEXANONE	66	U
124-48-1	DIBROMOCHLOROMETHANE	13	U
108-90-7	CHLOROBENZENE	230	D
100-41-4	ETHYL BENZENE	13	U
100-42-5	STYRENE	13	U
75-25-2	BROMOFORM	13	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	13	U
540-59-0	1,2-DICHLOROETHENE (total)	13	U
1330-20-7	XYLENE (total)	13	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T2-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0937

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 30 Date Analyzed: 12/22/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
67-64-1	ACETONE	41	J
75-15-0	CARBON DISULFIDE	7.1	U
75-09-2	METHYLENE CHLORIDE	2.3	J
75-34-3	1 1-DICHLOROETHANE	7.1	U
78-93-3	2-BUTANONE	5.7	J
67-66-3	CHLOROFORM	7.1	U
71-55-6	1 1 1-TRICHLOROETHANE	7.1	U
56-23-5	CARBON TETRACHLORIDE	7.1	U
71-43-2	BENZENE	7.1	U
107-06-2	1 2-DICHLOROETHANE	7.1	U
79-01-6	TRICHLOROETHENE	7.1	U
78-87-5	1 2-DICHLOROPROPANE	7.1	U
75-27-4	BROMODICHLOROMETHANE	7.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	3.9	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.1	U
127-18-4	TETRACHLOROETHENE	7.1	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.1	U
108-90-7	CHLOROBENZENE	110	
100-41-4	ETHYL BENZENE	7.1	U
100-42-5	STYRENE	2.7	J
75-25-2	BROMOFORM	7.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.1	U
540-59-0	1,2-DICHLOROETHENE (total)	7.1	U
1330-20-7	XYLENE (total)	7.1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T3-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0972

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 35 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.1	U
67-64-1	ACETONE	77	U
75-15-0	CARBON DISULFIDE	7.7	U
75-09-2	METHYLENE CHLORIDE	7.7	U
75-34-3	1 1-DICHLOROETHANE	7.7	U
78-93-3	2-BUTANONE	38	U
67-66-3	CHLOROFORM	7.7	U
71-55-6	1 1 1-TRICHLOROETHANE	7.7	U
56-23-5	CARBON TETRACHLORIDE	7.7	U
71-43-2	BENZENE	7.7	U
107-06-2	1 2-DICHLOROETHANE	7.7	U
79-01-6	TRICHLOROETHENE	7.7	U
78-87-5	1 2-DICHLOROPROPANE	7.7	U
75-27-4	BROMODICHLOROMETHANE	7.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.2	U
79-00-5	1 1 2-TRICHLOROETHANE	7.7	U
127-18-4	TETRACHLOROETHENE	7.7	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.7	U
108-90-7	CHLOROBENZENE	46	
100-41-4	ETHYL BENZENE	7.7	U
100-42-5	STYRENE	7.7	U
75-25-2	BROMOFORM	7.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.7	U
540-59-0	1,2-DICHLOROETHENE (total)	7.7	U
1330-20-7	XYLENE (total)	7.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T4-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0939

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 33 Date Analyzed: 12/22/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	14	J
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	2.6	J
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	37	U
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	4.6	J
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	22	
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T4-1-FD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0940

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 34 Date Analyzed: 12/22/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.0	U
67-64-1	ACETONE	13	J
75-15-0	CARBON DISULFIDE	7.6	U
75-09-2	METHYLENE CHLORIDE	7.6	U
75-34-3	1 1-DICHLOROETHANE	7.6	U
78-93-3	2-BUTANONE	38	U
67-66-3	CHLOROFORM	7.6	U
71-55-6	1 1 1-TRICHLOROETHANE	7.6	U
56-23-5	CARBON TETRACHLORIDE	7.6	U
71-43-2	BENZENE	7.6	U
107-06-2	1 2-DICHLOROETHANE	7.6	U
79-01-6	TRICHLOROETHENE	7.6	U
78-87-5	1 2-DICHLOROPROPANE	7.6	U
75-27-4	BROMODICHLOROMETHANE	7.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.1	U
79-00-5	1 1 2-TRICHLOROETHANE	7.6	U
127-18-4	TETRACHLOROETHENE	7.6	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.6	U
108-90-7	CHLOROBENZENE	10	
100-41-4	ETHYL BENZENE	7.6	U
100-42-5	STYRENE	7.6	U
75-25-2	BROMOFORM	7.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.6	U
540-59-0	1,2-DICHLOROETHENE (total)	7.6	U
1330-20-7	XYLENE (total)	7.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-6

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T5-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0941

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 36 Date Analyzed: 12/22/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.2	U
67-64-1	ACETONE	9.6	J
75-15-0	CARBON DISULFIDE	7.8	U
75-09-2	METHYLENE CHLORIDE	7.8	U
75-34-3	1 1-DICHLOROETHANE	7.8	U
78-93-3	2-BUTANONE	39	U
67-66-3	CHLOROFORM	7.8	U
71-55-6	1 1 1-TRICHLOROETHANE	7.8	U
56-23-5	CARBON TETRACHLORIDE	7.8	U
71-43-2	BENZENE	7.8	U
107-06-2	1 2-DICHLOROETHANE	7.8	U
79-01-6	TRICHLOROETHENE	7.8	U
78-87-5	1 2-DICHLOROPROPANE	7.8	U
75-27-4	BROMODICHLOROMETHANE	7.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	39	U
108-88-3	TOLUENE	7.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.2	U
79-00-5	1 1 2-TRICHLOROETHANE	7.8	U
127-18-4	TETRACHLOROETHENE	7.8	U
591-78-6	2-HEXANONE	39	U
124-48-1	DIBROMOCHLOROMETHANE	7.8	U
108-90-7	CHLOROBENZENE	2.3	J
100-41-4	ETHYL BENZENE	7.8	U
100-42-5	STYRENE	7.8	U
75-25-2	BROMOFORM	7.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.8	U
540-59-0	1,2-DICHLOROETHENE (total)	7.8	U
1330-20-7	XYLENE (total)	7.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T6-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0942

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 37 Date Analyzed: 12/22/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	16	U
75-01-4	VINYL CHLORIDE	16	U
74-83-9	BROMOMETHANE	16	U
75-00-3	CHLOROETHANE	16	U
75-35-4	1 1-DICHLOROETHENE	7.3	U
67-64-1	ACETONE	83	
75-15-0	CARBON DISULFIDE	7.9	U
75-09-2	METHYLENE CHLORIDE	4.8	J
75-34-3	1 1-DICHLOROETHANE	7.9	U
78-93-3	2-BUTANONE	9.9	J
67-66-3	CHLOROFORM	7.9	U
71-55-6	1 1 1-TRICHLOROETHANE	7.9	U
56-23-5	CARBON TETRACHLORIDE	7.9	U
71-43-2	BENZENE	3.0	J
107-06-2	1 2-DICHLOROETHANE	7.9	U
79-01-6	TRICHLOROETHENE	7.9	U
78-87-5	1 2-DICHLOROPROPANE	7.9	U
75-27-4	BROMODICHLOROMETHANE	7.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	40	U
108-88-3	TOLUENE	7.5	J
10061-02-6	trans-1,3-DICHLOROPROPENE	6.3	U
79-00-5	1 1 2-TRICHLOROETHANE	7.9	U
127-18-4	TETRACHLOROETHENE	7.9	U
591-78-6	2-HEXANONE	40	U
124-48-1	DIBROMOCHLOROMETHANE	7.9	U
108-90-7	CHLOROBENZENE	~~770~~	~~E~~ 700
100-41-4	ETHYL BENZENE	7.9	U
100-42-5	STYRENE	7.9	U
75-25-2	BROMOFORM	7.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.9	U
540-59-0	1,2-DICHLOROETHENE (total)	7.9	U
1330-20-7	XYLENE (total)	4.3	J

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-7DL

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T6-1

Sample wt/vol: 1.0 (g/mL) G Lab File ID: L0976

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 37 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Do Not Report LW 4/17/02

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	79	U
75-01-4	VINYL CHLORIDE	79	U
74-83-9	BROMOMETHANE	79	U
75-00-3	CHLOROETHANE	79	U
75-35-4	1 1-DICHLOROETHENE	36	U
67-64-1	ACETONE	130	DJB
75-15-0	CARBON DISULFIDE	40	U
75-09-2	METHYLENE CHLORIDE	40	U
75-34-3	1 1-DICHLOROETHANE	40	U
78-93-3	2-BUTANONE	200	U
67-66-3	CHLOROFORM	40	U
71-55-6	1 1 1-TRICHLOROETHANE	40	U
56-23-5	CARBON TETRACHLORIDE	40	U
71-43-2	BENZENE	40	U
107-06-2	1 2-DICHLOROETHANE	40	U
79-01-6	TRICHLOROETHENE	40	U
78-87-5	1 2-DICHLOROPROPANE	40	U
75-27-4	BROMODICHLOROMETHANE	40	U
10061-01-5	cis-1,3-DICHLOROPROPENE	32	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	200	U
108-88-3	TOLUENE	40	U
10061-02-6	trans-1,3-DICHLOROPROPENE	32	U
79-00-5	1 1 2-TRICHLOROETHANE	40	U
127-18-4	TETRACHLOROETHENE	40	U
591-78-6	2-HEXANONE	200	U
124-48-1	DIBROMOCHLOROMETHANE	40	U
108-90-7	CHLOROBENZENE	700	D
100-41-4	ETHYL BENZENE	40	U
100-42-5	STYRENE	40	U
75-25-2	BROMOFORM	40	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	40	U
540-59-0	1,2-DICHLOROETHENE (total)	40	U
1330-20-7	XYLENE (total)	40	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T7-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0973

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 32 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.8	U
67-64-1	ACETONE	~~27~~	~~JB~~ 74 UL-B
75-15-0	CARBON DISULFIDE	7.4	U
75-09-2	METHYLENE CHLORIDE	7.4	U
75-34-3	1 1-DICHLOROETHANE	7.4	U
78-93-3	2-BUTANONE	37	U
67-66-3	CHLOROFORM	7.4	U
71-55-6	1 1 1-TRICHLOROETHANE	7.4	U
56-23-5	CARBON TETRACHLORIDE	7.4	U
71-43-2	BENZENE	7.4	U
107-06-2	1 2-DICHLOROETHANE	7.4	U
79-01-6	TRICHLOROETHENE	7.4	U
78-87-5	1 2-DICHLOROPROPANE	7.4	U
75-27-4	BROMODICHLOROMETHANE	7.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	3.3	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.9	U
79-00-5	1 1 2-TRICHLOROETHANE	7.4	U
127-18-4	TETRACHLOROETHENE	7.4	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.4	U
108-90-7	CHLOROBENZENE	42	
100-41-4	ETHYL BENZENE	7.4	U
100-42-5	STYRENE	7.4	U
75-25-2	BROMOFORM	7.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.4	U
540-59-0	1,2-DICHLOROETHENE (total)	7.4	U
1330-20-7	XYLENE (total)	7.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-9

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T8-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0974

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 33 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	75	U
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	37	U
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	7.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	22	
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-10

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T9-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0945

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: not dec. 26 Date Analyzed: 12/22/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.2	U
67-64-1	ACETONE	14	J
75-15-0	CARBON DISULFIDE	6.8	U
75-09-2	METHYLENE CHLORIDE	6.8	U
75-34-3	1 1-DICHLOROETHANE	6.8	U
78-93-3	2-BUTANONE	34	U
67-66-3	CHLOROFORM	6.8	U
71-55-6	1 1 1-TRICHLOROETHANE	6.8	U
56-23-5	CARBON TETRACHLORIDE	6.8	U
71-43-2	BENZENE	6.8	U
107-06-2	1 2-DICHLOROETHANE	6.8	U
79-01-6	TRICHLOROETHENE	6.8	U
78-87-5	1 2-DICHLOROPROPANE	6.8	U
75-27-4	BROMODICHLOROMETHANE	6.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.4	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	6.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.4	U
79-00-5	1 1 2-TRICHLOROETHANE	6.8	U
127-18-4	TETRACHLOROETHENE	6.8	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.8	U
108-90-7	CHLOROBENZENE	3.8	J
100-41-4	ETHYL BENZENE	6.8	U
100-42-5	STYRENE	6.8	U
75-25-2	BROMOFORM	6.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.8	U
540-59-0	1,2-DICHLOROETHENE (total)	6.8	U
1330-20-7	XYLENE (total)	6.8	U

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO015vocjas.doc 06105-012-202
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG# SIL081	**CC:**	D. McGrath/Westford

SUMMARY

Full validation was performed on the data for four sediment samples analyzed for Target List Compound (TCL) volatile organic compounds (VOCs) using SW-846 method 5035/8260B. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on January 16, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL081

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to nonconformances of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSF-T6-1	CBS-CSF-T6-1 FD (field duplicate of CBS-CSF-T6-1)
CBS-CSF-T7-1	CBS-CSF-T13-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes
- Initial and continuing calibrations
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Internal standard performance
- Field duplicate results

- Laboratory control sample (LCS) results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of (4°C ± 2°C). Non-conformances were not observed for this sample set.

GC/MS Tunes

The frequency and abundance of the bromofluorobenzene (BFB) tunes were within the QC acceptance criteria. All samples were analyzed within 12 hours from the BFB tune.

Initial and Continuing Calibrations

The percent relative standard deviations (%RSDs), correlation coefficients (r^2), and/or response factors (RFs) were within the QC acceptance criteria in the initial calibration standards.

The following table summarizes the percent difference (%D) that was outside the QC acceptance criteria in the continuing calibration standard.

Calibration	Compound	%Ds
CCAL (01/26/02) Instrument MSL5972	Bromomethane	32.4
Associated sample: All sediment samples.		

Sample results were qualified as follows:

- If a compound had a %D >20, both positive results and nondetects for the associated compound were qualified as estimated (J/UJ).

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Batch MS/MSD analyses were performed with this sample set . The percent recoveries (%Rs) and relative percent differences (RPDs) were within the QC acceptance limits.

ENSR

Internal Standard Performance

Internal standard performance met the QC acceptance criteria in all sample analyses.

Field Duplicate Results

Samples CBS-CSF-T6-1 and CBS-CSF-T6-1 FD were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	CBS-CSF-T6-1 (µg/Kg)	CBS-CSF-T6-1 FD (µg/Kg)	RPD (%)
Acetone	50	74	39
2-Butanone	8.0	12	40
Toluene	8.4	7.1 U	NC
NC- Not calculable due to a nondetect result in the field duplicate.			

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Quantitation Limits and Sample Results

Dilutions were not performed with this sample set.

Calculations were spot-checked. There were no discrepancies noted.

There were no samples reported with percent solids <50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L1101

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: not dec. 33 Date Analyzed: 01/26/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	UJ-C
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	50	J
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	8.0	J
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	8.4	
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	7.5	U
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

40367-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L1101

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: not dec. 33 Date Analyzed: 01/26/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.89	2600	JNB
2.	UNKNOWN	1.18	9.7	JB
3.	UNKNOWN	1.99	12	JB
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
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22.				
23.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1-FD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L1102

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: not dec. 30 Date Analyzed: 01/26/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	UJ-C
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
67-64-1	ACETONE	74	
75-15-0	CARBON DISULFIDE	7.1	U
75-09-2	METHYLENE CHLORIDE	7.1	U
75-34-3	1 1-DICHLOROETHANE	7.1	U
78-93-3	2-BUTANONE	12	J
67-66-3	CHLOROFORM	7.1	U
71-55-6	1 1 1-TRICHLOROETHANE	7.1	U
56-23-5	CARBON TETRACHLORIDE	7.1	U
71-43-2	BENZENE	7.1	U
107-06-2	1 2-DICHLOROETHANE	7.1	U
79-01-6	TRICHLOROETHENE	7.1	U
78-87-5	1 2-DICHLOROPROPANE	7.1	U
75-27-4	BROMODICHLOROMETHANE	7.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	7.1	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.1	U
127-18-4	TETRACHLOROETHENE	7.1	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.1	U
108-90-7	CHLOROBENZENE	7.1	U
100-41-4	ETHYL BENZENE	7.1	U
100-42-5	STYRENE	7.1	U
75-25-2	BROMOFORM	7.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.1	U
540-59-0	1,2-DICHLOROETHENE (total)	7.1	U
1330-20-7	XYLENE (total)	7.1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

40367-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1-FD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L1102

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: not dec. 30 Date Analyzed: 01/26/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.89	3000	JNB
2.	UNKNOWN	1.14	7.2	JB
3.	UNKNOWN	1.18	17	JB
4.				
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T7-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L1103

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: not dec. 28 Date Analyzed: 01/26/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	UJ-C
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	48	J
75-15-0	CARBON DISULFIDE	6.9	U
75-09-2	METHYLENE CHLORIDE	6.9	U
75-34-3	1 1-DICHLOROETHANE	6.9	U
78-93-3	2-BUTANONE	8.3	J
67-66-3	CHLOROFORM	6.9	U
71-55-6	1 1 1-TRICHLOROETHANE	6.9	U
56-23-5	CARBON TETRACHLORIDE	6.9	U
71-43-2	BENZENE	6.9	U
107-06-2	1 2-DICHLOROETHANE	6.9	U
79-01-6	TRICHLOROETHENE	6.9	U
78-87-5	1 2-DICHLOROPROPANE	6.9	U
75-27-4	BROMODICHLOROMETHANE	6.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	4.7	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	6.9	U
127-18-4	TETRACHLOROETHENE	6.9	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	6.9	U
108-90-7	CHLOROBENZENE	6.9	U
100-41-4	ETHYL BENZENE	6.9	U
100-42-5	STYRENE	6.9	U
75-25-2	BROMOFORM	6.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.9	U
540-59-0	1,2-DICHLOROETHENE (total)	6.9	U
1330-20-7	XYLENE (total)	6.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

40367-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T7-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L1103

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: not dec. 28 Date Analyzed: 01/26/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.89	4500	JNB
2.	UNKNOWN	1.17	33	JB
3.	UNKNOWN	1.25	24	JB
4.	UNKNOWN	1.34	8.0	JB
5.	UNKNOWN	1.38	17	JB
6.	UNKNOWN	1.49	19	JB
7.	UNKNOWN	1.63	7.0	JB
8.	UNKNOWN	1.99	9.0	JB
9.	UNKNOWN	2.04	7.0	JB
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FORM I VOA-TIC

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T13-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L1104

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: not dec. 25 Date Analyzed: 01/26/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	UJ-C
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.1	U
67-64-1	ACETONE	67	U
75-15-0	CARBON DISULFIDE	6.7	U
75-09-2	METHYLENE CHLORIDE	6.7	U
75-34-3	1 1-DICHLOROETHANE	6.7	U
78-93-3	2-BUTANONE	33	U
67-66-3	CHLOROFORM	6.7	U
71-55-6	1 1 1-TRICHLOROETHANE	6.7	U
56-23-5	CARBON TETRACHLORIDE	6.7	U
71-43-2	BENZENE	6.7	U
107-06-2	1 2-DICHLOROETHANE	6.7	U
79-01-6	TRICHLOROETHENE	6.7	U
78-87-5	1 2-DICHLOROPROPANE	6.7	U
75-27-4	BROMODICHLOROMETHANE	6.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	33	U
108-88-3	TOLUENE	6.7	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.3	U
79-00-5	1 1 2-TRICHLOROETHANE	6.7	U
127-18-4	TETRACHLOROETHENE	6.7	U
591-78-6	2-HEXANONE	33	U
124-48-1	DIBROMOCHLOROMETHANE	6.7	U
108-90-7	CHLOROBENZENE	6.7	U
100-41-4	ETHYL BENZENE	6.7	U
100-42-5	STYRENE	6.7	U
75-25-2	BROMOFORM	6.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.7	U
540-59-0	1,2-DICHLOROETHENE (total)	6.7	U
1330-20-7	XYLENE (total)	6.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

40367-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T13-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L1104

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: not dec. 25 Date Analyzed: 01/26/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 124-38-9	CARBON DIOXIDE	0.89	3000	JNB
2.	UNKNOWN	1.13	27	JB
3.	UNKNOWN	1.25	26	JB
4.	UNKNOWN	1.37	22	JB
5.	UNKNOWN	1.45	9.0	JB
6.	UNKNOWN	1.49	13	JB
7.	UNKNOWN	1.55	14	JB
8.	UNKNOWN	1.58	8.8	JB
9.	UNKNOWN	1.64	19	JB
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FORM I VOA-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley	**DATE:**	April 17, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO016vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL075	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for ten sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on December 18, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL075.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSE-T1-1	CBS-CSE-T5-1
CBS-CSE-T2-1	CBS-CSE-T14-1
CBS-CSE-T3-1	CBS-CSE-T15-1
CBS-CSE-T3-1-FD (field duplicate of CBS-CSE-T3-1)	CBS-CSE-T15-1-FD (field duplicate of CBS-CSE-T15-1)
CBS-CSE-T4-1	CBS-CSE-T6-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Acetone was detected in the laboratory method blank. The presence of blank contamination indicates that false positives may exist for this compound in the associated sample. Action Levels (ALs) were established at 10x the concentration detected in the blank for acetone. The following table summarizes the AL and sample affected.

Type of Blank	Compound	Concentration Detected (µg/kg)	Action Level (µg/kg)
Laboratory Blank-12/23/01	Acetone	6.6	66
Associated sample: CBS-CSE-T6-1.			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as nondetect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as nondetect (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on sample CBS-CSE-T1-1 with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits except for the RPD for acetone (32%). Qualification of the data was not required since the acetone result in the associated sample was previously estimated (J) by the laboratory due to results below the sample quantitation limit (SQL).

Field Duplicate Results

Samples CBS-CSE-T3-1/CBS-CSE-T3-1-FD and CBS-CSE-T15-1/CBS-CSE-T15-1-FD were submitted as

field duplicate pairs with this sample set. The following tables summarize the RPDs of the detected analytes in the field duplicate pairs. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	CBS-CSE-T3-1 (µg/kg)	CBS-CSE-T3-1-FD (µg/kg)	RPD (%)
Acetone	24 J	70 U	NC
Methylene chloride	2.3 J	7.0 U	NC
Toluene	3.7 J	7.0 U	NC
NC = Not calculable due to a non-detect result for the sample or field duplicate.			

Compound	CBS-CSE-T15-1 (µg/kg)	CBS-CSE-T15-1-FD (µg/kg)	RPD (%)
Methylene chloride	3.3 J	6.4 U	NC
Toluene	5.7 J	6.4 U	NC
Chlorobenzene	5.9 J	12	68
NC = Not calculable due to a non-detect result for the sample or field duplicate.			

LCS Results

The %Rs of the soil LCS were within the QC acceptance criteria.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T1-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0954

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 33 Date Analyzed: 12/22/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	73	J-m
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	14	J
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	7.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	7.1	J
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T2-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0955

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 26 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.2	U
67-64-1	ACETONE	68	U
75-15-0	CARBON DISULFIDE	6.8	U
75-09-2	METHYLENE CHLORIDE	6.8	U
75-34-3	1 1-DICHLOROETHANE	6.8	U
78-93-3	2-BUTANONE	34	U
67-66-3	CHLOROFORM	6.8	U
71-55-6	1 1 1-TRICHLOROETHANE	6.8	U
56-23-5	CARBON TETRACHLORIDE	6.8	U
71-43-2	BENZENE	6.8	U
107-06-2	1 2-DICHLOROETHANE	6.8	U
79-01-6	TRICHLOROETHENE	6.8	U
78-87-5	1 2-DICHLOROPROPANE	6.8	U
75-27-4	BROMODICHLOROMETHANE	6.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.4	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	6.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.4	U
79-00-5	1 1 2-TRICHLOROETHANE	6.8	U
127-18-4	TETRACHLOROETHENE	6.8	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.8	U
108-90-7	CHLOROBENZENE	6.8	U
100-41-4	ETHYL BENZENE	6.8	U
100-42-5	STYRENE	6.8	U
75-25-2	BROMOFORM	6.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.8	U
540-59-0	1,2-DICHLOROETHENE (total)	6.8	U
1330-20-7	XYLENE (total)	6.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T3-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0956

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 32 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.8	U
67-64-1	ACETONE	24	J
75-15-0	CARBON DISULFIDE	7.4	U
75-09-2	METHYLENE CHLORIDE	2.3	J
75-34-3	1 1-DICHLOROETHANE	7.4	U
78-93-3	2-BUTANONE	37	U
67-66-3	CHLOROFORM	7.4	U
71-55-6	1 1 1-TRICHLOROETHANE	7.4	U
56-23-5	CARBON TETRACHLORIDE	7.4	U
71-43-2	BENZENE	7.4	U
107-06-2	1 2-DICHLOROETHANE	7.4	U
79-01-6	TRICHLOROETHENE	7.4	U
78-87-5	1 2-DICHLOROPROPANE	7.4	U
75-27-4	BROMODICHLOROMETHANE	7.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	3.7	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.9	U
79-00-5	1 1 2-TRICHLOROETHANE	7.4	U
127-18-4	TETRACHLOROETHENE	7.4	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.4	U
108-90-7	CHLOROBENZENE	7.4	U
100-41-4	ETHYL BENZENE	7.4	U
100-42-5	STYRENE	7.4	U
75-25-2	BROMOFORM	7.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.4	U
540-59-0	1,2-DICHLOROETHENE (total)	7.4	U
1330-20-7	XYLENE (total)	7.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T3-1-FD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0957

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 29 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.5	U
67-64-1	ACETONE	70	U
75-15-0	CARBON DISULFIDE	7.0	U
75-09-2	METHYLENE CHLORIDE	7.0	U
75-34-3	1 1-DICHLOROETHANE	7.0	U
78-93-3	2-BUTANONE	35	U
67-66-3	CHLOROFORM	7.0	U
71-55-6	1 1 1-TRICHLOROETHANE	7.0	U
56-23-5	CARBON TETRACHLORIDE	7.0	U
71-43-2	BENZENE	7.0	U
107-06-2	1 2-DICHLOROETHANE	7.0	U
79-01-6	TRICHLOROETHENE	7.0	U
78-87-5	1 2-DICHLOROPROPANE	7.0	U
75-27-4	BROMODICHLOROMETHANE	7.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	7.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	7.0	U
127-18-4	TETRACHLOROETHENE	7.0	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	7.0	U
108-90-7	CHLOROBENZENE	7.0	U
100-41-4	ETHYL BENZENE	7.0	U
100-42-5	STYRENE	7.0	U
75-25-2	BROMOFORM	7.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.0	U
540-59-0	1,2-DICHLOROETHENE (total)	7.0	U
1330-20-7	XYLENE (total)	7.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T4-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0958

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 28 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	48	J
75-15-0	CARBON DISULFIDE	6.9	U
75-09-2	METHYLENE CHLORIDE	6.9	U
75-34-3	1 1-DICHLOROETHANE	6.9	U
78-93-3	2-BUTANONE	8.9	J
67-66-3	CHLOROFORM	6.9	U
71-55-6	1 1 1-TRICHLOROETHANE	6.9	U
56-23-5	CARBON TETRACHLORIDE	6.9	U
71-43-2	BENZENE	6.9	U
107-06-2	1 2-DICHLOROETHANE	6.9	U
79-01-6	TRICHLOROETHENE	6.9	U
78-87-5	1 2-DICHLOROPROPANE	6.9	U
75-27-4	BROMODICHLOROMETHANE	6.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	6.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	6.9	U
127-18-4	TETRACHLOROETHENE	6.9	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	6.9	U
108-90-7	CHLOROBENZENE	13	
100-41-4	ETHYL BENZENE	6.9	U
100-42-5	STYRENE	6.9	U
75-25-2	BROMOFORM	6.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.9	U
540-59-0	1,2-DICHLOROETHENE (total)	6.9	U
1330-20-7	XYLENE (total)	6.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T5-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0959

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 23 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.0	U
67-64-1	ACETONE	18	J
75-15-0	CARBON DISULFIDE	6.5	U
75-09-2	METHYLENE CHLORIDE	6.5	U
75-34-3	1 1-DICHLOROETHANE	6.5	U
78-93-3	2-BUTANONE	32	U
67-66-3	CHLOROFORM	6.5	U
71-55-6	1 1 1-TRICHLOROETHANE	6.5	U
56-23-5	CARBON TETRACHLORIDE	6.5	U
71-43-2	BENZENE	6.5	U
107-06-2	1 2-DICHLOROETHANE	6.5	U
79-01-6	TRICHLOROETHENE	6.5	U
78-87-5	1 2-DICHLOROPROPANE	6.5	U
75-27-4	BROMODICHLOROMETHANE	6.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.2	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	32	U
108-88-3	TOLUENE	6.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.2	U
79-00-5	1 1 2-TRICHLOROETHANE	6.5	U
127-18-4	TETRACHLOROETHENE	6.5	U
591-78-6	2-HEXANONE	32	U
124-48-1	DIBROMOCHLOROMETHANE	6.5	U
108-90-7	CHLOROBENZENE	2.0	J
100-41-4	ETHYL BENZENE	6.5	U
100-42-5	STYRENE	6.5	U
75-25-2	BROMOFORM	6.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.5	U
540-59-0	1,2-DICHLOROETHENE (total)	6.5	U
1330-20-7	XYLENE (total)	6.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T14-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0960

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 32 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.8	U
67-64-1	ACETONE	18	J
75-15-0	CARBON DISULFIDE	7.4	U
75-09-2	METHYLENE CHLORIDE	7.4	U
75-34-3	1 1-DICHLOROETHANE	7.4	U
78-93-3	2-BUTANONE	37	U
67-66-3	CHLOROFORM	7.4	U
71-55-6	1 1 1-TRICHLOROETHANE	7.4	U
56-23-5	CARBON TETRACHLORIDE	7.4	U
71-43-2	BENZENE	7.4	U
107-06-2	1 2-DICHLOROETHANE	7.4	U
79-01-6	TRICHLOROETHENE	7.4	U
78-87-5	1 2-DICHLOROPROPANE	7.4	U
75-27-4	BROMODICHLOROMETHANE	7.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	7.4	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.9	U
79-00-5	1 1 2-TRICHLOROETHANE	7.4	U
127-18-4	TETRACHLOROETHENE	7.4	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.4	U
108-90-7	CHLOROBENZENE	5.1	J
100-41-4	ETHYL BENZENE	7.4	U
100-42-5	STYRENE	7.4	U
75-25-2	BROMOFORM	7.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.4	U
540-59-0	1,2-DICHLOROETHENE (total)	7.4	U
1330-20-7	XYLENE (total)	7.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T15-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0961

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 21 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	5.8	U
67-64-1	ACETONE	63	U
75-15-0	CARBON DISULFIDE	6.3	U
75-09-2	METHYLENE CHLORIDE	3.3	J
75-34-3	1 1-DICHLOROETHANE	6.3	U
78-93-3	2-BUTANONE	32	U
67-66-3	CHLOROFORM	6.3	U
71-55-6	1 1 1-TRICHLOROETHANE	6.3	U
56-23-5	CARBON TETRACHLORIDE	6.3	U
71-43-2	BENZENE	6.3	U
107-06-2	1 2-DICHLOROETHANE	6.3	U
79-01-6	TRICHLOROETHENE	6.3	U
78-87-5	1 2-DICHLOROPROPANE	6.3	U
75-27-4	BROMODICHLOROMETHANE	6.3	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	32	U
108-88-3	TOLUENE	5.7	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.1	U
79-00-5	1 1 2-TRICHLOROETHANE	6.3	U
127-18-4	TETRACHLOROETHENE	6.3	U
591-78-6	2-HEXANONE	32	U
124-48-1	DIBROMOCHLOROMETHANE	6.3	U
108-90-7	CHLOROBENZENE	5.9	J
100-41-4	ETHYL BENZENE	6.3	U
100-42-5	STYRENE	6.3	U
75-25-2	BROMOFORM	6.3	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.3	U
540-59-0	1,2-DICHLOROETHENE (total)	6.3	U
1330-20-7	XYLENE (total)	6.3	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T15-1-FD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0962

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 22 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	5.9	U
67-64-1	ACETONE	64	U
75-15-0	CARBON DISULFIDE	6.4	U
75-09-2	METHYLENE CHLORIDE	6.4	U
75-34-3	1 1-DICHLOROETHANE	6.4	U
78-93-3	2-BUTANONE	32	U
67-66-3	CHLOROFORM	6.4	U
71-55-6	1 1 1-TRICHLOROETHANE	6.4	U
56-23-5	CARBON TETRACHLORIDE	6.4	U
71-43-2	BENZENE	6.4	U
107-06-2	1 2-DICHLOROETHANE	6.4	U
79-01-6	TRICHLOROETHENE	6.4	U
78-87-5	1 2-DICHLOROPROPANE	6.4	U
75-27-4	BROMODICHLOROMETHANE	6.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	32	U
108-88-3	TOLUENE	6.4	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.1	U
79-00-5	1 1 2-TRICHLOROETHANE	6.4	U
127-18-4	TETRACHLOROETHENE	6.4	U
591-78-6	2-HEXANONE	32	U
124-48-1	DIBROMOCHLOROMETHANE	6.4	U
108-90-7	CHLOROBENZENE	12	
100-41-4	ETHYL BENZENE	6.4	U
100-42-5	STYRENE	6.4	U
75-25-2	BROMOFORM	6.4	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.4	U
540-59-0	1,2-DICHLOROETHENE (total)	6.4	U
1330-20-7	XYLENE (total)	6.4	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T6-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0969

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: not dec. 30 Date Analyzed: 12/23/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
67-64-1	ACETONE	~~20~~ ~~JB~~ 71U-B	
75-15-0	CARBON DISULFIDE	7.1	U
75-09-2	METHYLENE CHLORIDE	7.1	U
75-34-3	1 1-DICHLOROETHANE	7.1	U
78-93-3	2-BUTANONE	36	U
67-66-3	CHLOROFORM	7.1	U
71-55-6	1 1 1-TRICHLOROETHANE	7.1	U
56-23-5	CARBON TETRACHLORIDE	7.1	U
71-43-2	BENZENE	7.1	U
107-06-2	1 2-DICHLOROETHANE	7.1	U
79-01-6	TRICHLOROETHENE	7.1	U
78-87-5	1 2-DICHLOROPROPANE	7.1	U
75-27-4	BROMODICHLOROMETHANE	7.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	7.1	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.1	U
127-18-4	TETRACHLOROETHENE	7.1	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.1	U
108-90-7	CHLOROBENZENE	7.1	U
100-41-4	ETHYL BENZENE	7.1	U
100-42-5	STYRENE	7.1	U
75-25-2	BROMOFORM	7.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.1	U
540-59-0	1,2-DICHLOROETHENE (total)	7.1	U
1330-20-7	XYLENE (total)	7.1	U

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO017vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL082	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for six sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on December 23 and 25, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL082.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSF-T8-1	CBS-CSF-T12-1
CBS-CSF-T9-1	CBS-CSF-T10-1
CBS-CSF-T9-1-FD (field duplicate of CBS-CSF-T9-1)	CBS-CSF-T11-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample identification (ID) in the lab ID field on the Form 1s in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Acetone was detected in the laboratory method blank. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. An Action Level (AL) was established at 10x the concentration detected in the blank for acetone. The following table summarizes the AL.

Type of Blank	Compound	Concentration Detected (µg/kg)	Action Level (µg/kg)
Laboratory Blank-01/30/02	Acetone	5.2	52
Associated samples: CBS-CSF-T9-1, CBS-CSF-T9-1-FD, CBS-CSF-T12-1, CBS-CSF-T10-1 and CBS-CSF-T11-1.			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as nondetect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as nondetect (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSF-T11-1 was submitted for MS/MSD analyses with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits.

Field Duplicate Results

Samples CBS-CSE-T9-1 and CBS-CSE-T9-1-FD were submitted as the field duplicate pair with this sample set. Target analytes were not detected in the field duplicate pair. Precision was deemed acceptable.

ENSR

LCS Results

The %Rs in the soil LCS analyses were within the QC acceptance criteria except as noted below.

LCS	Compound	%R	QC Limits (%)
Soil LCS-01/30/02	2-Hexanone	130	45-127
Associated samples: CBS-CSF-T9-1, CBS-CSF-T9-1-FD, CBS-CSF-T12-1, CBS-CSF-T10-1 and CBS-CSF-T11-1.			

LCS	Compound	%R	QC Limits (%)
Soil LCS-02/05/02	2-Hexanone	130	45-127
Associated sample: CBS-CSF-T8-1.			

Qualification was not required since positive results are affected and 2-hexanone was not detected in the associated samples and the %Rs indicate a positive bias.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T8-1

Sample wt/vol: 5.6 (g/mL) G Lab File ID: L1145

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: not dec. 27 Date Analyzed: 02/05/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.6	U
67-64-1	ACETONE	36	J
75-15-0	CARBON DISULFIDE	6.1	U
75-09-2	METHYLENE CHLORIDE	6.1	U
75-34-3	1 1-DICHLOROETHANE	6.1	U
78-93-3	2-BUTANONE	30	U
67-66-3	CHLOROFORM	6.1	U
71-55-6	1 1 1-TRICHLOROETHANE	6.1	U
56-23-5	CARBON TETRACHLORIDE	6.1	U
71-43-2	BENZENE	6.1	U
107-06-2	1 2-DICHLOROETHANE	6.1	U
79-01-6	TRICHLOROETHENE	6.1	U
78-87-5	1 2-DICHLOROPROPANE	6.1	U
75-27-4	BROMODICHLOROMETHANE	6.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	30	U
108-88-3	TOLUENE	2.5	J
10061-02-6	trans-1,3-DICHLOROPROPENE	4.9	U
79-00-5	1 1 2-TRICHLOROETHANE	6.1	U
127-18-4	TETRACHLOROETHENE	6.1	U
591-78-6	2-HEXANONE	30	U
124-48-1	DIBROMOCHLOROMETHANE	6.1	U
108-90-7	CHLOROBENZENE	6.1	U
100-41-4	ETHYL BENZENE	6.1	U
100-42-5	STYRENE	6.1	U
75-25-2	BROMOFORM	6.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.1	U
540-59-0	1,2-DICHLOROETHENE (total)	6.1	U
1330-20-7	XYLENE (total)	6.1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1

Sample wt/vol: 5.4 (g/mL) G Lab File ID: L1127

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: not dec. 33 Date Analyzed: 01/30/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	~~8.1~~	~~JB~~ 75U-B
75-15-0	CARBON DISULFIDE	6.9	U
75-09-2	METHYLENE CHLORIDE	6.9	U
75-34-3	1 1-DICHLOROETHANE	6.9	U
78-93-3	2-BUTANONE	34	U
67-66-3	CHLOROFORM	6.9	U
71-55-6	1 1 1-TRICHLOROETHANE	6.9	U
56-23-5	CARBON TETRACHLORIDE	6.9	U
71-43-2	BENZENE	6.9	U
107-06-2	1 2-DICHLOROETHANE	6.9	U
79-01-6	TRICHLOROETHENE	6.9	U
78-87-5	1 2-DICHLOROPROPANE	6.9	U
75-27-4	BROMODICHLOROMETHANE	6.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.5	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	6.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.5	U
79-00-5	1 1 2-TRICHLOROETHANE	6.9	U
127-18-4	TETRACHLOROETHENE	6.9	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.9	U
108-90-7	CHLOROBENZENE	6.9	U
100-41-4	ETHYL BENZENE	6.9	U
100-42-5	STYRENE	6.9	U
75-25-2	BROMOFORM	6.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.9	U
540-59-0	1,2-DICHLOROETHENE (total)	6.9	U
1330-20-7	XYLENE (total)	6.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1-FD

Sample wt/vol: 5.4 (g/mL) G Lab File ID: L1128

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: not dec. 24 Date Analyzed: 01/31/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.6	U
67-64-1	ACETONE	61	U
75-15-0	CARBON DISULFIDE	6.1	U
75-09-2	METHYLENE CHLORIDE	6.1	U
75-34-3	1 1-DICHLOROETHANE	6.1	U
78-93-3	2-BUTANONE	30	U
67-66-3	CHLOROFORM	6.1	U
71-55-6	1 1 1-TRICHLOROETHANE	6.1	U
56-23-5	CARBON TETRACHLORIDE	6.1	U
71-43-2	BENZENE	6.1	U
107-06-2	1 2-DICHLOROETHANE	6.1	U
79-01-6	TRICHLOROETHENE	6.1	U
78-87-5	1 2-DICHLOROPROPANE	6.1	U
75-27-4	BROMODICHLOROMETHANE	6.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	30	U
108-88-3	TOLUENE	6.1	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.9	U
79-00-5	1 1 2-TRICHLOROETHANE	6.1	U
127-18-4	TETRACHLOROETHENE	6.1	U
591-78-6	2-HEXANONE	30	U
124-48-1	DIBROMOCHLOROMETHANE	6.1	U
108-90-7	CHLOROBENZENE	6.1	U
100-41-4	ETHYL BENZENE	6.1	U
100-42-5	STYRENE	6.1	U
75-25-2	BROMOFORM	6.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.1	U
540-59-0	1,2-DICHLOROETHENE (total)	6.1	U
1330-20-7	XYLENE (total)	6.1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T12-1

Sample wt/vol: 5.4 (g/mL) G Lab File ID: L1131

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: not dec. 26 Date Analyzed: 01/31/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.8	U
67-64-1	ACETONE	~~22~~	~~JB~~ 684-B
75-15-0	CARBON DISULFIDE	6.2	U
75-09-2	METHYLENE CHLORIDE	6.2	U
75-34-3	1 1-DICHLOROETHANE	6.2	U
78-93-3	2-BUTANONE	31	U
67-66-3	CHLOROFORM	6.2	U
71-55-6	1 1 1-TRICHLOROETHANE	6.2	U
56-23-5	CARBON TETRACHLORIDE	6.2	U
71-43-2	BENZENE	6.2	U
107-06-2	1 2-DICHLOROETHANE	6.2	U
79-01-6	TRICHLOROETHENE	6.2	U
78-87-5	1 2-DICHLOROPROPANE	6.2	U
75-27-4	BROMODICHLOROMETHANE	6.2	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	31	U
108-88-3	TOLUENE	7.7	
10061-02-6	trans-1,3-DICHLOROPROPENE	5.0	U
79-00-5	1 1 2-TRICHLOROETHANE	6.2	U
127-18-4	TETRACHLOROETHENE	6.2	U
591-78-6	2-HEXANONE	31	U
124-48-1	DIBROMOCHLOROMETHANE	6.2	U
108-90-7	CHLOROBENZENE	6.2	U
100-41-4	ETHYL BENZENE	6.2	U
100-42-5	STYRENE	6.2	U
75-25-2	BROMOFORM	6.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.2	U
540-59-0	1,2-DICHLOROETHENE (total)	6.2	U
1330-20-7	XYLENE (total)	6.2	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40588-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T10-1

Sample wt/vol: 5.6 (g/mL) G Lab File ID: L1137

Level: (low/med) LOW Date Received: 01/28/02

% Moisture: not dec. 23 Date Analyzed: 01/31/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.3	U
67-64-1	ACETONE	58	U
75-15-0	CARBON DISULFIDE	5.8	U
75-09-2	METHYLENE CHLORIDE	5.8	U
75-34-3	1 1-DICHLOROETHANE	5.8	U
78-93-3	2-BUTANONE	29	U
67-66-3	CHLOROFORM	5.8	U
71-55-6	1 1 1-TRICHLOROETHANE	5.8	U
56-23-5	CARBON TETRACHLORIDE	5.8	U
71-43-2	BENZENE	5.8	U
107-06-2	1 2-DICHLOROETHANE	5.8	U
79-01-6	TRICHLOROETHENE	5.8	U
78-87-5	1 2-DICHLOROPROPANE	5.8	U
75-27-4	BROMODICHLOROMETHANE	5.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	29	U
108-88-3	TOLUENE	5.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.6	U
79-00-5	1 1 2-TRICHLOROETHANE	5.8	U
127-18-4	TETRACHLOROETHENE	5.8	U
591-78-6	2-HEXANONE	29	U
124-48-1	DIBROMOCHLOROMETHANE	5.8	U
108-90-7	CHLOROBENZENE	5.8	U
100-41-4	ETHYL BENZENE	5.8	U
100-42-5	STYRENE	5.8	U
75-25-2	BROMOFORM	5.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5.8	U
540-59-0	1,2-DICHLOROETHENE (total)	5.8	U
1330-20-7	XYLENE (total)	5.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40588-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T11-1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: L1138

Level: (low/med) LOW Date Received: 01/28/02

% Moisture: not dec. 28 Date Analyzed: 01/31/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.3	U
67-64-1	ACETONE	68	U
75-15-0	CARBON DISULFIDE	6.8	U
75-09-2	METHYLENE CHLORIDE	6.8	U
75-34-3	1 1-DICHLOROETHANE	6.8	U
78-93-3	2-BUTANONE	34	U
67-66-3	CHLOROFORM	6.8	U
71-55-6	1 1 1-TRICHLOROETHANE	6.8	U
56-23-5	CARBON TETRACHLORIDE	6.8	U
71-43-2	BENZENE	6.8	U
107-06-2	1 2-DICHLOROETHANE	6.8	U
79-01-6	TRICHLOROETHENE	6.8	U
78-87-5	1 2-DICHLOROPROPANE	6.8	U
75-27-4	BROMODICHLOROMETHANE	6.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.4	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	34	U
108-88-3	TOLUENE	6.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.4	U
79-00-5	1 1 2-TRICHLOROETHANE	6.8	U
127-18-4	TETRACHLOROETHENE	6.8	U
591-78-6	2-HEXANONE	34	U
124-48-1	DIBROMOCHLOROMETHANE	6.8	U
108-90-7	CHLOROBENZENE	6.8	U
100-41-4	ETHYL BENZENE	6.8	U
100-42-5	STYRENE	6.8	U
75-25-2	BROMOFORM	6.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.8	U
540-59-0	1,2-DICHLOROETHENE (total)	6.8	U
1330-20-7	XYLENE (total)	6.8	U

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 18, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO018vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL077	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for six sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on December 19, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL077.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination and estimated (J, UJ) due to certain QC nonconformances (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSE-T12-1	CBS-CSE-T8-1
CBS-CSE-T11-1	CBS-CSE-T9-1
CBS-CSE-T7-1	CBS-CSE-T10-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC..

The laboratory reported the full field sample identification (ID) in the lab ID field on the Form Is in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Acetone was detected in the laboratory method blank. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. An Action Level (AL) was established at 10x the concentration detected in the blank for acetone. The following table summarizes the AL.

Type of Blank	Compound	Concentration Detected (µg/kg)	Action Level (µg/kg)
Laboratory Blank-12/26/01	Acetone	3.8	38
Associated samples: CBS-CSE-T12-1, CBS-CSE-T11-1, CBS-CSE-T7-1, CBS-CSE-T8-1, CBS-CSE-T9-1 and CBS-CSE-T10-1.			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as nondetect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as nondetect (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on sample CBS-CSE-T10-1 with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits, except as noted below. The following table summarizes the non-compliant %R and RPDs.

ENSR

Compound	CBS-CSE-T10-1 MSD (%R)	RPD (%)
Methylene chloride	ok	37
1,2-Dichloroethane	ok	28
1,2-Dichloropropane	ok	29
Toluene	ok	37
1,1,2-Trichloroethane	ok	33
Dibromochloromethane	ok	31
Chlorobenzene	238	50
Bromoform	ok	34
1,1,2,2-Tetrachloroethane	ok	29

The compounds listed above were non-detect in the associated sample. These nondetect results were qualified as estimated (UJ) in sample CBS-CSE-T10-1 with the exception of chlorobenzene. The chlorobenzene result in the associated sample was qualified as estimated (J).

Field Duplicate Results

Field duplicates were not submitted with this sample set.

LCS Results

The %Rs of the soil LCS were within the QC acceptance criteria.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T12-1

Sample wt/vol: 5.1 (g/mL) G Lab File ID: M9967

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: not dec. 35 Date Analyzed: 12/26/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.9	U
67-64-1	ACETONE	~~22~~	~~JB~~ 77 U-B
75-15-0	CARBON DISULFIDE	7.5	U
75-09-2	METHYLENE CHLORIDE	7.5	U
75-34-3	1 1-DICHLOROETHANE	7.5	U
78-93-3	2-BUTANONE	7.3	J
67-66-3	CHLOROFORM	7.5	U
71-55-6	1 1 1-TRICHLOROETHANE	7.5	U
56-23-5	CARBON TETRACHLORIDE	7.5	U
71-43-2	BENZENE	7.5	U
107-06-2	1 2-DICHLOROETHANE	7.5	U
79-01-6	TRICHLOROETHENE	7.5	U
78-87-5	1 2-DICHLOROPROPANE	7.5	U
75-27-4	BROMODICHLOROMETHANE	7.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.0	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.0	U
79-00-5	1 1 2-TRICHLOROETHANE	7.5	U
127-18-4	TETRACHLOROETHENE	7.5	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.5	U
108-90-7	CHLOROBENZENE	66	
100-41-4	ETHYL BENZENE	7.5	U
100-42-5	STYRENE	7.5	U
75-25-2	BROMOFORM	7.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.5	U
540-59-0	1,2-DICHLOROETHENE (total)	7.5	U
1330-20-7	XYLENE (total)	7.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T11-1

Sample wt/vol: 6.3 (g/mL) G Lab File ID: M9968

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: not dec. 32 Date Analyzed: 12/26/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.4	U
67-64-1	ACETONE	~~14~~	~~JB~~ 74 U-B
75-15-0	CARBON DISULFIDE	5.8	U
75-09-2	METHYLENE CHLORIDE	5.8	U
75-34-3	1 1-DICHLOROETHANE	5.8	U
78-93-3	2-BUTANONE	29	U
67-66-3	CHLOROFORM	5.8	U
71-55-6	1 1 1-TRICHLOROETHANE	5.8	U
56-23-5	CARBON TETRACHLORIDE	5.8	U
71-43-2	BENZENE	5.8	U
107-06-2	1 2-DICHLOROETHANE	5.8	U
79-01-6	TRICHLOROETHENE	5.8	U
78-87-5	1 2-DICHLOROPROPANE	5.8	U
75-27-4	BROMODICHLOROMETHANE	5.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	29	U
108-88-3	TOLUENE	5.8	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.7	U
79-00-5	1 1 2-TRICHLOROETHANE	5.8	U
127-18-4	TETRACHLOROETHENE	5.8	U
591-78-6	2-HEXANONE	29	U
124-48-1	DIBROMOCHLOROMETHANE	5.8	U
108-90-7	CHLOROBENZENE	2.2	J
100-41-4	ETHYL BENZENE	5.8	U
100-42-5	STYRENE	5.8	U
75-25-2	BROMOFORM	5.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5.8	U
540-59-0	1,2-DICHLOROETHENE (total)	5.8	U
1330-20-7	XYLENE (total)	5.8	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T7-1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M9969

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: not dec. 31 Date Analyzed: 12/26/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	17	U
75-01-4	VINYL CHLORIDE	17	U
74-83-9	BROMOMETHANE	17	U
75-00-3	CHLOROETHANE	17	U
75-35-4	1 1-DICHLOROETHENE	7.9	U
67-64-1	ACETONE	~~19~~	~~JB~~ 72 U-B
75-15-0	CARBON DISULFIDE	8.6	U
75-09-2	METHYLENE CHLORIDE	8.6	U
75-34-3	1 1-DICHLOROETHANE	8.6	U
78-93-3	2-BUTANONE	43	U
67-66-3	CHLOROFORM	8.6	U
71-55-6	1 1 1-TRICHLOROETHANE	8.6	U
56-23-5	CARBON TETRACHLORIDE	8.6	U
71-43-2	BENZENE	8.6	U
107-06-2	1 2-DICHLOROETHANE	8.6	U
79-01-6	TRICHLOROETHENE	8.6	U
78-87-5	1 2-DICHLOROPROPANE	8.6	U
75-27-4	BROMODICHLOROMETHANE	8.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	43	U
108-88-3	TOLUENE	8.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.9	U
79-00-5	1 1 2-TRICHLOROETHANE	8.6	U
127-18-4	TETRACHLOROETHENE	8.6	U
591-78-6	2-HEXANONE	43	U
124-48-1	DIBROMOCHLOROMETHANE	8.6	U
108-90-7	CHLOROBENZENE	8.6	U
100-41-4	ETHYL BENZENE	8.6	U
100-42-5	STYRENE	8.6	U
75-25-2	BROMOFORM	8.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	8.6	U
540-59-0	1,2-DICHLOROETHENE (total)	8.6	U
1330-20-7	XYLENE (total)	8.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T8-1

Sample wt/vol: 5.2 (g/mL) G Lab File ID: M9970

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: not dec. 37 Date Analyzed: 12/26/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	7.0	U
67-64-1	ACETONE	62	JB
75-15-0	CARBON DISULFIDE	7.6	U
75-09-2	METHYLENE CHLORIDE	7.6	U
75-34-3	1 1-DICHLOROETHANE	7.6	U
78-93-3	2-BUTANONE	11	J
67-66-3	CHLOROFORM	7.6	U
71-55-6	1 1 1-TRICHLOROETHANE	7.6	U
56-23-5	CARBON TETRACHLORIDE	7.6	U
71-43-2	BENZENE	7.6	U
107-06-2	1 2-DICHLOROETHANE	7.6	U
79-01-6	TRICHLOROETHENE	7.6	U
78-87-5	1 2-DICHLOROPROPANE	7.6	U
75-27-4	BROMODICHLOROMETHANE	7.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	6.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	38	U
108-88-3	TOLUENE	7.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	6.1	U
79-00-5	1 1 2-TRICHLOROETHANE	7.6	U
127-18-4	TETRACHLOROETHENE	7.6	U
591-78-6	2-HEXANONE	38	U
124-48-1	DIBROMOCHLOROMETHANE	7.6	U
108-90-7	CHLOROBENZENE	33	
100-41-4	ETHYL BENZENE	7.6	U
100-42-5	STYRENE	7.6	U
75-25-2	BROMOFORM	7.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.6	U
540-59-0	1,2-DICHLOROETHENE (total)	7.6	U
1330-20-7	XYLENE (total)	7.6	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T9-1

Sample wt/vol: 6.2 (g/mL) G Lab File ID: M9971

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: not dec. 33 Date Analyzed: 12/26/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	12	U
75-01-4	VINYL CHLORIDE	12	U
74-83-9	BROMOMETHANE	12	U
75-00-3	CHLOROETHANE	12	U
75-35-4	1 1-DICHLOROETHENE	5.5	U
67-64-1	ACETONE	~~13~~	~~JB~~ 754-B
75-15-0	CARBON DISULFIDE	6.0	U
75-09-2	METHYLENE CHLORIDE	1.8	J
75-34-3	1 1-DICHLOROETHANE	6.0	U
78-93-3	2-BUTANONE	30	U
67-66-3	CHLOROFORM	6.0	U
71-55-6	1 1 1-TRICHLOROETHANE	6.0	U
56-23-5	CARBON TETRACHLORIDE	6.0	U
71-43-2	BENZENE	6.0	U
107-06-2	1 2-DICHLOROETHANE	6.0	U
79-01-6	TRICHLOROETHENE	6.0	U
78-87-5	1 2-DICHLOROPROPANE	6.0	U
75-27-4	BROMODICHLOROMETHANE	6.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	4.8	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	30	U
108-88-3	TOLUENE	6.0	U
10061-02-6	trans-1,3-DICHLOROPROPENE	4.8	U
79-00-5	1 1 2-TRICHLOROETHANE	6.0	U
127-18-4	TETRACHLOROETHENE	6.0	U
591-78-6	2-HEXANONE	30	U
124-48-1	DIBROMOCHLOROMETHANE	6.0	U
108-90-7	CHLOROBENZENE	6.0	U
100-41-4	ETHYL BENZENE	6.0	U
100-42-5	STYRENE	6.0	U
75-25-2	BROMOFORM	6.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.0	U
540-59-0	1,2-DICHLOROETHENE (total)	6.0	U
1330-20-7	XYLENE (total)	6.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T10-1

Sample wt/vol: 5.4 (g/mL) G Lab File ID: M9972

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: not dec. 28 Date Analyzed: 12/26/01

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	5.9	U
67-64-1	ACETONE	64	U
75-15-0	CARBON DISULFIDE	6.4	U
75-09-2	METHYLENE CHLORIDE	6.4	UJ-M
75-34-3	1 1-DICHLOROETHANE	6.4	U
78-93-3	2-BUTANONE	12	J
67-66-3	CHLOROFORM	6.4	U
71-55-6	1 1 1-TRICHLOROETHANE	6.4	U
56-23-5	CARBON TETRACHLORIDE	6.4	U
71-43-2	BENZENE	6.4	U
107-06-2	1 2-DICHLOROETHANE	6.4	UJ-M
79-01-6	TRICHLOROETHENE	6.4	U
78-87-5	1 2-DICHLOROPROPANE	6.4	UJ-M
75-27-4	BROMODICHLOROMETHANE	6.4	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.1	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	32	U
108-88-3	TOLUENE	6.4	UJ-M
10061-02-6	trans-1,3-DICHLOROPROPENE	5.1	U
79-00-5	1 1 2-TRICHLOROETHANE	6.4	UJ-M
127-18-4	TETRACHLOROETHENE	6.4	U
591-78-6	2-HEXANONE	32	U
124-48-1	DIBROMOCHLOROMETHANE	6.4	UJ-M
108-90-7	CHLOROBENZENE	15	J-M
100-41-4	ETHYL BENZENE	6.4	U
100-42-5	STYRENE	6.4	U
75-25-2	BROMOFORM	6.4	UJ-M
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.4	UJ-M
540-59-0	1,2-DICHLOROETHENE (total)	6.4	U
1330-20-7	XYLENE (total)	6.4	U

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO019vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL083	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for one sediment sample analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The sample was collected at the Sauget Area 1 site in Sauget and Cahokia, IL on February 6, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL083.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J, UJ) due to certain QC nonconformances (see discussion below).

SAMPLES

The sample included in this review is listed below:

Sample Identification
CBS-CSF-T16-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC, with the exception of sample SP-013, which was not included in the scope of this data validation effort.

The laboratory reported the full field sample ID in the lab ID field on the Form 1s in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on sample CBS-CSF-T16-1 with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits, except as noted below. The following table summarizes the non-compliant RPDs. Positive results for dibromochloromethane and bromoform were already qualified as estimated (J) due to sample results below the sample quantitation limit (SQL).

Compound	RPD (%)	QC Limits (%)
Dibromochloromethane	23	22
Bromoform	26	24

Field Duplicate Results

Field duplicates were not submitted with this sample set.

LCS Results

The %Rs of the soil LCS were within the QC acceptance criteria.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40850-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL083

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T16-1

Sample wt/vol: 6.7 (g/mL) G Lab File ID: L4153

Level: (low/med) LOW Date Received: 02/07/02

% Moisture: not dec. 30 Date Analyzed: 02/11/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	11	U
75-01-4	VINYL CHLORIDE	11	U
74-83-9	BROMOMETHANE	11	U
75-00-3	CHLOROETHANE	11	U
75-35-4	1 1-DICHLOROETHENE	4.9	U
67-64-1	ACETONE	29	J
75-15-0	CARBON DISULFIDE	5.3	U
75-09-2	METHYLENE CHLORIDE	1.8	J
75-34-3	1 1-DICHLOROETHANE	5.3	U
78-93-3	2-BUTANONE	27	U
67-66-3	CHLOROFORM	5.3	U
71-55-6	1 1 1-TRICHLOROETHANE	5.3	U
56-23-5	CARBON TETRACHLORIDE	5.3	U
71-43-2	BENZENE	5.3	U
107-06-2	1 2-DICHLOROETHANE	2.1	J
79-01-6	TRICHLOROETHENE	5.3	U
78-87-5	1 2-DICHLOROPROPANE	5.3	U
75-27-4	BROMODICHLOROMETHANE	1.3	J
10061-01-5	cis-1,3-DICHLOROPROPENE	4.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	27	U
108-88-3	TOLUENE	2.3	J
10061-02-6	trans-1,3-DICHLOROPROPENE	4.3	U
79-00-5	1 1 2-TRICHLOROETHANE	6.1	
127-18-4	TETRACHLOROETHENE	5.3	U
591-78-6	2-HEXANONE	27	U
124-48-1	DIBROMOCHLOROMETHANE	2.0	J-M
108-90-7	CHLOROBENZENE	5.3	U
100-41-4	ETHYL BENZENE	5.3	U
100-42-5	STYRENE	5.3	U
75-25-2	BROMOFORM	3.0	J-M
79-34-5	1 1 2 2-TETRACHLOROETHANE	10	
540-59-0	1,2-DICHLOROETHENE (total)	5.3	U
1330-20-7	XYLENE (total)	5.3	U

ENSR

MEMORANDUM

TO:	Lisa Bradley	**DATE:**	April 18, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO020vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL079	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for six sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on December 20 and 21, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL079.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were estimated (J/UJ) due to % solids < 50% (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T15-1	CBS-CSE-T16-1
CBS-CSB-T16-1	CBS-CSE-T17-1
CBS-CSB-T14-1	CBS-CSF-T1-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC. The date relinquished appearing on the COC (12/07/01) is probably an error. No action was taken other than this notation.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on sample CBS-CSB-T14-1 with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits except for the RPD for toluene (40%). The toluene result for the associated sample was qualified as estimated (J).

Field Duplicate Results

Field duplicates were not submitted with this sample set.

LCS Results

The %Rs of the soil LCS were within the QC acceptance criteria.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for samples in the data set were > 50%, except for sample CBS-CSE-T16-1, which was 49% solid. Results for this sample were qualified as estimated (J positive, UJ non-detect).

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T15-1

Sample wt/vol: 6.8 (g/mL) G Lab File ID: M0014

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: not dec. 24 Date Analyzed: 01/03/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	9.7	U
75-01-4	VINYL CHLORIDE	9.7	U
74-83-9	BROMOMETHANE	9.7	U
75-00-3	CHLOROETHANE	9.7	U
75-35-4	1 1-DICHLOROETHENE	4.4	U
67-64-1	ACETONE	14	J
75-15-0	CARBON DISULFIDE	4.8	U
75-09-2	METHYLENE CHLORIDE	1.8	J
75-34-3	1 1-DICHLOROETHANE	4.8	U
78-93-3	2-BUTANONE	24	U
67-66-3	CHLOROFORM	4.8	U
71-55-6	1 1 1-TRICHLOROETHANE	4.8	U
56-23-5	CARBON TETRACHLORIDE	4.8	U
71-43-2	BENZENE	4.8	U
107-06-2	1 2-DICHLOROETHANE	4.8	U
79-01-6	TRICHLOROETHENE	4.8	U
78-87-5	1 2-DICHLOROPROPANE	4.8	U
75-27-4	BROMODICHLOROMETHANE	4.8	U
10061-01-5	cis-1,3-DICHLOROPROPENE	3.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	24	U
108-88-3	TOLUENE	2.0	J
10061-02-6	trans-1,3-DICHLOROPROPENE	3.9	U
79-00-5	1 1 2-TRICHLOROETHANE	4.8	U
127-18-4	TETRACHLOROETHENE	4.8	U
591-78-6	2-HEXANONE	24	U
124-48-1	DIBROMOCHLOROMETHANE	4.8	U
108-90-7	CHLOROBENZENE	4.8	U
100-41-4	ETHYL BENZENE	4.8	U
100-42-5	STYRENE	4.8	U
75-25-2	BROMOFORM	4.8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	4.8	U
540-59-0	1,2-DICHLOROETHENE (total)	4.8	U
1330-20-7	XYLENE (total)	4.8	U

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FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T16-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M0012

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: not dec. 31 Date Analyzed: 01/02/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.7	U
67-64-1	ACETONE	72	U
75-15-0	CARBON DISULFIDE	6.1	J
75-09-2	METHYLENE CHLORIDE	2.9	J
75-34-3	1 1-DICHLOROETHANE	7.2	U
78-93-3	2-BUTANONE	5.2	J
67-66-3	CHLOROFORM	3.1	J
71-55-6	1 1 1-TRICHLOROETHANE	6.3	J
56-23-5	CARBON TETRACHLORIDE	7.2	U
71-43-2	BENZENE	7.2	U
107-06-2	1 2-DICHLOROETHANE	7.2	U
79-01-6	TRICHLOROETHENE	6.8	J
78-87-5	1 2-DICHLOROPROPANE	7.2	U
75-27-4	BROMODICHLOROMETHANE	7.2	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.8	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	58	
10061-02-6	trans-1,3-DICHLOROPROPENE	5.8	U
79-00-5	1 1 2-TRICHLOROETHANE	7.2	U
127-18-4	TETRACHLOROETHENE	7.2	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.2	U
108-90-7	CHLOROBENZENE	31	
100-41-4	ETHYL BENZENE	11	
100-42-5	STYRENE	2.8	J
75-25-2	BROMOFORM	7.2	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.2	U
540-59-0	1,2-DICHLOROETHENE (total)	7.2	U
1330-20-7	XYLENE (total)	22	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T14-1

Sample wt/vol: 5.5 (g/mL) G Lab File ID: M0007

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: not dec. 35 Date Analyzed: 01/02/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	67	J
75-15-0	CARBON DISULFIDE	7.0	U
75-09-2	METHYLENE CHLORIDE	2.3	J
75-34-3	1 1-DICHLOROETHANE	7.0	U
78-93-3	2-BUTANONE	9.0	J
67-66-3	CHLOROFORM	7.0	U
71-55-6	1 1 1-TRICHLOROETHANE	7.0	U
56-23-5	CARBON TETRACHLORIDE	7.0	U
71-43-2	BENZENE	7.0	U
107-06-2	1 2-DICHLOROETHANE	7.0	U
79-01-6	TRICHLOROETHENE	7.0	U
78-87-5	1 2-DICHLOROPROPANE	7.0	U
75-27-4	BROMODICHLOROMETHANE	7.0	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	14	J-M
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	7.0	U
127-18-4	TETRACHLOROETHENE	7.0	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	7.0	U
108-90-7	CHLOROBENZENE	8.2	
100-41-4	ETHYL BENZENE	7.0	U
100-42-5	STYRENE	7.0	U
75-25-2	BROMOFORM	7.0	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.0	U
540-59-0	1,2-DICHLOROETHENE (total)	7.0	U
1330-20-7	XYLENE (total)	7.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T17-1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: M0008

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: not dec. 43 Date Analyzed: 01/02/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	19	U
75-01-4	VINYL CHLORIDE	19	U
74-83-9	BROMOMETHANE	19	U
75-00-3	CHLOROETHANE	19	U
75-35-4	1 1-DICHLOROETHENE	8.8	U
67-64-1	ACETONE	34	J
75-15-0	CARBON DISULFIDE	9.5	U
75-09-2	METHYLENE CHLORIDE	9.5	U
75-34-3	1 1-DICHLOROETHANE	9.5	U
78-93-3	2-BUTANONE	48	U
67-66-3	CHLOROFORM	9.5	U
71-55-6	1 1 1-TRICHLOROETHANE	9.5	U
56-23-5	CARBON TETRACHLORIDE	9.5	U
71-43-2	BENZENE	9.5	U
107-06-2	1 2-DICHLOROETHANE	9.5	U
79-01-6	TRICHLOROETHENE	9.5	U
78-87-5	1 2-DICHLOROPROPANE	9.5	U
75-27-4	BROMODICHLOROMETHANE	9.5	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	48	U
108-88-3	TOLUENE	9.5	U
10061-02-6	trans-1,3-DICHLOROPROPENE	7.6	U
79-00-5	1 1 2-TRICHLOROETHANE	9.5	U
127-18-4	TETRACHLOROETHENE	9.5	U
591-78-6	2-HEXANONE	48	U
124-48-1	DIBROMOCHLOROMETHANE	9.5	U
108-90-7	CHLOROBENZENE	4.2	J
100-41-4	ETHYL BENZENE	9.5	U
100-42-5	STYRENE	9.5	U
75-25-2	BROMOFORM	9.5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	9.5	U
540-59-0	1,2-DICHLOROETHENE (total)	9.5	U
1330-20-7	XYLENE (total)	9.5	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T1-1

Sample wt/vol: 4.2 (g/mL) G Lab File ID: M0009

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: not dec. 40 Date Analyzed: 01/02/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	20	U
75-01-4	VINYL CHLORIDE	20	U
74-83-9	BROMOMETHANE	20	U
75-00-3	CHLOROETHANE	20	U
75-35-4	1 1-DICHLOROETHENE	9.1	U
67-64-1	ACETONE	37	J
75-15-0	CARBON DISULFIDE	9.9	U
75-09-2	METHYLENE CHLORIDE	9.9	U
75-34-3	1 1-DICHLOROETHANE	9.9	U
78-93-3	2-BUTANONE	8.7	J
67-66-3	CHLOROFORM	9.9	U
71-55-6	1 1 1-TRICHLOROETHANE	9.9	U
56-23-5	CARBON TETRACHLORIDE	9.9	U
71-43-2	BENZENE	9.9	U
107-06-2	1 2-DICHLOROETHANE	9.9	U
79-01-6	TRICHLOROETHENE	9.9	U
78-87-5	1 2-DICHLOROPROPANE	9.9	U
75-27-4	BROMODICHLOROMETHANE	9.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	7.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	50	U
108-88-3	TOLUENE	9.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	7.9	U
79-00-5	1 1 2-TRICHLOROETHANE	9.9	U
127-18-4	TETRACHLOROETHENE	9.9	U
591-78-6	2-HEXANONE	50	U
124-48-1	DIBROMOCHLOROMETHANE	9.9	U
108-90-7	CHLOROBENZENE	5.2	J
100-41-4	ETHYL BENZENE	9.9	U
100-42-5	STYRENE	9.9	U
75-25-2	BROMOFORM	9.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	9.9	U
540-59-0	1,2-DICHLOROETHENE (total)	9.9	U
1330-20-7	XYLENE (total)	9.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T16-1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: M0015

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: not dec. 51 Date Analyzed: 01/03/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	22	UJ-X
75-01-4	VINYL CHLORIDE	22	U
74-83-9	BROMOMETHANE	22	U
75-00-3	CHLOROETHANE	22	U
75-35-4	1 1-DICHLOROETHENE	10	U
67-64-1	ACETONE	48	J-X
75-15-0	CARBON DISULFIDE	11	UJ-X
75-09-2	METHYLENE CHLORIDE	11	U
75-34-3	1 1-DICHLOROETHANE	11	U
78-93-3	2-BUTANONE	55	U
67-66-3	CHLOROFORM	11	U
71-55-6	1 1 1-TRICHLOROETHANE	11	U
56-23-5	CARBON TETRACHLORIDE	11	U
71-43-2	BENZENE	11	U
107-06-2	1 2-DICHLOROETHANE	11	U
79-01-6	TRICHLOROETHENE	11	U
78-87-5	1 2-DICHLOROPROPANE	11	U
75-27-4	BROMODICHLOROMETHANE	11	U
10061-01-5	cis-1,3-DICHLOROPROPENE	8.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	55	U
108-88-3	TOLUENE	11	U
10061-02-6	trans-1,3-DICHLOROPROPENE	8.9	U
79-00-5	1 1 2-TRICHLOROETHANE	11	U
127-18-4	TETRACHLOROETHENE	11	U
591-78-6	2-HEXANONE	55	U
124-48-1	DIBROMOCHLOROMETHANE	11	U
108-90-7	CHLOROBENZENE	210	J-X
100-41-4	ETHYL BENZENE	4.9	J-X
100-42-5	STYRENE	11	UJ-X
75-25-2	BROMOFORM	11	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	11	U
540-59-0	1,2-DICHLOROETHENE (total)	11	U
1330-20-7	XYLENE (total)	11	U

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 17, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO021vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL080	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for four sediment samples analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The samples were collected at the Sauget Area 1 site in Sauget and Cahokia, IL on January 8, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL080.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J, UJ) due to certain QC nonconformances (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSF-T5-1	CBS-CSF-T15-1
CBS-CSF-T14-1	CBS-CSF-T15-1-FD (field duplicate of CBS-CSF-T15-1)

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC, with the exception of sample SP-011, which was not included in the scope of this data validation effort.

The laboratory reported the full field sample identification (ID) in the lab ID field on the Form Is in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on sample CBS-CSF-T15-1 with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits, except as noted below. The following table summarizes the non-compliant %Rs and RPD. The non-detect result form bromomethane was qualified as estimated (UJ). The remaining analytes were accepted unqualified.

Compound	CBS-CSF-T15-1 MS (%R)	CBS-CSF-T15-1 MSD (%R)	RPD (%)
Acetone	162	183	ok
2-Hexanone	131	133	ok
Bromomethane	ok	ok	83

Field Duplicate Results

Samples CBS-CSF-T15-1 and CBS-CSF-T15-1-FD were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	CBS-CSF-T15-1 (µg/kg)	CBS-CSF-T15-1-FD (µg/kg)	RPD (%)
Methylene chloride	2.4 J	6.6 U	NC
Toluene	12	6.6 U	NC
Xylene (total)	4.8 J	6.6 U	NC
NC – RPDs were not calculable due to a non-detect result in the field duplicate.			

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LCS Results

The %Rs of the soil LCS were within the QC acceptance criteria.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T5-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0979

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: not dec. 28 Date Analyzed: 01/11/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	U
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.4	U
67-64-1	ACETONE	64	J
75-15-0	CARBON DISULFIDE	6.9	U
75-09-2	METHYLENE CHLORIDE	6.9	U
75-34-3	1 1-DICHLOROETHANE	6.9	U
78-93-3	2-BUTANONE	10	J
67-66-3	CHLOROFORM	6.9	U
71-55-6	1 1 1-TRICHLOROETHANE	6.9	U
56-23-5	CARBON TETRACHLORIDE	6.9	U
71-43-2	BENZENE	6.9	U
107-06-2	1 2-DICHLOROETHANE	6.9	U
79-01-6	TRICHLOROETHENE	6.9	U
78-87-5	1 2-DICHLOROPROPANE	6.9	U
75-27-4	BROMODICHLOROMETHANE	6.9	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.6	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	35	U
108-88-3	TOLUENE	6.9	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.6	U
79-00-5	1 1 2-TRICHLOROETHANE	6.9	U
127-18-4	TETRACHLOROETHENE	6.9	U
591-78-6	2-HEXANONE	35	U
124-48-1	DIBROMOCHLOROMETHANE	6.9	U
108-90-7	CHLOROBENZENE	6.9	U
100-41-4	ETHYL BENZENE	6.9	U
100-42-5	STYRENE	6.9	U
75-25-2	BROMOFORM	6.9	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.9	U
540-59-0	1,2-DICHLOROETHENE (total)	6.9	U
1330-20-7	XYLENE (total)	6.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T14-1

Sample wt/vol: 4.6 (g/mL) G Lab File ID: L0980

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: not dec. 26 Date Analyzed: 01/11/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	15	U
75-01-4	VINYL CHLORIDE	15	U
74-83-9	BROMOMETHANE	15	U
75-00-3	CHLOROETHANE	15	U
75-35-4	1 1-DICHLOROETHENE	6.8	U
67-64-1	ACETONE	58	J
75-15-0	CARBON DISULFIDE	7.3	U
75-09-2	METHYLENE CHLORIDE	7.3	U
75-34-3	1 1-DICHLOROETHANE	7.3	U
78-93-3	2-BUTANONE	10	J
67-66-3	CHLOROFORM	7.3	U
71-55-6	1 1 1-TRICHLOROETHANE	7.3	U
56-23-5	CARBON TETRACHLORIDE	7.3	U
71-43-2	BENZENE	7.3	U
107-06-2	1 2-DICHLOROETHANE	7.3	U
79-01-6	TRICHLOROETHENE	7.3	U
78-87-5	1 2-DICHLOROPROPANE	7.3	U
75-27-4	BROMODICHLOROMETHANE	7.3	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.9	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	37	U
108-88-3	TOLUENE	7.3	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.9	U
79-00-5	1 1 2-TRICHLOROETHANE	7.3	U
127-18-4	TETRACHLOROETHENE	7.3	U
591-78-6	2-HEXANONE	37	U
124-48-1	DIBROMOCHLOROMETHANE	7.3	U
108-90-7	CHLOROBENZENE	7.3	U
100-41-4	ETHYL BENZENE	7.3	U
100-42-5	STYRENE	7.3	U
75-25-2	BROMOFORM	7.3	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.3	U
540-59-0	1,2-DICHLOROETHENE (total)	7.3	U
1330-20-7	XYLENE (total)	7.3	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T15-1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0981

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: not dec. 30 Date Analyzed: 01/11/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	14	U
75-01-4	VINYL CHLORIDE	14	U
74-83-9	BROMOMETHANE	14	UJ-M
75-00-3	CHLOROETHANE	14	U
75-35-4	1 1-DICHLOROETHENE	6.6	U
67-64-1	ACETONE	71	U
75-15-0	CARBON DISULFIDE	7.1	U
75-09-2	METHYLENE CHLORIDE	2.4	J
75-34-3	1 1-DICHLOROETHANE	7.1	U
78-93-3	2-BUTANONE	36	U
67-66-3	CHLOROFORM	7.1	U
71-55-6	1 1 1-TRICHLOROETHANE	7.1	U
56-23-5	CARBON TETRACHLORIDE	7.1	U
71-43-2	BENZENE	7.1	U
107-06-2	1 2-DICHLOROETHANE	7.1	U
79-01-6	TRICHLOROETHENE	7.1	U
78-87-5	1 2-DICHLOROPROPANE	7.1	U
75-27-4	BROMODICHLOROMETHANE	7.1	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.7	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	36	U
108-88-3	TOLUENE	12	
10061-02-6	trans-1,3-DICHLOROPROPENE	5.7	U
79-00-5	1 1 2-TRICHLOROETHANE	7.1	U
127-18-4	TETRACHLOROETHENE	7.1	U
591-78-6	2-HEXANONE	36	U
124-48-1	DIBROMOCHLOROMETHANE	7.1	U
108-90-7	CHLOROBENZENE	7.1	U
100-41-4	ETHYL BENZENE	7.1	U
100-42-5	STYRENE	7.1	U
75-25-2	BROMOFORM	7.1	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7.1	U
540-59-0	1,2-DICHLOROETHENE (total)	7.1	U
1330-20-7	XYLENE (total)	4.8	J

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T15-1-FD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: L0982

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: not dec. 24 Date Analyzed: 01/11/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.0	U
67-64-1	ACETONE	66	U
75-15-0	CARBON DISULFIDE	6.6	U
75-09-2	METHYLENE CHLORIDE	6.6	U
75-34-3	1 1-DICHLOROETHANE	6.6	U
78-93-3	2-BUTANONE	33	U
67-66-3	CHLOROFORM	6.6	U
71-55-6	1 1 1-TRICHLOROETHANE	6.6	U
56-23-5	CARBON TETRACHLORIDE	6.6	U
71-43-2	BENZENE	6.6	U
107-06-2	1 2-DICHLOROETHANE	6.6	U
79-01-6	TRICHLOROETHENE	6.6	U
78-87-5	1 2-DICHLOROPROPANE	6.6	U
75-27-4	BROMODICHLOROMETHANE	6.6	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	33	U
108-88-3	TOLUENE	6.6	U
10061-02-6	trans-1,3-DICHLOROPROPENE	5.3	U
79-00-5	1 1 2-TRICHLOROETHANE	6.6	U
127-18-4	TETRACHLOROETHENE	6.6	U
591-78-6	2-HEXANONE	33	U
124-48-1	DIBROMOCHLOROMETHANE	6.6	U
108-90-7	CHLOROBENZENE	6.6	U
100-41-4	ETHYL BENZENE	6.6	U
100-42-5	STYRENE	6.6	U
75-25-2	BROMOFORM	6.6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.6	U
540-59-0	1,2-DICHLOROETHENE (total)	6.6	U
1330-20-7	XYLENE (total)	6.6	U

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO022vocln.doc 06105-012-201
RE:	Data Validation VOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, IL STL SDG SIL084	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for one sediment sample analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) using SW-846 method 8260B. The sample was collected at the Sauget Area 1 site in Sauget and Cahokia, IL on February 14, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL084.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), *the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes (see discussion below).

SAMPLES

The sample included in this review is listed below:

Sample Identification
CBS-CSE-T13-2

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Laboratory blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample identification (ID) in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Laboratory Blanks

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on a non-client sample with this sample set. No action was taken based on MS/MSD analyses.

Field Duplicate Results

Field duplicates were not submitted with this sample set.

LCS Results

The %Rs of the soil LCS were within the QC acceptance criteria.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

41071-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL Case No.: SAS No.: SDG No.: SIL084

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T13-2

Sample wt/vol: 5.6 (g/mL) G Lab File ID: L4218

Level: (low/med) LOW Date Received: 02/15/02

% Moisture: not dec. 33 Date Analyzed: 02/19/02

GC Column: DB-624 ID: 0.18 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(mL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	13	U
75-01-4	VINYL CHLORIDE	13	U
74-83-9	BROMOMETHANE	13	U
75-00-3	CHLOROETHANE	13	U
75-35-4	1 1-DICHLOROETHENE	6.1	U
67-64-1	ACETONE	29	J
75-15-0	CARBON DISULFIDE	6.7	U
75-09-2	METHYLENE CHLORIDE	6.7	U
75-34-3	1 1-DICHLOROETHANE	6.7	U
78-93-3	2-BUTANONE	33	U
67-66-3	CHLOROFORM	6.7	U
71-55-6	1 1 1-TRICHLOROETHANE	6.7	U
56-23-5	CARBON TETRACHLORIDE	6.7	U
71-43-2	BENZENE	6.7	U
107-06-2	1 2-DICHLOROETHANE	6.7	U
79-01-6	TRICHLOROETHENE	6.7	U
78-87-5	1 2-DICHLOROPROPANE	6.7	U
75-27-4	BROMODICHLOROMETHANE	6.7	U
10061-01-5	cis-1,3-DICHLOROPROPENE	5.3	U
108-10-1	4-METHYL-2-PENTANONE (MIBK)	33	U
108-88-3	TOLUENE	2.6	J
10061-02-6	trans-1,3-DICHLOROPROPENE	5.3	U
79-00-5	1 1 2-TRICHLOROETHANE	6.7	U
127-18-4	TETRACHLOROETHENE	6.7	U
591-78-6	2-HEXANONE	33	U
124-48-1	DIBROMOCHLOROMETHANE	6.7	U
108-90-7	CHLOROBENZENE	12	
100-41-4	ETHYL BENZENE	6.7	U
100-42-5	STYRENE	6.7	U
75-25-2	BROMOFORM	6.7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6.7	U
540-59-0	1,2-DICHLOROETHENE (total)	6.7	U
1330-20-7	XYLENE (total)	6.7	U

2

APPENDIX A-2

SEMIVOLATILE ORGANIC COMPOUNDS

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 22, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO001svocjas.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG SIL070	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for 16 sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on November 8, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group SIL070.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to nonconformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T6-C1	CBS-CSB-T6-C1-D (field duplicate of CBS-CSB-T6-C1)
CBS-CSB-T6-E1	CBS-CSB-T6-W1
CBS-CSB-T7-E1	CBS-CSB-T7-W1
CBS-CSB-T8-E1	CBS-CSB-T7-C1
CBS-CSB-T8-W1	CBS-CSB-T8-C1
CBS-CSB-T9-C1	CBS-CSB-T9-E1
CBS-CSB-T9-W1	CBS-CSB-T10-E1
CBS-CSB-T10-W1	CBS-CSB-T10-C1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation

ENSR

- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding times.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSB-T7-W1 was submitted for MS/MSD analyses with this sample set. The percent recoveries (%Rs) of the spiked target compounds in the MS analysis were within the QC acceptance limits. The following table summarizes the %Rs and relative percent differences (RPDs) of the spiked target compounds, which were outside the QC acceptance limits in the MS/MSD analyses. With the exception of 4-nitrophenol, nondetects for the affected compounds were qualified as estimated (UJ) in sample CBS-CSB-T7-W1. The nondetect result for 2-nitrophenol was accepted unqualified in sample CBS-CSB-T7-W1.

Compound	CBS-CSB-T7-W1 MSD (%R)	RPD (%)
1,3-Dichlorobenzene	ok	31
1,2-Dichlorobenzene	ok	26
Bis(2-chloroisopropyl)ether	ok	31
Hexachlorocyclopentadiene	ok	98
3-Nitroaniline	ok	38
Chrysene	ok	25
1,2,4-Trichlorobenzene	ok	26
Pentachlorophenol	ok	71
4-Nitrophenol	121	ok

Field Duplicate Results

Samples CBS-CSB-T6-C1 and CBS-CSB-T6-C1-D were submitted as the field duplicate pair with this sample set. Target analytes were not detected in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids <50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5520

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5520

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil water) SOIL Lab Sample ID: CBS-CSB-T6-C1

Sample wt (vol): 30 (g/mL) G Lab File ID: J5520

Level: (low med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/29/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.02	19000	JAB
2.		UNKNOWN AMIDE	20.17	260	J
3.		UNKNOWN	22.97	2600	J
4.		UNKNOWN	23.26	190	J
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
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25.					
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27.					
28.					
29.					
30.					

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1-D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5397

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/20/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

12

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1-D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5397

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/20/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-C1-D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5397

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/20/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.19	21000	JA
2.	UNKNOWN	20.05	190	J
3.	UNKNOWN	20.35	230	J
4.	UNKNOWN	20.67	230	J
5.	UNKNOWN ALKANE	20.76	260	J
6.	UNKNOWN	20.84	290	J
7.	UNKNOWN	21.55	270	J
8.	UNKNOWN ALKANE	21.71	190	J
9.	UNKNOWN	23.32	260	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5521

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 14 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	200	U J
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	bis(2-Chloroisopropyl)ether	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
106-44-5	3&4-Methylphenol	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	200	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	81	U
95-95-4	2,4,5-Trichlorophenol	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	990	U
208-96-8	Acenaphthylene	200	U
606-20-2	2,6-Dinitrotoluene	200	U
99-09-2	3-Nitroaniline	990	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	990	U
132-64-9	Dibenzofuran	200	U ✓

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5521

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 14 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	990	U J
121-14-2	2,4-Dinitrotoluene	200	U
86-73-7	Fluorene	200	U
131-11-3	Dimethylphthalate	200	U
84-66-2	Diethylphthalate	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	990	U
534-52-1	4,6-Dinitro-2-methylphenol	990	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	81	U
87-86-5	Pentachlorophenol	990	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
84-74-2	Di-n-Butylphthalate	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
56-55-3	Benzo(a)Anthracene	200	U
91-94-1	3,3'-Dichlorobenzidine	380	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	100	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	100	U
191-24-2	Benzo(g,h,i)perylene	200	U
86-74-8	Carbazole	200	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5521

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 14 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.03	15000	JAB
2.		UNKNOWN ALKANE	19.07	180	J
3.		UNKNOWN PAH	19.71	230	J
4.		UNKNOWN ALKANE	19.83	250	J
5.		UNKNOWN	20.03	180	J
6.		UNKNOWN	20.18	580	J
7.		UNKNOWN ALKANE	20.57	250	J
8.		UNKNOWN ALKANE	21.47	190	J
9.		UNKNOWN	22.97	240	J
10.		UNKNOWN	23.28	190	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5522

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 24 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	92	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5522

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	48	J
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	92	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	51	J
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	32	J
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T6-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5522

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 24 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.02	13000	JAB
2.	UNKNOWN	15.04	180	J
3.	UNKNOWN	16.65	180	J
4.	UNKNOWN	17.13	370	J
5.	UNKNOWN	17.24	960	J
6.	UNKNOWN AMIDE	20.18	220	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5523

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/29/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	93	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5523

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	93	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5523

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/29/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.03	18000	JAB
2.		UNKNOWN	6.84	180	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5524

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U J-M
106-46-7	1,4-Dichlorobenzene	220	U J
95-50-1	1,2-Dichlorobenzene	220	U J-M
95-48-7	2-Methylphenol	220	U J
108-60-1	bis(2-Chloroisopropyl)ether	220	U J-M
621-64-7	N-Nitroso-di-n-propylamine	220	U J
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U J-M
91-20-3	Naphthalene	220	U J
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U J-M
88-06-2	2,4,6-Trichlorophenol	90	U J
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U J-M
83-32-9	Acenaphthene	220	U J
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

24

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5524

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	UJ-M
121-14-2	2,4-Dinitrotoluene	220	UJ
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	90	U
87-86-5	Pentachlorophenol	1100	UJ-M
85-01-8	Phenanthrene	220	UJ
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	420	U
218-01-9	Chrysene	220	UJ-M
117-81-7	Bis(2-ethylhexyl)phthalate	220	UJ
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-6

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5524

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 22 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.03	18000	JAB
2.	UNKNOWN ALKANE	19.07	190	J
3.	UNKNOWN AMIDE	20.17	340	J
4.	UNKNOWN ALKANE	20.57	200	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5404

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5404

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 30 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	470	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil water) SOIL Lab Sample ID: CBS-CSB-T8-E1

Sample wt vol: 30 g mL) G Lab File ID: J5404

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.20	24000	JA
2.		UNKNOWN	5.52	900	J
3.		UNKNOWN AMIDE	20.34	360	J
4.		UNKNOWN	20.53	200	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5405

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5405

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	61	J
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T7-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5405

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.20	17000	JA
2.	UNKNOWN	15.21	380	J
3.	UNKNOWN	16.80	220	J
4.	UNKNOWN	17.39	280	J
5. 10544-50-0	SULFUR, MOL. (S8)	17.54	860	NJ
6.	UNKNOWN	19.47	570	J
7.	UNKNOWN ALKANE	19.98	190	J
8.	UNKNOWN AMIDE	20.34	840	J
9.	UNKNOWN	20.45	1700	J
10.	UNKNOWN ALKANE	20.75	220	J
11.	UNKNOWN	22.98	420	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-9

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5526

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	UJ
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-9

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5526

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-9

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5526

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.03	17000	JAB
2.					
3.					
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-10

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5407

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-10

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5407

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-10

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T8-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5407

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 28 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/21/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.20	7500	JA
2.	UNKNOWN	14.08	1900	J
3.	UNKNOWN	15.84	350	J
4.	UNKNOWN	16.31	440	J
5.	UNKNOWN	16.40	290	J
6.	UNKNOWN	16.54	850	J
7.	UNKNOWN	16.76	580	J
8.	UNKNOWN	16.88	230	J
9.	UNKNOWN	16.98	510	J
10.	UNKNOWN	17.12	320	J
11. 10544-50-0	SULFUR, MOL. (S8)	17.30	9400	NJ
12.				
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-11

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5527

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-11

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5527

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-11

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5527

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.03	12000	JAB
2.		UNKNOWN	15.04	380	J
3.	10544-50-0	SULFUR, MOL. (S8)	17.37	1400	NJ
4.		UNKNOWN ALKANE	19.83	200	J
5.		UNKNOWN ALKANE	20.19	210	J
6.		UNKNOWN	20.27	420	J
7.		UNKNOWN ALKANE	20.57	220	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-12

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5528

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	92	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

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FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-12

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5528

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	92	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U ✓

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-12

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5528

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 24 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.03	15000	JAB
2.		UNKNOWN	20.18	240	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-13

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5554

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 23 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	91	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-13

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5554

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 23 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	91	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-13

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T9-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5554

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 23 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.00	14000	JAB
2.					
3.					
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-14

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5555

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-14

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5555

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-14

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5555

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.00	24000	JAB
2.		UNKNOWN	23.23	240	J
3.					
4.					
5.					
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-15

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5556

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-15

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5556

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-15

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5556

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.00	18000	JAB
2.	UNKNOWN	5.32	720	JB
3.	UNKNOWN ALKANE	20.17	250	J
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-16

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5557

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 30 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17315-16

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5557

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 11/15/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	470	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	120	J
117-84-0	Di-n-octylphthalate	240	U J
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17315-16

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL070

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T10-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5557

Level: (low/med) LOW Date Received: 11/09/01

% Moisture: 30 decanted: (Y/N) N Date Extracted:11/15/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 15

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.00	18000	JAB
2.	UNKNOWN	13.79	610	J
3.	UNKNOWN	13.84	280	J
4.	UNKNOWN	15.03	560	J
5.	UNKNOWN	15.92	340	J
6.	UNKNOWN	16.20	500	J
7.	UNKNOWN	16.38	950	J
8.	UNKNOWN	16.52	1300	J
9.	UNKNOWN	16.62	990	J
10.	UNKNOWN	16.77	750	J
11.	UNKNOWN	16.92	1800	J
12.	UNKNOWN ORGANIC ACID	17.27	2200	J
13. 10544-50-0	SULFUR, MOL. (S8)	17.38	6100	NJ
14.	UNKNOWN ORGANIC ACID	19.04	380	J
15.	UNKNOWN	20.24	460	J
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FORM I SV-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 22, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO007svocjas.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG SIL062	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for four sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on June 22, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group SIL062.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. The result for hexachlorocyclopentadiene in sample SED-M-S2 0-6" was rejected (R) due to percent recoveries (%Rs) <10% in the MS/MSD analyses. Selected data points were qualified as estimated (J/UJ) due to nonconformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
SED-M-S2 0-6"	SED-M-S5 0-6"
SED-M-S8 0-6"	SED-M-S10- 0-6"

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results

ENSR

- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding times.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample SED-M-S2 0-6" was submitted for MS/MSD analyses with this sample set. The relative percent differences (RPDs) of the spiked target compounds were within the QC acceptance limits. The following table summarizes the %Rs of the spiked target compounds in the MS/MSD analyses which were outside the QC acceptance limits. The MS/MSD analyses were reanalyzed yielding similar nonconformance. The initial MS/MSD analyses were used. Positive results and nondetects were qualified as estimated (J, UJ) for sample SED-M-S2 0-6". The nondetect result for hexachlorocyclopentadiene was rejected (R) in sample SED-M-S2 0-6" due to the %Rs <10% in the MS/MSD analyses.

Compound	MS/MSD (%R)
1,3-Dichlorobenzene	22/24
Bis(2-chloroethoxy)methane	33/30
Hexachlorobutadiene	26/28
Hexachlorcyclopentadiene	0/5
2,4,6-Trichlorophenol	35/37
2-Chloronaphthalene	30/33
Acenaphthylene	35/35
Dibenzofuran	35/ok
Dimethylphthate	35/39
4-Chlorophenyl phenyl ether	33/35
N-Nitrosodiphenyl amine	35/37
4-Bromophenylphenylether	30/ok
Benzo(a)anthracene	39/41
Chrysene	41/43
Bis(2-ethylhexyl)phthalate	41/46
Phenanthrene	35/37
Anthracene	33/37

Compound	MS/MSD (%R)
2-Nitrophenol	ok/28
Di-n-butylphthalate	37/39
Fluoranthene	35/ok
Butylbenzylphthalate	39/43
Benzo(b)fluoranthene	37/39
Benzo(a)pyrene	37/39

Field Duplicate Results

A field duplicate pair was not submitted with this sample set.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results/Quantitation Limits

Dilutions were not performed on any samples in this sample set.

It should be noted that samples SED-M-S8 0-6" and SED-M-S10 0-6" were extracted with 5g of soil instead of the usual 30g due to an oily matrix. The laboratory elevated sample quantitation limits (SQLs) accordingly.

There were no samples reported with percent solids <50%.

It should be noted that the SQLs for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S2 0-6"

Sample wt/vol: 30 (g/mL) G Lab File ID: E8828

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	UJ
111-44-4	Bis(2-chloroethyl)ether	230	~~UJ-M~~ UJ
95-57-8	2-Chlorophenol	230	UJ
541-73-1	1,3-Dichlorobenzene	230	UJ-M
106-46-7	1,4-Dichlorobenzene	230	UJ
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	UJ-M
111-91-1	Bis(2-chloroethoxy)methane	230	UJ-M
120-83-2	2,4-Dichlorophenol	230	UJ
120-82-1	1,2,4-Trichlorobenzene	230	UJ
91-20-3	Naphthalene	230	UJ
106-47-8	4-Chloroaniline	450	UJ
87-68-3	Hexachlorobutadiene	230	UJ-M
59-50-7	4-Chloro-3-methylphenol	230	UJ
91-57-6	2-Methylnaphthalene	230	UJ
77-47-4	Hexachlorocyclopentadiene	R-M ~~230~~	~~UJ-M~~
88-06-2	2,4,6-Trichlorophenol	96	UJ-M
95-95-4	2,4,5-Trichlorophenol	230	UJ
91-58-7	2-Chloronaphthalene	230	UJ-M
88-74-4	2-Nitroaniline	1200	UJ
208-96-8	Acenaphthylene	230	UJ-M
606-20-2	2,6-Dinitrotoluene	230	UJ
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	UJ-M

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S2 0-6"

Sample wt/vol: 30 (g/mL) G Lab File ID: E8828

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	230	UJ
86-73-7	Fluorene	230	UJ
131-11-3	Dimethylphthalate	230	UJ-M
84-66-2	Diethylphthalate	230	UJ
7005-72-3	4-Chlorophenyl-phenylether	230	UJ-M
100-01-6	4-Nitroaniline	1200	UJ
534-52-1	4,6-Dinitro-2-methylphenol	1200	UJ
86-30-6	N-Nitrosodiphenylamine (1)	230	UJ-M
101-55-3	4-Bromophenyl-phenylether	230	UJ-M
118-74-1	Hexachlorobenzene	96	UJ
87-86-5	Pentachlorophenol	1200	UJ
85-01-8	Phenanthrene	230	UJ-M
120-12-7	Anthracene	230	UJ-M
84-74-2	Di-n-Butylphthalate	230	UJ-M
206-44-0	Fluoranthene	230	UJ-M
129-00-0	Pyrene	230	UJ
85-68-7	Butylbenzylphthalate	230	UJ-M
56-55-3	Benzo(a)Anthracene	230	UJ-M
91-94-1	3,3'-Dichlorobenzidine	450	UJ
218-01-9	Chrysene	230	UJ-M
117-81-7	Bis(2-ethylhexyl)phthalate	230	UJ-M
117-84-0	Di-n-octylphthalate	230	UJ
205-99-2	Benzo(b)fluoranthene	230	UJ-M
207-08-9	Benzo(k)fluoranthene	230	UJ
50-32-8	Benzo(a)pyrene	120	UJ-M
193-39-5	Indeno(1,2,3-cd)pyrene	230	UJ
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S2 0-6"

Sample wt/vol: 30 (g/mL) G Lab File ID: E8828

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	3.16	14000	JAB
2.		UNKNOWN	3.58	600	J
3.		UNKNOWN	4.08	980	J
4.		UNKNOWN	4.67	790	J
5.		UNKNOWN	12.68	600	J
6.		UNKNOWN	13.17	200	J
7.		UNKNOWN	18.96	190	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S5 0-6"

Sample wt/vol: 30 (g/mL) G Lab File ID: E8822

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 20 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
541-73-1	1,3-Dichlorobenzene	210	U
106-46-7	1,4-Dichlorobenzene	210	U
95-50-1	1,2-Dichlorobenzene	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	bis(2-Chloroisopropyl)ether	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
106-44-5	3&4-Methylphenol	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
120-82-1	1,2,4-Trichlorobenzene	210	U
91-20-3	Naphthalene	44	J
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	88	U
95-95-4	2,4,5-Trichlorophenol	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	210	U
606-20-2	2,6-Dinitrotoluene	210	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	39	J
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	210	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S5 0-6"

Sample wt/vol: 30 (g/mL) G Lab File ID: E8822

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 20 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	210	U J
86-73-7	Fluorene	40	J
131-11-3	Dimethylphthalate	210	U J
84-66-2	Diethylphthalate	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	88	U
87-86-5	Pentachlorophenol	1100	U ✓
85-01-8	Phenanthrene	97	J
120-12-7	Anthracene	210	U J
84-74-2	Di-n-Butylphthalate	210	U J
206-44-0	Fluoranthene	68	J
129-00-0	Pyrene	210	U J
85-68-7	Butylbenzylphthalate	210	U J
56-55-3	Benzo(a)Anthracene	26	J
91-94-1	3,3'-Dichlorobenzidine	410	U J
218-01-9	Chrysene	37	J
117-81-7	Bis(2-ethylhexyl)phthalate	95	J
117-84-0	Di-n-octylphthalate	210	U J
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	110	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	110	U ✓
191-24-2	Benzo(g,h,i)perylene	34	J
86-74-8	Carbazole	210	U J

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S5 0-6"

Sample wt/vol: 30 (g/mL) G Lab File ID: E8822

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 20 decanted: (Y/N) N Date Extracted:07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 16

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	3.17	19000	JAB
2.		UNKNOWN	3.97	700	JB
3.		UNKNOWN ALKANE	10.43	180	J
4.		UNKNOWN	11.33	190	J
5.		UNKNOWN	11.57	210	J
6.		UNKNOWN ALKENE	11.65	210	J
7.		UNKNOWN	11.89	270	J
8.		UNKNOWN ORGANIC ACID	12.15	260	J
9.		UNKNOWN	12.68	320	J
10.	7704-34-9	SULFUR	12.88	570	NJ
11.		UNKNOWN TETRACHLOROBIPHENYL	13.01	180	J
12.		UNKNOWN	16.41	470	J
13.		UNKNOWN	18.01	180	J
14.		UNKNOWN	18.16	220	J
15.		UNKNOWN	18.98	400	J
16.		UNKNOWN	19.77	170	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S8 0-6"

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E8823

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1500	U
111-44-4	Bis(2-chloroethyl)ether	1500	U
95-57-8	2-Chlorophenol	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	370	J
95-50-1	1,2-Dichlorobenzene	1500	U
95-48-7	2-Methylphenol	1500	U
108-60-1	bis(2-Chloroisopropyl)ether	1500	U
621-64-7	N-Nitroso-di-n-propylamine	1500	U
106-44-5	3&4-Methylphenol	1500	U
67-72-1	Hexachloroethane	1500	U
98-95-3	Nitrobenzene	1500	U
78-59-1	Isophorone	1500	U
88-75-5	2-Nitrophenol	1500	U
111-91-1	Bis(2-chloroethoxy)methane	1500	U
120-83-2	2,4-Dichlorophenol	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U
91-20-3	Naphthalene	1500	U
106-47-8	4-Chloroaniline	3000	U
87-68-3	Hexachlorobutadiene	1500	U
59-50-7	4-Chloro-3-methylphenol	1500	U
91-57-6	2-Methylnaphthalene	1500	U
77-47-4	Hexachlorocyclopentadiene	1500	U
88-06-2	2,4,6-Trichlorophenol	630	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	1500	U
88-74-4	2-Nitroaniline	7600	U
208-96-8	Acenaphthylene	1500	U
606-20-2	2,6-Dinitrotoluene	1500	U
99-09-2	3-Nitroaniline	7600	U
83-32-9	Acenaphthene	1500	U
51-28-5	2,4-Dinitrophenol	7600	U
132-64-9	Dibenzofuran	1500	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S8 0-6"

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E8823

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	7600	U J
121-14-2	2,4-Dinitrotoluene	1500	U
86-73-7	Fluorene	1500	U
131-11-3	Dimethylphthalate	1500	U
84-66-2	Diethylphthalate	1500	U
7005-72-3	4-Chlorophenyl-phenylether	1500	U
100-01-6	4-Nitroaniline	7600	U
534-52-1	4,6-Dinitro-2-methylphenol	7600	U
86-30-6	N-Nitrosodiphenylamine (1)	1500	U
101-55-3	4-Bromophenyl-phenylether	1500	U
118-74-1	Hexachlorobenzene	630	U
87-86-5	Pentachlorophenol	7600	U ✓
85-01-8	Phenanthrene	370	J
120-12-7	Anthracene	1500	U J
84-74-2	Di-n-Butylphthalate	1500	U J
206-44-0	Fluoranthene	410	J
129-00-0	Pyrene	1500	U J
85-68-7	Butylbenzylphthalate	1500	U J
56-55-3	Benzo(a)Anthracene	220	J
91-94-1	3,3'-Dichlorobenzidine	3000	U J
218-01-9	Chrysene	210	J
117-81-7	Bis(2-ethylhexyl)phthalate	1500	U J
117-84-0	Di-n-octylphthalate	1500	U
205-99-2	Benzo(b)fluoranthene	1500	U
207-08-9	Benzo(k)fluoranthene	1500	U
50-32-8	Benzo(a)pyrene	800	U
193-39-5	Indeno(1,2,3-cd)pyrene	1500	U
53-70-3	Dibenzo(a,h)anthracene	800	U
191-24-2	Benzo(g,h,i)perylene	1500	U
86-74-8	Carbazole	1500	U ✓

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S8 0-6"

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E8823

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 15

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	3.17	150000	JAB
2.	UNKNOWN	3.97	5700	JB
3.	UNKNOWN ORGANIC ACID	12.16	1700	J
4.	UNKNOWN	12.69	18000	J
5.	UNKNOWN	12.88	7000	J
6.	UNKNOWN	13.18	9000	J
7.	UNKNOWN	13.38	1400	J
8.	UNKNOWN	13.83	3900	J
9.	UNKNOWN	13.89	2600	J
10.	UNKNOWN	14.01	1500	J
11.	UNKNOWN	14.68	1600	J
12.	UNKNOWN	18.75	1500	J
13.	UNKNOWN	18.97	2700	J
14.	UNKNOWN	19.03	2500	J
15.	UNKNOWN	19.77	5600	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S10 0-6"

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E8824

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 34 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1500	U J
111-44-4	Bis(2-chloroethyl)ether	1500	U
95-57-8	2-Chlorophenol	1500	U
541-73-1	1,3-Dichlorobenzene	1500	U
106-46-7	1,4-Dichlorobenzene	4100	
95-50-1	1,2-Dichlorobenzene	1500	U J
95-48-7	2-Methylphenol	1500	U
108-60-1	bis(2-Chloroisopropyl)ether	1500	U
621-64-7	N-Nitroso-di-n-propylamine	1500	U
106-44-5	3&4-Methylphenol	1500	U
67-72-1	Hexachloroethane	1500	U
98-95-3	Nitrobenzene	1500	U
78-59-1	Isophorone	1500	U
88-75-5	2-Nitrophenol	1500	U
111-91-1	Bis(2-chloroethoxy)methane	1500	U
120-83-2	2,4-Dichlorophenol	1500	U
120-82-1	1,2,4-Trichlorobenzene	1500	U
91-20-3	Naphthalene	1500	U
106-47-8	4-Chloroaniline	3000	U
87-68-3	Hexachlorobutadiene	1500	U
59-50-7	4-Chloro-3-methylphenol	1500	U
91-57-6	2-Methylnaphthalene	1500	U
77-47-4	Hexachlorocyclopentadiene	1500	U
88-06-2	2,4,6-Trichlorophenol	640	U
95-95-4	2,4,5-Trichlorophenol	1500	U
91-58-7	2-Chloronaphthalene	1500	U
88-74-4	2-Nitroaniline	7700	U
208-96-8	Acenaphthylene	1500	U
606-20-2	2,6-Dinitrotoluene	1500	U
99-09-2	3-Nitroaniline	7700	U
83-32-9	Acenaphthene	1500	U
51-28-5	2,4-Dinitrophenol	7700	U
132-64-9	Dibenzofuran	1500	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14015-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S10 0-6"

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E8824

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 34 decanted: (Y/N) N Date Extracted: 07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	7700	U
121-14-2	2,4-Dinitrotoluene	1500	U
86-73-7	Fluorene	490	J
131-11-3	Dimethylphthalate	1500	U
84-66-2	Diethylphthalate	1500	U
7005-72-3	4-Chlorophenyl-phenylether	1500	U
100-01-6	4-Nitroaniline	7700	U
534-52-1	4,6-Dinitro-2-methylphenol	7700	U
86-30-6	N-Nitrosodiphenylamine (1)	600	J
101-55-3	4-Bromophenyl-phenylether	1500	U
118-74-1	Hexachlorobenzene	640	U
87-86-5	Pentachlorophenol	7700	U
85-01-8	Phenanthrene	1400	J
120-12-7	Anthracene	230	J
84-74-2	Di-n-Butylphthalate	1500	U
206-44-0	Fluoranthene	1700	
129-00-0	Pyrene	1700	
85-68-7	Butylbenzylphthalate	1500	U
56-55-3	Benzo(a)Anthracene	680	J
91-94-1	3,3'-Dichlorobenzidine	3000	U
218-01-9	Chrysene	780	J
117-81-7	Bis(2-ethylhexyl)phthalate	1500	U
117-84-0	Di-n-octylphthalate	1500	U
205-99-2	Benzo(b)fluoranthene	540	J
207-08-9	Benzo(k)fluoranthene	340	J
50-32-8	Benzo(a)pyrene	480	J
193-39-5	Indeno(1,2,3-cd)pyrene	1500	U
53-70-3	Dibenzo(a,h)anthracene	820	U
191-24-2	Benzo(g,h,i)perylene	410	J
86-74-8	Carbazole	1500	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14015-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL062

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S10 0-6"

Sample wt/vol: 5.0 (g/mL) G Lab File ID: E8824

Level: (low/med) LOW Date Received: 06/25/01

% Moisture: 34 decanted: (Y/N) N Date Extracted:07/03/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	3.16	97000	JAB
2.	UNKNOWN TETRACHLOROBIPHENYL	12.19	7100	J
3.	UNKNOWN	12.45	5000	J
4.	UNKNOWN	12.70	100000	J
5.	UNKNOWN	12.90	40000	J
6.	UNKNOWN	13.18	6800	J
7.	UNKNOWN PENTACHLOROBIPHENYL	13.37	3800	J
8.	UNKNOWN	13.51	2900	J
9.	UNKNOWN PENTACHLOROBIPHENYL	13.72	4200	J
10.	UNKNOWN	13.83	9800	J
11.	UNKNOWN	13.89	6300	J
12.	UNKNOWN PENTACHLOROBIPHENYL	13.99	5200	J
13.	UNKNOWN	14.01	3000	J
14.	UNKNOWN HEXACHLOROBIPHENYL I	14.53	3000	J
15.	UNKNOWN	14.69	5900	J
16.	UNKNOWN	14.83	3000	J
17.	UNKNOWN	18.16	3000	J
18.	UNKNOWN	18.98	6300	J
19.	UNKNOWN	19.04	4000	J
20.	UNKNOWN	19.79	7800	J
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FORM I SV-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 23, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO008svocjas.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG SIL063	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for three sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on July 10, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group SIL063.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. The nondetect result for hexachlorocyclopentadiene in sample SED-M-S6-(0-6") was rejected (R) due to percent recoveries (%Rs) <10% in the MS/MSD analyses. Selected data points were also qualified as estimated (J/UJ) due to nonconformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
SED-M-S3-(0-6")	SED-M-S6-(0-6")
SED-M-S9-(0-6")	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results

ENSR

- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding times.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample SED-M-S6-(0-6") was submitted for MS/MSD analyses with this sample set. The relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits. The following table summarizes the %Rs of the spiked target compounds in the MS/MSD analyses, which were outside the QC acceptance limits. The MS/MSD analyses were reanalyzed yielding similar nonconformance. Results from the initial MS/MSD analyses were used for data review. With the exception of hexachlorocyclopentadiene, positive results and nondetects for the affected compounds were qualified as estimated (J and UJ, respectively) in sample SED-M-S6-(0-6"). The nondetect result for hexachlorocyclopentadiene was rejected (R) due to %Rs < 10%.

Compound	SED-M-S6-(0-6") MS (%R)	SED-M-S6-(0-6") MSD (%R)
Hexachlorocyclopentadiene	0	0
Diethylphthalate	ok	46
N-Nitrosodiphenyl amine	ok	44
Butylbenzylphthalate	ok	51
Benzo(a)anthracene	ok	50
Chrysene	ok	49

Field Duplicate Results

A field duplicate pair was not submitted with this sample set.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

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Sample Results/Quantitation Limits

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids <50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL and postive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: soil/water SOIL Lab Sample ID: SED-M-S3-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8886

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	1200	
95-50-1	1,2-Dichlorobenzene	210	J
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	160	J
91-20-3	Naphthalene	160	J
106-47-8	4-Chloroaniline	100	J
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	90	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	86	J
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	77	J

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S3-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8886

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U J
86-73-7	Fluorene	180	J
131-11-3	Dimethylphthalate	220	U J
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	90	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	180	J
120-12-7	Anthracene	81	J
84-74-2	Di-n-Butylphthalate	220	U J
206-44-0	Fluoranthene	420	J
129-00-0	Pyrene	440	J
85-68-7	Butylbenzylphthalate	220	U J
56-55-3	Benzo(a)Anthracene	150	J
91-94-1	3,3'-Dichlorobenzidine	420	U J
218-01-9	Chrysene	210	J
117-81-7	Bis(2-ethylhexyl)phthalate	86	J
117-84-0	Di-n-octylphthalate	220	U J
205-99-2	Benzo(b)fluoranthene	120	J
207-08-9	Benzo(k)fluoranthene	99	J
50-32-8	Benzo(a)pyrene	130	J
193-39-5	Indeno(1,2,3-cd)pyrene	170	J
53-70-3	Dibenzo(a,h)anthracene	150	J
191-24-2	Benzo(g,h,i)perylene	220	J
86-74-8	Carbazole	32	J

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14342-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S3-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8886

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	2.96	4300	JAB
2.		UNKNOWN ALDOL CONDENSATE	2.98	5800	JAB
3.		UNKNOWN	10.13	1200	J
4.		UNKNOWN	12.22	1500	J
5.		UNKNOWN	12.48	20000	J
6.		UNKNOWN	12.58	1600	J
7.	7704-34-9	SULFUR	12.69	24000	NJ
8.		UNKNOWN	12.96	9600	J
9.		UNKNOWN ORGANIC ACID	13.20	1500	J
10.		UNKNOWN	13.29	1000	J
11.		UNKNOWN PAH	13.63	4600	J
12.		UNKNOWN	13.69	2800	J
13.		UNKNOWN	13.81	1400	J
14.		UNKNOWN	14.12	1100	J
15.		UNKNOWN	14.24	860	J
16.		UNKNOWN	14.36	960	J
17.		UNKNOWN	14.49	2500	J
18.		UNKNOWN	14.62	1800	J
19.		UNKNOWN	18.68	1400	J
20.		UNKNOWN	19.41	1200	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S6-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8887

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	~~220~~	~~U~~ R-M
88-06-2	2,4,6-Trichlorophenol	90	U J
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S6-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8887

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	UJ-M
7005-72-3	4-Chlorophenyl-phenylether	220	U J
100-01-6	4-Nitroaniline	1100	U J
534-52-1	4,6-Dinitro-2-methylphenol	1100	U J
86-30-6	N-Nitrosodiphenylamine (1)	220	UJ-M
101-55-3	4-Bromophenyl-phenylether	220	U J
118-74-1	Hexachlorobenzene	90	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	31	J
120-12-7	Anthracene	220	U J
84-74-2	Di-n-Butylphthalate	220	U J
206-44-0	Fluoranthene	79	J
129-00-0	Pyrene	220	U J
85-68-7	Butylbenzylphthalate	220	UJ-M
56-55-3	Benzo(a)Anthracene	60	J-M
91-94-1	3,3'-Dichlorobenzidine	420	U J
218-01-9	Chrysene	76	J-M
117-81-7	Bis(2-ethylhexyl)phthalate	170	J
117-84-0	Di-n-octylphthalate	220	U J
205-99-2	Benzo(b)fluoranthene	86	J
207-08-9	Benzo(k)fluoranthene	66	J
50-32-8	Benzo(a)pyrene	68	J
193-39-5	Indeno(1,2,3-cd)pyrene	220	U J
53-70-3	Dibenzo(a,h)anthracene	120	U J
191-24-2	Benzo(g,h,i)perylene	92	J
86-74-8	Carbazole	220	U J

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14342-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S6-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8887

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 22 decanted: (Y/N) N Date Extracted:07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	2.96	9800	JAB
2.	UNKNOWN ALDOL CONDENSATE	2.99	8600	JAB
3.	UNKNOWN	8.90	730	J
4.	UNKNOWN	10.97	1000	J
5.	UNKNOWN BIPHENYL	11.95	350	J
6.	UNKNOWN	12.39	340	J
7.	UNKNOWN	12.41	310	J
8.	UNKNOWN	12.47	710	J
9.	UNKNOWN	12.51	360	J
10.	UNKNOWN	12.58	1200	J
11. 10544-50-0	SULFUR, MOL. (S8)	12.70	28000	NJ
12.	UNKNOWN	13.06	550	J
13.	UNKNOWN	13.33	1200	J
14.	UNKNOWN	14.23	440	J
15.	UNKNOWN ORGANIC ACID	14.33	1000	J
16.	UNKNOWN	17.79	390	J
17.	UNKNOWN	18.68	620	J
18.	UNKNOWN	19.41	400	J
19.	UNKNOWN	19.81	460	J
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FORM I SV-TIC

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S9-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8890

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	210	U
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
541-73-1	1,3-Dichlorobenzene	210	U
106-46-7	1,4-Dichlorobenzene	210	U
95-50-1	1,2-Dichlorobenzene	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	bis(2-Chloroisopropyl)ether	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
106-44-5	3&4-Methylphenol	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
120-82-1	1,2,4-Trichlorobenzene	29	J
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	86	U
95-95-4	2,4,5-Trichlorophenol	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	1000	U
208-96-8	Acenaphthylene	210	U
606-20-2	2,6-Dinitrotoluene	210	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	210	U
51-28-5	2,4-Dinitrophenol	1000	U
132-64-9	Dibenzofuran	210	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14342-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S9-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8890

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1000	U J
121-14-2	2,4-Dinitrotoluene	210	U
86-73-7	Fluorene	210	U
131-11-3	Dimethylphthalate	210	U
84-66-2	Diethylphthalate	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine (1)	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	86	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	23	J
120-12-7	Anthracene	210	U J
84-74-2	Di-n-Butylphthalate	210	U J
206-44-0	Fluoranthene	56	J
129-00-0	Pyrene	210	U J
85-68-7	Butylbenzylphthalate	210	U J
56-55-3	Benzo(a)Anthracene	37	J
91-94-1	3,3'-Dichlorobenzidine	410	U J
218-01-9	Chrysene	66	J
117-81-7	Bis(2-ethylhexyl)phthalate	210	U J
117-84-0	Di-n-octylphthalate	210	U J
205-99-2	Benzo(b)fluoranthene	84	J
207-08-9	Benzo(k)fluoranthene	50	J
50-32-8	Benzo(a)pyrene	55	J
193-39-5	Indeno(1,2,3-cd)pyrene	87	J
53-70-3	Dibenzo(a,h)anthracene	78	J
191-24-2	Benzo(g,h,i)perylene	140	J
86-74-8	Carbazole	210	U J

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14342-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL063

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S9-(0-6')

Sample wt/vol: 30 (g/mL) G Lab File ID: E8890

Level: (low/med) LOW Date Received: 07/11/01

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/13/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 07/16/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	2.96	9100	JAB
2.	UNKNOWN ALDOL CONDENSATE	2.99	11000	JAB
3.	UNKNOWN	3.81	440	JB
4.	UNKNOWN ORGANIC ACID	11.95	1100	J
5.	UNKNOWN	12.46	5800	J
6.	UNKNOWN PENTACHLOROBIPHENYL	12.78	320	J
7.	UNKNOWN	12.94	400	J
8.	UNKNOWN PENTACHLOROBIPHENYL	13.06	760	J
9.	UNKNOWN ORGANIC ACID	13.19	720	J
10.	UNKNOWN PENTACHLOROBIPHENYL	13.51	200	J
11.	UNKNOWN PAH	13.63	540	J
12.	UNKNOWN PENTACHLOROBIPHENYL	13.78	180	J
13.	UNKNOWN	14.12	240	J
14.	UNKNOWN	14.23	600	J
15.	UNKNOWN HEXACHLOROBIPHENYL I	14.32	200	J
16.	UNKNOWN	14.61	280	J
17.	UNKNOWN ORGANIC ACID	15.19	180	J
18.	UNKNOWN	18.68	780	J
19.	UNKNOWN	18.73	440	J
20.	UNKNOWN	19.41	390	J
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FORM I SV-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 23, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO009svocjas.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG SIL065	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for three sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on August 1, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group SIL065.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to nonconformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
SED-M-S4-(0-6")	SED-M-S7-(0-6")
SED-M-S7-FD(0-6") (field duplicate of sample SED-M-S7-(0-6")	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results

ENSR

- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding times.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

Due to dilutions performed, surrogate recoveries were not calculable in all sample analyses. No validation action was taken on this basis.

MS/MSD Results

Sample SED-M-S7-(0-6") was submitted for MS/MSD analyses with this sample set. Due to dilutions performed, recoveries and relative percent differences (RPDs) were not calculable in the sample and its MS/MSD analyses. No validation action was taken on this basis.

Field Duplicate Results

Samples SED-M-S7-(0-6") and SED-M-S7-FD(0-6") were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	SED-M-S7-(0-6") (µg/Kg)	SED-M-S7-(0-6") (µg/Kg)	RPD (%)
Phenanthrene	380	480	23
Fluoranthene	1300	1300	0
Pyrene	1300	1300	0
Benzo(a)anthracene	720	720	0
Chrysene	820	810	1
Bis(2-ethylhexyl)phthalate	1400	860	48
Benzo(b)fluoranthene	580	640	10
Benzo(a)pyrene	440	490	11

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

ENSR

Sample Results/Quantitation Limits

Samples SED-M-S4-(0-6"), SED-M-S7-(0-6"), and SED-M-S7-FD(0-6") were analyzed at 10-fold dilution due to concentrations of target analytes which would have exceeded the calibration range if analyzed undiluted. The laboratory elevated sample quantitation limits (SQLs) accordingly.

There were no samples reported with percent solids <50%.

It should be noted that the SQLs for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL and postive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt vol: 30 (g/mL) G Lab File ID: G4839

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2200	U
111-44-4	Bis(2-chloroethyl)ether	2200	U
95-57-8	2-Chlorophenol	2200	U
541-73-1	1,3-Dichlorobenzene	2200	U
106-46-7	1,4-Dichlorobenzene	2200	U
95-50-1	1,2-Dichlorobenzene	2200	U
95-48-7	2-Methylphenol	2200	U
108-60-1	bis(2-Chloroisopropyl)ether	2200	U
621-64-7	N-Nitroso-di-n-propylamine	2200	U
106-44-5	3&4-Methylphenol	2200	U
67-72-1	Hexachloroethane	2200	U
98-95-3	Nitrobenzene	2200	U
78-59-1	Isophorone	2200	U
88-75-5	2-Nitrophenol	2200	U
111-91-1	Bis(2-chloroethoxy)methane	2200	U
120-83-2	2,4-Dichlorophenol	2200	U
120-82-1	1,2,4-Trichlorobenzene	2200	U
91-20-3	Naphthalene	2200	U
106-47-8	4-Chloroaniline	4300	U
87-68-3	Hexachlorobutadiene	2200	U
59-50-7	4-Chloro-3-methylphenol	2200	U
91-57-6	2-Methylnaphthalene	2200	U
77-47-4	Hexachlorocyclopentadiene	2200	U
88-06-2	2,4,6-Trichlorophenol	920	U
95-95-4	2,4,5-Trichlorophenol	2200	U
91-58-7	2-Chloronaphthalene	2200	U
88-74-4	2-Nitroaniline	11000	U
208-96-8	Acenaphthylene	2200	U
606-20-2	2,6-Dinitrotoluene	2200	U
99-09-2	3-Nitroaniline	11000	U
83-32-9	Acenaphthene	2200	U
51-28-5	2,4-Dinitrophenol	11000	U
132-64-9	Dibenzofuran	2200	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt/vol: 30 (g/mL) G Lab File ID: G4839

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	11000	U J
121-14-2	2,4-Dinitrotoluene	2200	U
86-73-7	Fluorene	2200	U
131-11-3	Dimethylphthalate	2200	U
84-66-2	Diethylphthalate	2200	U
7005-72-3	4-Chlorophenyl-phenylether	2200	U
100-01-6	4-Nitroaniline	11000	U
534-52-1	4,6-Dinitro-2-methylphenol	11000	U
86-30-6	N-Nitrosodiphenylamine (1)	2200	U
101-55-3	4-Bromophenyl-phenylether	2200	U
118-74-1	Hexachlorobenzene	920	U
87-86-5	Pentachlorophenol	11000	U
85-01-8	Phenanthrene	2200	U
120-12-7	Anthracene	2200	U
84-74-2	Di-n-Butylphthalate	2200	U
206-44-0	Fluoranthene	420	J
129-00-0	Pyrene	2200	U J
85-68-7	Butylbenzylphthalate	2200	U J
56-55-3	Benzo(a)Anthracene	280	J
91-94-1	3,3'-Dichlorobenzidine	4300	U J
218-01-9	Chrysene	380	J
117-81-7	Bis(2-ethylhexyl)phthalate	2200	U J
117-84-0	Di-n-octylphthalate	2200	U
205-99-2	Benzo(b)fluoranthene	2200	U
207-08-9	Benzo(k)fluoranthene	2200	U
50-32-8	Benzo(a)pyrene	1200	U
193-39-5	Indeno(1,2,3-cd)pyrene	2200	U
53-70-3	Dibenzo(a,h)anthracene	1200	U
191-24-2	Benzo(g,h,i)perylene	2200	U
86-74-8	Carbazole	2200	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S4-(0-6")

Sample wt/vol: 30 (g/mL) G Lab File ID: G4839

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0 uL Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	13.13	6000	J
2.	7704-34-9	SULFUR	13.50	5400	NJ
3.					
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt/vol: 30 (g/mL) G Lab File ID: G4842

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2200	U J
111-44-4	Bis(2-chloroethyl)ether	2200	U
95-57-8	2-Chlorophenol	2200	U
541-73-1	1,3-Dichlorobenzene	2200	U
106-46-7	1,4-Dichlorobenzene	2200	U
95-50-1	1,2-Dichlorobenzene	2200	U
95-48-7	2-Methylphenol	2200	U
108-60-1	bis(2-Chloroisopropyl)ether	2200	U
621-64-7	N-Nitroso-di-n-propylamine	2200	U
106-44-5	3&4-Methylphenol	2200	U
67-72-1	Hexachloroethane	2200	U
98-95-3	Nitrobenzene	2200	U
78-59-1	Isophorone	2200	U
88-75-5	2-Nitrophenol	2200	U
111-91-1	Bis(2-chloroethoxy)methane	2200	U
120-83-2	2,4-Dichlorophenol	2200	U
120-82-1	1,2,4-Trichlorobenzene	2200	U
91-20-3	Naphthalene	2200	U
106-47-8	4-Chloroaniline	4200	U
87-68-3	Hexachlorobutadiene	2200	U
59-50-7	4-Chloro-3-methylphenol	2200	U
91-57-6	2-Methylnaphthalene	2200	U
77-47-4	Hexachlorocyclopentadiene	2200 UJ ~~2200~~	~~U R M~~
88-06-2	2,4,6-Trichlorophenol	900	UJ
95-95-4	2,4,5-Trichlorophenol	2200	U
91-58-7	2-Chloronaphthalene	2200	U
88-74-4	2-Nitroaniline	11000	U
208-96-8	Acenaphthylene	2200	U
606-20-2	2,6-Dinitrotoluene	2200	U
99-09-2	3-Nitroaniline	11000	U
83-32-9	Acenaphthene	2200	U
51-28-5	2,4-Dinitrophenol	11000 UJ ~~11000~~	~~U R M~~
132-64-9	Dibenzofuran	2200	UJ

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt vol: 30 (g/mL) G Lab File ID: G4842

Level: (low med) LOW Date Received: 08/02/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	11000	U J
121-14-2	2,4-Dinitrotoluene	2200	U
86-73-7	Fluorene	2200	U
131-11-3	Dimethylphthalate	2200	U
84-66-2	Diethylphthalate	2200	U
7005-72-3	4-Chlorophenyl-phenylether	2200	U
100-01-6	4-Nitroaniline	11000	U
534-52-1	4,6-Dinitro-2-methylphenol	11000 UJ	~~11000 U R M~~
86-30-6	N-Nitrosodiphenylamine (1)	2200	U J
101-55-3	4-Bromophenyl-phenylether	2200	U J
118-74-1	Hexachlorobenzene	900	U J
87-86-5	Pentachlorophenol	11000 UJ	~~11000 U R M~~
85-01-8	Phenanthrene	380	J
120-12-7	Anthracene	2200	U J
84-74-2	Di-n-Butylphthalate	2200	U J
206-44-0	Fluoranthene	1300	J
129-00-0	Pyrene	1300	J
85-68-7	Butylbenzylphthalate	~~2200 UJ~~	~~2200 U R M~~ 2200 UJ
56-55-3	Benzo(a)Anthracene	720	J
91-94-1	3,3'-Dichlorobenzidine	4200 UJ	~~4200 U R M~~
218-01-9	Chrysene	820	J
117-81-7	Bis(2-ethylhexyl)phthalate	1400	J
117-84-0	Di-n-octylphthalate	2200 UJ	~~2200 U R M~~
205-99-2	Benzo(b)fluoranthene	580	J
207-08-9	Benzo(k)fluoranthene	2200	U J
50-32-8	Benzo(a)pyrene	440	J
193-39-5	Indeno(1,2,3-cd)pyrene	2200	U J
53-70-3	Dibenzo(a,h)anthracene	1200	U
191-24-2	Benzo(g,h,i)perylene	2200	U
86-74-8	Carbazole	2200	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-(0-6")

Sample wt/vol: 30 (g/mL) G Lab File ID: G4842

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: 22 decanted: (Y/N) N Date Extracted:08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 15

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	9.63	2100	J
2.		UNKNOWN ALKANE	10.82	2000	J
3.		UNKNOWN	11.79	2200	J
4.		UNKNOWN	13.05	1900	J
5.		UNKNOWN	13.13	7900	J
6.		UNKNOWN	13.27	2000	J
7.		UNKNOWN DIMTHYPHENANTHRENE I	13.34	2700	J
8.	4534-65-0	PENTADECANE, 3-PHENYL-	13.39	4000	NJ
9.		UNKNOWN TETRACHLORO-BIPHENYL	13.43	1800	J
10.	10544-50-0	SULFUR, MOL. (S8)	13.52	36000	NJ
11.		UNKNOWN ALKYL BENZENE	13.63	2400	J
12.		UNKNOWN ALKYL BENZENE	14.14	2700	J
13.		UNKNOWN	14.20	1900	J
14.		UNKNOWN ALKYL BENZENE	14.63	2600	J
15.		UNKNOWN ALKYL BENZENE	15.09	1800	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 30 (g/mL) G Lab File ID: G4843

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: 23 decanted: (Y/N) N Date Extracted: 08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2200	U
111-44-4	Bis(2-chloroethyl)ether	2200	U
95-57-8	2-Chlorophenol	2200	U
541-73-1	1,3-Dichlorobenzene	2200	U
106-46-7	1,4-Dichlorobenzene	2200	U
95-50-1	1,2-Dichlorobenzene	2200	U
95-48-7	2-Methylphenol	2200	U
108-60-1	bis(2-Chloroisopropyl)ether	2200	U
621-64-7	N-Nitroso-di-n-propylamine	2200	U
106-44-5	3&4-Methylphenol	2200	U
67-72-1	Hexachloroethane	2200	U
98-95-3	Nitrobenzene	2200	U
78-59-1	Isophorone	2200	U
88-75-5	2-Nitrophenol	2200	U
111-91-1	Bis(2-chloroethoxy)methane	2200	U
120-83-2	2,4-Dichlorophenol	2200	U
120-82-1	1,2,4-Trichlorobenzene	2200	U
91-20-3	Naphthalene	2200	U
106-47-8	4-Chloroaniline	4300	U
87-68-3	Hexachlorobutadiene	2200	U
59-50-7	4-Chloro-3-methylphenol	2200	U
91-57-6	2-Methylnaphthalene	2200	U
77-47-4	Hexachlorocyclopentadiene	2200	U
88-06-2	2,4,6-Trichlorophenol	910	U
95-95-4	2,4,5-Trichlorophenol	2200	U
91-58-7	2-Chloronaphthalene	2200	U
88-74-4	2-Nitroaniline	11000	U
208-96-8	Acenaphthylene	2200	U
606-20-2	2,6-Dinitrotoluene	2200	U
99-09-2	3-Nitroaniline	11000	U
83-32-9	Acenaphthene	2200	U
51-28-5	2,4-Dinitrophenol	11000	U
132-64-9	Dibenzofuran	2200	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

14895-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 30 (g/mL) G Lab File ID: G4843

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: 23 decanted: (Y/N) N Date Extracted:08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	11000	U J
121-14-2	2,4-Dinitrotoluene	2200	U
86-73-7	Fluorene	2200	U
131-11-3	Dimethylphthalate	2200	U
84-66-2	Diethylphthalate	2200	U
7005-72-3	4-Chlorophenyl-phenylether	2200	U
100-01-6	4-Nitroaniline	11000	U
534-52-1	4,6-Dinitro-2-methylphenol	11000	U
86-30-6	N-Nitrosodiphenylamine (1)	2200	U
101-55-3	4-Bromophenyl-phenylether	2200	U
118-74-1	Hexachlorobenzene	910	U
87-86-5	Pentachlorophenol	11000	U
85-01-8	Phenanthrene	480	J
120-12-7	Anthracene	2200	U J
84-74-2	Di-n-Butylphthalate	2200	U J
206-44-0	Fluoranthene	1300	J
129-00-0	Pyrene	1300	J
85-68-7	Butylbenzylphthalate	2200	U J
56-55-3	Benzo(a)Anthracene	720	J
91-94-1	3,3'-Dichlorobenzidine	4300	U J
218-01-9	Chrysene	810	J
117-81-7	Bis(2-ethylhexyl)phthalate	860	J
117-84-0	Di-n-octylphthalate	2200	U J
205-99-2	Benzo(b)fluoranthene	640	J
207-08-9	Benzo(k)fluoranthene	2200	U J
50-32-8	Benzo(a)pyrene	490	J
193-39-5	Indeno(1,2,3-cd)pyrene	2200	U J
53-70-3	Dibenzo(a,h)anthracene	1200	U
191-24-2	Benzo(g,h,i)perylene	2200	U
86-74-8	Carbazole	2200	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

14895-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL065

Matrix: (soil/water) SOIL Lab Sample ID: SED-M-S7-FD(0-6")

Sample wt/vol: 30 (g/mL) G Lab File ID: G4843

Level: (low/med) LOW Date Received: 08/02/01

% Moisture: 23 decanted: (Y/N) N Date Extracted: 08/07/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 08/13/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKYL BENZENE	13.05	5800	J
2.		UNKNOWN ALKYL BENZENE	13.07	4900	J
3.		UNKNOWN	13.13	11000	J
4.		UNKNOWN ALKYL BENZENE	13.22	5100	J
5.		UNKNOWN ALKANE	13.39	7700	J
6.	7704-34-9	SULFUR	13.51	28000	NJ
7.		UNKNOWN ALKYL BENZENE	13.63	11000	J
8.		UNKNOWN ALKYL BENZENE	13.66	2600	J
9.		UNKNOWN ALKYL BENZENE	13.93	3700	J
10.		UNKNOWN ALKYL BENZENE	14.14	11000	J
11.		UNKNOWN ALKYL BENZENE	14.20	3900	J
12.		UNKNOWN ALKYL BENZENE	14.29	3100	J
13.		UNKNOWN ALKANE	14.43	3300	J
14.		UNKNOWN ALKYL BENZENE	14.60	3000	J
15.		UNKNOWN ALKYL BENZENE	14.63	11000	J
16.		UNKNOWN ALKYL BENZENE	14.90	3700	J
17.		UNKNOWN ALKYL BENZENE	15.06	4200	J
18.		UNKNOWN ALKYL BENZENE	15.10	8800	J
19.		UNKNOWN ALKYL BENZENE	15.49	2800	J
20.		UNKNOWN ALKYL BENZENE	15.96	3500	J
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FORM I SV-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 25, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO010SVOCLN.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, Illinois STL SDG SIL069	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for sixteen sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on October 31 and November 1, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL069.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to non-conformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T1-C1	CBS-CSB-T3-W1
CBS-CSB-T1-E1	CBS-CSB-T0-E1
CBS-CSB-T1-W1	CBS-CSB-T4-C1
CBS-CSB-T2-C1	CBS-CSB-T4-E1
CBS-CSB-T2-E1	CBS-CSB-T4-W1
CBS-CSB-T2-W1	CBS-CSB-T5-C1
CBS-CSB-T3-C1	CBS-CSB-T5-E1
CBS-CSB-T3-E1	CBS-CSB-T5-W1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results

- Surrogate spike recoveries
- Matrix spike matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses with the following exceptions: samples CBS-CSB-T3-1 (10x) and CBS-CSB-T3-E1 (20x) required dilutions, which caused the surrogates to be diluted out of the samples. No validation action was taken on this basis.

MS/MSD Results

MS/MSD analyses were performed on samples CBS-CSB-T3-E1 and CBS-CSB-T4-C1 with this sample set. The laboratory provided the percent recoveries (%Rs) and relative percent differences (RPDs) for the short list of spiked target compounds for these MS/MSD analyses. The %Rs and RPDs were within the QC acceptance limits except as noted below. The following table summarizes the non-compliant %Rs. Positive results for 1,2,4-trichlorobenzene and pentachlorophenol in the associated sample were qualified as estimated (J). The non-detect result for acenaphthene was accepted unqualified.

Compound	CBS-CSB-T3-E1 MS (%R)	CBS-CSB-T3-E1 MSD (%R)
1,2,4-Trichlorobenzene	143	333
Acenaphthene	152	152
Pentachlorophenol	ok	143

Field Duplicate Results

Field duplicates were not submitted with this sample set.

LCS Results

The %Rs of the short list spiked analytes provided by the laboratory met the QC acceptance criteria in the LCS analyses.

Sample Results

Dilutions were performed on samples CBS-CSB-T3-C1 (10x) and CBS-CSB-T3-E1 (20x) in this sample set due to target analytes exceeding calibration range in the initial analyses. Both the diluted and undiluted analyses were combined in order to report the lowest possible sample quantitation limits (SQLs) and all results within the calibration range. The laboratory elevated the SQLs accordingly.

There were no samples reported with percent solids < 50%.

It should be noted that the SQLs for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The non-detects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

The laboratory identified samples CBS-CSB-T3-C1 (10x) and CBS-CSB-T3-E1 (20x) as having low internal standard recoveries. The internal standard summary was inspected and recoveries were determined by the validator to be slightly low. The diluted samples were re-analyzed yielding similar non-conformances. Results from the initial dilution of sample CBS-CSB-T3-C1 (10x) were reported and qualified as estimated (J) due to internal standards non-conformance. Results from the re-dilution of CBS-CSB-T3-E1 (20x) were reported and qualified as estimated (J) due to internal standards non-conformance.

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3426

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 34 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	260	UJ
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
541-73-1	1,3-Dichlorobenzene	260	U
106-46-7	1,4-Dichlorobenzene	260	U
95-50-1	1,2-Dichlorobenzene	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	bis(2-Chloroisopropyl)ether	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
106-44-5	3&4-Methylphenol	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
120-82-1	1,2,4-Trichlorobenzene	260	U
91-20-3	Naphthalene	71	J
106-47-8	4-Chloroaniline	500	UJ
87-68-3	Hexachlorobutadiene	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	260	U
606-20-2	2,6-Dinitrotoluene	260	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	260	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	260	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3426

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 34 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	260	U
86-73-7	Fluorene	260	U
131-11-3	Dimethylphthalate	260	U
84-66-2	Diethylphthalate	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
84-74-2	Di-n-Butylphthalate	260	U
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	260	U
56-55-3	Benzo(a)Anthracene	260	U
91-94-1	3,3'-Dichlorobenzidine	500	U
218-01-9	Chrysene	260	U
117-81-7	Bis(2-ethylhexyl)phthalate	260	U
117-84-0	Di-n-octylphthalate	260	U
205-99-2	Benzo(b)fluoranthene	260	U
207-08-9	Benzo(k)fluoranthene	260	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	260	U
86-74-8	Carbazole	260	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3439

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3439

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3428

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T1-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3428

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	62	J
120-12-7	Anthracene	240	U J
84-74-2	Di-n-Butylphthalate	240	U J
206-44-0	Fluoranthene	120	J
129-00-0	Pyrene	240	U J
85-68-7	Butylbenzylphthalate	240	U J
56-55-3	Benzo(a)Anthracene	51	J
91-94-1	3,3'-Dichlorobenzidine	460	U J
218-01-9	Chrysene	53	J
117-81-7	Bis(2-ethylhexyl)phthalate	240	U J
117-84-0	Di-n-octylphthalate	240	U J
205-99-2	Benzo(b)fluoranthene	53	J
207-08-9	Benzo(k)fluoranthene	240	U J
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: soil water SOIL Lab Sample ID: CBS-CSB-T2-C1

Sample wt vol: 30 g mL: 0 Lab File ID: J3440

Level: low med LOW Date Received: 11/01/01

% Moisture: 37 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0 uL Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	270	UJ
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
541-73-1	1,3-Dichlorobenzene	270	U
106-46-7	1,4-Dichlorobenzene	270	U
95-50-1	1,2-Dichlorobenzene	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	bis(2-Chloroisopropyl)ether	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
106-44-5	3&4-Methylphenol	270	U
67-72-1	Hexachloroethane	270	U
98-95-3	Nitrobenzene	270	U
78-59-1	Isophorone	270	U
88-75-5	2-Nitrophenol	270	U
111-91-1	Bis(2-chloroethoxy)methane	270	U
120-83-2	2,4-Dichlorophenol	270	U
120-82-1	1,2,4-Trichlorobenzene	270	U
91-20-3	Naphthalene	270	U
106-47-8	4-Chloroaniline	520	U
87-68-3	Hexachlorobutadiene	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	270	U
77-47-4	Hexachlorocyclopentadiene	270	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	270	U
606-20-2	2,6-Dinitrotoluene	270	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	270	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	270	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3440

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 37 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U
121-14-2	2,4-Dinitrotoluene	270	U
86-73-7	Fluorene	270	U
131-11-3	Dimethylphthalate	270	U
84-66-2	Diethylphthalate	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
84-74-2	Di-n-Butylphthalate	270	U
206-44-0	Fluoranthene	270	U
129-00-0	Pyrene	270	U
85-68-7	Butylbenzylphthalate	270	U
56-55-3	Benzo(a)Anthracene	270	U
91-94-1	3,3'-Dichlorobenzidine	520	U
218-01-9	Chrysene	270	U
117-81-7	Bis(2-ethylhexyl)phthalate	270	U
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	U
207-08-9	Benzo(k)fluoranthene	270	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	270	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	270	U
86-74-8	Carbazole	270	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3441

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3441

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3431

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/06/01

Injection Volume: 1.0 uL Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	93	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T2-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3431

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	93	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3432

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 42 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3400	
111-44-4	Bis(2-chloroethyl)ether	290	UJ
95-57-8	2-Chlorophenol	510	J
541-73-1	1,3-Dichlorobenzene	290	UJ
106-46-7	1,4-Dichlorobenzene	5500	
95-50-1	1,2-Dichlorobenzene	~~42000~~	~~E~~ 53000 J-I
95-48-7	2-Methylphenol	290	UJ
108-60-1	bis(2-Chloroisopropyl)ether	290	U
621-64-7	N-Nitroso-di-n-propylamine	290	U
106-44-5	3&4-Methylphenol	1600	
67-72-1	Hexachloroethane	290	UJ
98-95-3	Nitrobenzene	160	J
78-59-1	Isophorone	290	UJ
88-75-5	2-Nitrophenol	290	U
111-91-1	Bis(2-chloroethoxy)methane	290	U
120-83-2	2,4-Dichlorophenol	6600	
120-82-1	1,2,4-Trichlorobenzene	~~63000~~	~~E~~ 80000 J-I
91-20-3	Naphthalene	160	J
106-47-8	4-Chloroaniline	11000	
87-68-3	Hexachlorobutadiene	290	UJ
59-50-7	4-Chloro-3-methylphenol	290	UJ
91-57-6	2-Methylnaphthalene	400	J
77-47-4	Hexachlorocyclopentadiene	290	UJ
88-06-2	2,4,6-Trichlorophenol	4300	
95-95-4	2,4,5-Trichlorophenol	240	J
91-58-7	2-Chloronaphthalene	290	UJ
88-74-4	2-Nitroaniline	1500	U
208-96-8	Acenaphthylene	290	U
606-20-2	2,6-Dinitrotoluene	290	U
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	290	U
51-28-5	2,4-Dinitrophenol	1500	U
132-64-9	Dibenzofuran	290	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3432

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 42 decanted: (Y/N) N Date Extracted:11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1500	U J
121-14-2	2,4-Dinitrotoluene	290	U J
86-73-7	Fluorene	100	J
131-11-3	Dimethylphthalate	290	U J
84-66-2	Diethylphthalate	290	U
7005-72-3	4-Chlorophenyl-phenylether	290	U
100-01-6	4-Nitroaniline	810	J
534-52-1	4,6-Dinitro-2-methylphenol	1500	U J
86-30-6	N-Nitrosodiphenylamine (1)	290	U
101-55-3	4-Bromophenyl-phenylether	290	U
118-74-1	Hexachlorobenzene	120	U
87-86-5	Pentachlorophenol	2600	
85-01-8	Phenanthrene	130	J
120-12-7	Anthracene	290	U J
84-74-2	Di-n-Butylphthalate	290	U J
206-44-0	Fluoranthene	150	J
129-00-0	Pyrene	290	U J
85-68-7	Butylbenzylphthalate	82	J
56-55-3	Benzo(a)Anthracene	290	U J
91-94-1	3,3'-Dichlorobenzidine	570	U
218-01-9	Chrysene	290	U
117-81-7	Bis(2-ethylhexyl)phthalate	290	U
117-84-0	Di-n-octylphthalate	290	U
205-99-2	Benzo(b)fluoranthene	290	U
207-08-9	Benzo(k)fluoranthene	290	U
50-32-8	Benzo(a)pyrene	160	U
193-39-5	Indeno(1,2,3-cd)pyrene	290	U
53-70-3	Dibenzo(a,h)anthracene	160	U
191-24-2	Benzo(g,h,i)perylene	290	U
86-74-8	Carbazole	290	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-7DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: soil water SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt vol: 30 g mL G Lab File ID: J3456

Level: low med LOW Date Received: 11/01/01

% Moisture: 42 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/08/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

LN 042602

Do Not Report

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3200	D
111-44-4	Bis(2-chloroethyl)ether	2900	U
95-57-8	2-Chlorophenol	2900	U
541-73-1	1,3-Dichlorobenzene	2900	U
106-46-7	1,4-Dichlorobenzene	5600	D
95-50-1	1,2-Dichlorobenzene	44000	D
95-48-7	2-Methylphenol	2900	U
108-60-1	bis(2-Chloroisopropyl)ether	2900	U
621-64-7	N-Nitroso-di-n-propylamine	2900	U
106-44-5	3&4-Methylphenol	1600	DJ
67-72-1	Hexachloroethane	2900	U
98-95-3	Nitrobenzene	2900	U
78-59-1	Isophorone	2900	U
88-75-5	2-Nitrophenol	2900	U
111-91-1	Bis(2-chloroethoxy)methane	2900	U
120-83-2	2,4-Dichlorophenol	5900	D
120-82-1	1,2,4-Trichlorobenzene	72000	D
91-20-3	Naphthalene	2900	U
106-47-8	4-Chloroaniline	9800	D
87-68-3	Hexachlorobutadiene	2900	U
59-50-7	4-Chloro-3-methylphenol	2900	U
91-57-6	2-Methylnaphthalene	2900	U
77-47-4	Hexachlorocyclopentadiene	2900	U
88-06-2	2,4,6-Trichlorophenol	5400	D
95-95-4	2,4,5-Trichlorophenol	2900	U
91-58-7	2-Chloronaphthalene	2900	U
88-74-4	2-Nitroaniline	15000	U
208-96-8	Acenaphthylene	2900	U
606-20-2	2,6-Dinitrotoluene	2900	U
99-09-2	3-Nitroaniline	15000	U
83-32-9	Acenaphthene	2900	U
51-28-5	2,4-Dinitrophenol	15000	U
132-64-9	Dibenzofuran	2900	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-7DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3456

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 42 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/08/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report - LW 01/26/02

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	15000	U
121-14-2	2,4-Dinitrotoluene	2900	U
86-73-7	Fluorene	2900	U
131-11-3	Dimethylphthalate	2900	U
84-66-2	Diethylphthalate	2900	U
7005-72-3	4-Chlorophenyl-phenylether	2900	U
100-01-6	4-Nitroaniline	15000	U
534-52-1	4,6-Dinitro-2-methylphenol	15000	U
86-30-6	N-Nitrosodiphenylamine (1)	2900	U
101-55-3	4-Bromophenyl-phenylether	2900	U
118-74-1	Hexachlorobenzene	1200	U
87-86-5	Pentachlorophenol	15000	U
85-01-8	Phenanthrene	2900	U
120-12-7	Anthracene	2900	U
84-74-2	Di-n-Butylphthalate	2900	U
206-44-0	Fluoranthene	2900	U
129-00-0	Pyrene	2900	U
85-68-7	Butylbenzylphthalate	2900	U
56-55-3	Benzo(a)Anthracene	2900	U
91-94-1	3,3'-Dichlorobenzidine	5700	U
218-01-9	Chrysene	2900	U
117-81-7	Bis(2-ethylhexyl)phthalate	1000	DJ
117-84-0	Di-n-octylphthalate	2900	U
205-99-2	Benzo(b)fluoranthene	2900	U
207-08-9	Benzo(k)fluoranthene	2900	U
50-32-8	Benzo(a)pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)pyrene	2900	U
53-70-3	Dibenzo(a,h)anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	2900	U
86-74-8	Carbazole	2900	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-7DLRE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt/vol: 30 g/mL G Lab File ID: J3451

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 42 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report - LN 04/02/02

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4000	D
111-44-4	Bis(2-chloroethyl)ether	2900	U
95-57-8	2-Chlorophenol	760	DJ
541-73-1	1,3-Dichlorobenzene	2900	U
106-46-7	1,4-Dichlorobenzene	7500	D
95-50-1	1,2-Dichlorobenzene	53000	D
95-48-7	2-Methylphenol	2900	U
108-60-1	bis(2-Chloroisopropyl)ether	2900	U
621-64-7	N-Nitroso-di-n-propylamine	2900	U
106-44-5	3&4-Methylphenol	1600	DJ
67-72-1	Hexachloroethane	2900	U
98-95-3	Nitrobenzene	2900	U
78-59-1	Isophorone	2900	U
88-75-5	2-Nitrophenol	2900	U
111-91-1	Bis(2-chloroethoxy)methane	2900	U
120-83-2	2,4-Dichlorophenol	6100	D
120-82-1	1,2,4-Trichlorobenzene	80000	D
91-20-3	Naphthalene	2900	U
106-47-8	4-Chloroaniline	11000	D
87-68-3	Hexachlorobutadiene	2900	U
59-50-7	4-Chloro-3-methylphenol	2900	U
91-57-6	2-Methylnaphthalene	2900	U
77-47-4	Hexachlorocyclopentadiene	2900	U
88-06-2	2,4,6-Trichlorophenol	5700	D
95-95-4	2,4,5-Trichlorophenol	2900	U
91-58-7	2-Chloronaphthalene	2900	U
88-74-4	2-Nitroaniline	15000	U
208-96-8	Acenaphthylene	2900	U
606-20-2	2,6-Dinitrotoluene	2900	U
99-09-2	3-Nitroaniline	15000	U
83-32-9	Acenaphthene	2900	U
51-28-5	2,4-Dinitrophenol	15000	U
132-64-9	Dibenzofuran	2900	U

Use these values for Str Rm.

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-7DLRE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3451

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 42 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/07/01

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report 042602

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	15000	U
121-14-2	2,4-Dinitrotoluene	2900	U
86-73-7	Fluorene	2900	U
131-11-3	Dimethylphthalate	2900	U
84-66-2	Diethylphthalate	2900	U
7005-72-3	4-Chlorophenyl-phenylether	2900	U
100-01-6	4-Nitroaniline	15000	U
534-52-1	4,6-Dinitro-2-methylphenol	15000	U
86-30-6	N-Nitrosodiphenylamine (1)	2900	U
101-55-3	4-Bromophenyl-phenylether	2900	U
118-74-1	Hexachlorobenzene	1200	U
87-86-5	Pentachlorophenol	15000	U
85-01-8	Phenanthrene	2900	U
120-12-7	Anthracene	2900	U
84-74-2	Di-n-Butylphthalate	2900	U
206-44-0	Fluoranthene	2900	U
129-00-0	Pyrene	2900	U
85-68-7	Butylbenzylphthalate	2900	U
56-55-3	Benzo(a)Anthracene	2900	U
91-94-1	3,3'-Dichlorobenzidine	5700	U
218-01-9	Chrysene	2900	U
117-81-7	Bis(2-ethylhexyl)phthalate	2900	U
117-84-0	Di-n-octylphthalate	2900	U
205-99-2	Benzo(b)fluoranthene	2900	U
207-08-9	Benzo(k)fluoranthene	2900	U
50-32-8	Benzo(a)pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)pyrene	2900	U
53-70-3	Dibenzo(a,h)anthracene	1600	U
191-24-2	Benzo(g,h,i)perylene	2900	U
86-74-8	Carbazole	2900	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: soil water SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt vol: 31 g mL G Lab File ID: J3433

Level: low med LOW Date Received: 11/01/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0 uL Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	110	J
111-44-4	Bis(2-chloroethyl)ether	220	UJ
95-57-8	2-Chlorophenol	97	J
541-73-1	1,3-Dichlorobenzene	220	UJ
106-46-7	1,4-Dichlorobenzene	2400	
95-50-1	1,2-Dichlorobenzene	~~21000 E~~ 23000	J-I
95-48-7	2-Methylphenol	220	UJ
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	520	
78-59-1	Isophorone	220	UJ
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	580	
120-82-1	1,2,4-Trichlorobenzene	~~26000 EJ-M~~	26000 J-I
91-20-3	Naphthalene	1300	
106-47-8	4-Chloroaniline	7200	
87-68-3	Hexachlorobutadiene	220	UJ
59-50-7	4-Chloro-3-methylphenol	220	UJ
91-57-6	2-Methylnaphthalene	7300	
77-47-4	Hexachlorocyclopentadiene	220	UJ
88-06-2	2,4,6-Trichlorophenol	990	
95-95-4	2,4,5-Trichlorophenol	220	UJ
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3433

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	UJ
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	~~17000~~	~~E~~ 9000 J-I
534-52-1	4,6-Dinitro-2-methylphenol	1100	UJ
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	89	U
87-86-5	Pentachlorophenol	32000 J-I-M ~~32000~~	~~EJ-M~~ ~~32000 J-I~~
85-01-8	Phenanthrene	2400	
120-12-7	Anthracene	310	J
84-74-2	Di-n-Butylphthalate	210	J
206-44-0	Fluoranthene	190	J
129-00-0	Pyrene	470	
85-68-7	Butylbenzylphthalate	3200	
56-55-3	Benzo(a)Anthracene	220	UJ
91-94-1	3,3'-Dichlorobenzidine	420	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	~~34000~~	~~E~~ 81000 J-I
117-84-0	Di-n-octylphthalate	220	UJ
205-99-2	Benzo(b)fluoranthene	140	J
207-08-9	Benzo(k)fluoranthene	110	J
50-32-8	Benzo(a)pyrene	220	J
193-39-5	Indeno(1,2,3-cd)pyrene	220	UJ
53-70-3	Dibenzo(a,h)anthracene	110	UJ
191-24-2	Benzo(g,h,i)perylene	86	J
86-74-8	Carbazole	220	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-8DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: soil water SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt vol: 31 g mL G Lab File ID: J1457

Level: low med LOW Date Received: 11/01/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/08/01

Injection Volume: 1.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: ___

Do not report 04262

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4300	U
111-44-4	Bis(2-chloroethyl)ether	4300	U
95-57-8	2-Chlorophenol	4300	U
541-73-1	1,3-Dichlorobenzene	4300	U
106-46-7	1,4-Dichlorobenzene	2500	DJ
95-50-1	1,2-Dichlorobenzene	23000	D
95-48-7	2-Methylphenol	4300	U
108-60-1	bis(2-Chloroisopropyl)ether	4300	U
621-64-7	N-Nitroso-di-n-propylamine	4300	U
106-44-5	3&4-Methylphenol	4300	U
67-72-1	Hexachloroethane	4300	U
98-95-3	Nitrobenzene	4300	U
78-59-1	Isophorone	4300	U
88-75-5	2-Nitrophenol	4300	U
111-91-1	Bis(2-chloroethoxy)methane	4300	U
120-83-2	2,4-Dichlorophenol	4300	U
120-82-1	1,2,4-Trichlorobenzene	26000	D
91-20-3	Naphthalene	1300	DJ
106-47-8	4-Chloroaniline	1600	DJ
87-68-3	Hexachlorobutadiene	4300	U
59-50-7	4-Chloro-3-methylphenol	4300	U
91-57-6	2-Methylnaphthalene	8900	D
77-47-4	Hexachlorocyclopentadiene	4300	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	4300	U
91-58-7	2-Chloronaphthalene	4300	U
88-74-4	2-Nitroaniline	22000	U
208-96-8	Acenaphthylene	4300	U
606-20-2	2,6-Dinitrotoluene	4300	U
99-09-2	3-Nitroaniline	22000	U
83-32-9	Acenaphthene	1200	DJ
51-28-5	2,4-Dinitrophenol	22000	U
132-64-9	Dibenzofuran	4300	U

use these values for str. run

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-8DL

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3457

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/08/01

Injection Volume: 1.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report LW 04260

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	22000	U
121-14-2	2,4-Dinitrotoluene	4300	U
86-73-7	Fluorene	4300	U
131-11-3	Dimethylphthalate	4300	U
84-66-2	Diethylphthalate	4300	U
7005-72-3	4-Chlorophenyl-phenylether	4300	U
100-01-6	4-Nitroaniline	9000	DJ
534-52-1	4,6-Dinitro-2-methylphenol	22000	U
86-30-6	N-Nitrosodiphenylamine (1)	4300	U
101-55-3	4-Bromophenyl-phenylether	4300	U
118-74-1	Hexachlorobenzene	1800	U
87-86-5	Pentachlorophenol	32000	D
85-01-8	Phenanthrene	3200	DJ
120-12-7	Anthracene	4300	U
84-74-2	Di-n-Butylphthalate	4300	U
206-44-0	Fluoranthene	4300	U
129-00-0	Pyrene	4300	U
85-68-7	Butylbenzylphthalate	4400	D
56-55-3	Benzo(a)Anthracene	4300	U
91-94-1	3,3'-Dichlorobenzidine	8400	U
218-01-9	Chrysene	4300	U
117-81-7	Bis(2-ethylhexyl)phthalate	81000	D
117-84-0	Di-n-octylphthalate	4300	U
205-99-2	Benzo(b)fluoranthene	4300	U
207-08-9	Benzo(k)fluoranthene	4300	U
50-32-8	Benzo(a)pyrene	2300	U
193-39-5	Indeno(1,2,3-cd)pyrene	4300	U
53-70-3	Dibenzo(a,h)anthracene	2300	U
191-24-2	Benzo(g,h,i)perylene	4300	U
86-74-8	Carbazole	4300	U

Use these values for SV. Run LW 04260

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-8DLRE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: soil water SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt vol: 30 g mL) G Lab File ID: J3452

Level: low med) LOW Date Received: 11/01/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report LN 042602

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4300	U
111-44-4	Bis(2-chloroethyl)ether	4300	U
95-57-8	2-Chlorophenol	4300	U
541-73-1	1,3-Dichlorobenzene	4300	U
106-46-7	1,4-Dichlorobenzene	3200	DJ
95-50-1	1,2-Dichlorobenzene	28000	D
95-48-7	2-Methylphenol	4300	U
108-60-1	bis(2-Chloroisopropyl)ether	4300	U
621-64-7	N-Nitroso-di-n-propylamine	4300	U
106-44-5	3&4-Methylphenol	4300	U
67-72-1	Hexachloroethane	4300	U
98-95-3	Nitrobenzene	4300	U
78-59-1	Isophorone	4300	U
88-75-5	2-Nitrophenol	4300	U
111-91-1	Bis(2-chloroethoxy)methane	4300	U
120-83-2	2,4-Dichlorophenol	4300	U
120-82-1	1,2,4-Trichlorobenzene	32000	D
91-20-3	Naphthalene	4300	U
106-47-8	4-Chloroaniline	8400	U
87-68-3	Hexachlorobutadiene	4300	U
59-50-7	4-Chloro-3-methylphenol	4300	U
91-57-6	2-Methylnaphthalene	10000	D
77-47-4	Hexachlorocyclopentadiene	4300	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	4300	U
91-58-7	2-Chloronaphthalene	4300	U
88-74-4	2-Nitroaniline	22000	U
208-96-8	Acenaphthylene	4300	U
606-20-2	2,6-Dinitrotoluene	4300	U
99-09-2	3-Nitroaniline	22000	U
83-32-9	Acenaphthene	1500	DJ
51-28-5	2,4-Dinitrophenol	22000	U
132-64-9	Dibenzofuran	4300	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-8DLRE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3452

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 20.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report - LW 011602

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	22000	U
121-14-2	2,4-Dinitrotoluene	4300	U
86-73-7	Fluorene	4300	U
131-11-3	Dimethylphthalate	4300	U
84-66-2	Diethylphthalate	4300	U
7005-72-3	4-Chlorophenyl-phenylether	4300	U
100-01-6	4-Nitroaniline	12000	DJ
534-52-1	4,6-Dinitro-2-methylphenol	22000	U
86-30-6	N-Nitrosodiphenylamine (1)	4300	U
101-55-3	4-Bromophenyl-phenylether	4300	U
118-74-1	Hexachlorobenzene	1800	U
87-86-5	Pentachlorophenol	36000	D
85-01-8	Phenanthrene	4100	DJ
120-12-7	Anthracene	4300	U
84-74-2	Di-n-Butylphthalate	4300	U
206-44-0	Fluoranthene	4300	U
129-00-0	Pyrene	4300	U
85-68-7	Butylbenzylphthalate	5000	D
56-55-3	Benzo(a)Anthracene	4300	U
91-94-1	3,3'-Dichlorobenzidine	8400	U
218-01-9	Chrysene	4300	U
117-81-7	Bis(2-ethylhexyl)phthalate	100000	D
117-84-0	Di-n-octylphthalate	4300	U
205-99-2	Benzo(b)fluoranthene	4300	U
207-08-9	Benzo(k)fluoranthene	4300	U
50-32-8	Benzo(a)pyrene	2300	U
193-39-5	Indeno(1,2,3-cd)pyrene	4300	U
53-70-3	Dibenzo(a,h)anthracene	2300	U
191-24-2	Benzo(g,h,i)perylene	4300	U
86-74-8	Carbazole	4300	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3445

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17083-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T3-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J3445

Level: (low/med) LOW Date Received: 11/01/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/02/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	65	J
117-84-0	Di-n-octylphthalate	230	U J
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T0-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0388

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	100	J
106-46-7	1,4-Dichlorobenzene	970	
95-50-1	1,2-Dichlorobenzene	250	U J
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	6000	
106-47-8	4-Chloroaniline	450	J
87-68-3	Hexachlorobutadiene	250	U J
59-50-7	4-Chloro-3-methylphenol	250	U J
91-57-6	2-Methylnaphthalene	4200	
77-47-4	Hexachlorocyclopentadiene	250	U J
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	J
606-20-2	2,6-Dinitrotoluene	250	U J
99-09-2	3-Nitroaniline	1200	U J
83-32-9	Acenaphthene	860	
51-28-5	2,4-Dinitrophenol	1200	U J
132-64-9	Dibenzofuran	1600	

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T0-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0388

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

AKM 5/1/02

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	440	J
121-14-2	2,4-Dinitrotoluene	250	UJ
86-73-7	Fluorene	3500	
131-11-3	Dimethylphthalate	250	UJ
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	1200	
101-55-3	4-Bromophenyl-phenylether	250	UJ
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	7000	
120-12-7	Anthracene	1400	
84-74-2	Di-n-Butylphthalate	250	UJ
206-44-0	Fluoranthene	4000	
129-00-0	Pyrene	4000	
85-68-7	Butylbenzylphthalate	250	UJ
56-55-3	Benzo(a)Anthracene	1900	
91-94-1	3,3'-Dichlorobenzidine	480	UJ
218-01-9	Chrysene	1900	
117-81-7	Bis(2-ethylhexyl)phthalate	93	J
117-84-0	Di-n-octylphthalate	250	UJ
205-99-2	Benzo(b)fluoranthene	1400	
207-08-9	Benzo(k)fluoranthene	900	
50-32-8	Benzo(a)pyrene	1200	
193-39-5	Indeno(1,2,3-cd)pyrene	830	
53-70-3	Dibenzo(a,h)anthracene	340	J
191-24-2	Benzo(g,h,i)perylene	890	
86-74-8	Carbazole	620	

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0389

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 39 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0 uL Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	280	U J
111-44-4	Bis(2-chloroethyl)ether	280	U
95-57-8	2-Chlorophenol	280	U
541-73-1	1,3-Dichlorobenzene	280	U
106-46-7	1,4-Dichlorobenzene	64	J
95-50-1	1,2-Dichlorobenzene	110	J
95-48-7	2-Methylphenol	280	U J
108-60-1	bis(2-Chloroisopropyl)ether	280	U
621-64-7	N-Nitroso-di-n-propylamine	280	U
106-44-5	3&4-Methylphenol	280	U
67-72-1	Hexachloroethane	280	U
98-95-3	Nitrobenzene	280	U
78-59-1	Isophorone	280	U
88-75-5	2-Nitrophenol	280	U
111-91-1	Bis(2-chloroethoxy)methane	280	U
120-83-2	2,4-Dichlorophenol	120	J
120-82-1	1,2,4-Trichlorobenzene	66	J
91-20-3	Naphthalene	280	U J
106-47-8	4-Chloroaniline	76	J
87-68-3	Hexachlorobutadiene	280	U J
59-50-7	4-Chloro-3-methylphenol	280	U
91-57-6	2-Methylnaphthalene	280	U
77-47-4	Hexachlorocyclopentadiene	280	U
88-06-2	2,4,6-Trichlorophenol	130	J
95-95-4	2,4,5-Trichlorophenol	280	U J
91-58-7	2-Chloronaphthalene	280	U
88-74-4	2-Nitroaniline	1400	U
208-96-8	Acenaphthylene	280	U
606-20-2	2,6-Dinitrotoluene	280	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	280	U
51-28-5	2,4-Dinitrophenol	1400	U
132-64-9	Dibenzofuran	280	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0389

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 39 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1400	U
121-14-2	2,4-Dinitrotoluene	280	U
86-73-7	Fluorene	280	U
131-11-3	Dimethylphthalate	280	U
84-66-2	Diethylphthalate	280	U
7005-72-3	4-Chlorophenyl-phenylether	280	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-Nitrosodiphenylamine (1)	280	U
101-55-3	4-Bromophenyl-phenylether	280	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	280	U
120-12-7	Anthracene	280	U
84-74-2	Di-n-Butylphthalate	280	U
206-44-0	Fluoranthene	280	U
129-00-0	Pyrene	280	U
85-68-7	Butylbenzylphthalate	280	U
56-55-3	Benzo(a)Anthracene	280	U
91-94-1	3,3'-Dichlorobenzidine	540	U
218-01-9	Chrysene	280	U
117-81-7	Bis(2-ethylhexyl)phthalate	280	U
117-84-0	Di-n-octylphthalate	280	U
205-99-2	Benzo(b)fluoranthene	280	U
207-08-9	Benzo(k)fluoranthene	280	U
50-32-8	Benzo(a)pyrene	150	U
193-39-5	Indeno(1,2,3-cd)pyrene	280	U
53-70-3	Dibenzo(a,h)anthracene	150	U
191-24-2	Benzo(g,h,i)perylene	280	U
86-74-8	Carbazole	280	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: soil water SOIL Lab Sample ID: CBS-CSB-T4-E1

Sample wt vol: 30 g mL G Lab File ID: E0392

Level: low med LOW Date Received: 11/02/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	57	J
95-48-7	2-Methylphenol	240	U J
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	48	J
91-20-3	Naphthalene	240	U J
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0392

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0393

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	160	J
111-44-4	Bis(2-chloroethyl)ether	250	UJ
95-57-8	2-Chlorophenol	98	J
541-73-1	1,3-Dichlorobenzene	250	UJ
106-46-7	1,4-Dichlorobenzene	250	J
95-50-1	1,2-Dichlorobenzene	370	
95-48-7	2-Methylphenol	250	UJ
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	670	
120-82-1	1,2,4-Trichlorobenzene	250	UJ
91-20-3	Naphthalene	100	J
106-47-8	4-Chloroaniline	480	J
87-68-3	Hexachlorobutadiene	250	UJ
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	150	J
95-95-4	2,4,5-Trichlorophenol	250	UJ
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T4-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0393

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	79	J
129-00-0	Pyrene	250	U J
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-C1

Sample wt/vol: 31 (g/mL) G Lab File ID: E0394

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0 uL Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0394

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0395

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	39	J
95-50-1	1,2-Dichlorobenzene	310	J
95-48-7	2-Methylphenol	220	U J
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	69	J
120-82-1	1,2,4-Trichlorobenzene	300	J
91-20-3	Naphthalene	220	U J
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	65	J
95-95-4	2,4,5-Trichlorophenol	220	U J
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0395

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/07/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	92	U
87-86-5	Pentachlorophenol	420	J
85-01-8	Phenanthrene	220	U J
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	82	J
117-84-0	Di-n-octylphthalate	220	U J
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0422

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/08/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17116-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL069

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T5-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: E0422

Level: (low/med) LOW Date Received: 11/02/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/05/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/08/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	73	J
101-55-3	4-Bromophenyl-phenylether	230	U J
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 25, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO011SVOCLN.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, Illinois STL SDG SIL073	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for three sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on December 11, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL073.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to non-conformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSF-T2-1	CBS-CSF-T4-1
CBS-CSF-T3-1	

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC, with the exception of sample SP-010, which was not included in the scope of this data validation effort.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSF-T4-1 was submitted for the MS/MSD analyses with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits except for the RPD for 4-chloro-3-methylphenol (33%). The non-detect result of 4-chloro-3-methylphenol in the associated sample was qualified as estimated (UJ).

Field Duplicate Results

Field duplicates were not submitted with this sample set.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids < 50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The non-detects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T2-1

Sample wt/vol: 30 (g/mL) G Lab File ID: J6201

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: 32 decanted: (Y/N) N Date Extracted:12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T2-1

Sample wt/vol: 30 (g/mL) G Lab File ID: J6201

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	39	J
207-08-9	Benzo(k)fluoranthene	44	J
50-32-8	Benzo(a)pyrene	49	J
193-39-5	Indeno(1,2,3-cd)pyrene	250	U J
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

1 - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T3-1

Sample wt/vol: 30 (g/mL) G Lab File ID: J6202

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: 35 decanted: (Y/N) N Date Extracted:12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	260	U J
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
541-73-1	1,3-Dichlorobenzene	260	U
106-46-7	1,4-Dichlorobenzene	94	J
95-50-1	1,2-Dichlorobenzene	260	U J
95-48-7	2-Methylphenol	260	U
108-60-1	bis(2-Chloroisopropyl)ether	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
106-44-5	3&4-Methylphenol	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
120-82-1	1,2,4-Trichlorobenzene	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	510	U
87-68-3	Hexachlorobutadiene	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	260	U
606-20-2	2,6-Dinitrotoluene	260	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	260	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	260	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T3-1

Sample wt/vol: 30 (g/mL) G Lab File ID: J6202

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: 35 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	260	U
86-73-7	Fluorene	260	U
131-11-3	Dimethylphthalate	260	U
84-66-2	Diethylphthalate	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	98	J
120-12-7	Anthracene	260	UJ
84-74-2	Di-n-Butylphthalate	260	UJ
206-44-0	Fluoranthene	170	J
129-00-0	Pyrene	160	J
85-68-7	Butylbenzylphthalate	260	UJ
56-55-3	Benzo(a)Anthracene	92	J
91-94-1	3,3'-Dichlorobenzidine	510	UJ
218-01-9	Chrysene	140	J
117-81-7	Bis(2-ethylhexyl)phthalate	110	J
117-84-0	Di-n-octylphthalate	260	UJ
205-99-2	Benzo(b)fluoranthene	180	J
207-08-9	Benzo(k)fluoranthene	130	J
50-32-8	Benzo(a)pyrene	190	J
193-39-5	Indeno(1,2,3-cd)pyrene	110	J
53-70-3	Dibenzo(a,h)anthracene	140	UJ
191-24-2	Benzo(g,h,i)perylene	130	J
86-74-8	Carbazole	260	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T4-1

Sample wt/vol: 30 (g/mL) G Lab File ID: J6203

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U J-m
91-57-6	2-Methylnaphthalene	230	U J
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18048-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL073

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T4-1

Sample wt/vol: 30 (g/mL) G Lab File ID: J6203

Level: (low/med) LOW Date Received: 12/12/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I SV

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO012svocjas.doc 06105-012-202
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG# SIL071	**CC:**	D. McGrath/Westford

SUMMARY

Full validation was performed on the data for eight sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on November 9, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL071.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to nonconformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T17-C1	CBS-CSB-T17-E1
CBS-CSB-T17-E1D (field duplicate of CBS-CSB-T17-E1)	CBS-CSB-T17-W1
CBS-CSB-T18-C1	CBS-CSB-T18-W1
CBS-CSB-T18-W1D (field duplicate of CBS-CSB-T18-W1)	CBS-CSB-T18-E1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes

- Initial and continuing calibrations
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Internal standard performance
- Field duplicate results
- Laboratory control sample (LCS) results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding times with the exception of sample CBS-CSB-T17-C1. This sample was re-extracted 18 days out of method specified holding time due to surrogate nonconformance (see surrogate section below). The re-extracted analysis was reported due to more target analytes reported for the re-extracted analysis. Positive results and nondetects were qualified as estimated (J, UJ).

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4 C ± 2 C). Non-conformances were not observed for this sample set.

GC/MS Tunes

The frequency and abundance of the decafluorotriphenylphosphine (DFTPP) tunes were within the QC acceptance criteria. All samples were analyzed within 12 hours from the DFTPP tune.

Initial and Continuing Calibrations

The relative percent standard deviations (%RSDs) and/or the correlation coefficients (r^2), percent differences (%Ds), and/or response factors (RFs) were within the QC acceptance criteria in the initial calibration standards.

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recovery of terphenyl-d_{14} (29) was below the QC acceptance limits in sample CBS-CSB-T17-C1. The sample was re-extracted yielding acceptable surrogate recoveries. The re-extraction was reported. No validation action was taken since the results were already qualified as estimated (J,UJ) due to holding time nonconformance.

MS/MSD Results

Sample CBS-CSB-T18-E1 was submitted for MS/MSD analyses with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) were within the QC acceptance limits.

Internal Standard Performance

Internal standard performance met the QC acceptance criteria in all sample analyses.

Field Duplicate Results

Samples CBS-CSB-T17-E1/CBS-CSB-T17-E1D and CBS-CSB-T18-W1/CBS-CSB-T18-W1D were submitted as the field duplicate pairs with this sample set. The following tables summarize the RPDs of the detected analytes in the field duplicate pairs. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	CBS-CSB-T17-E1 (µg/Kg)	CBS-CSB-T17-E1D (µg/Kg)	RPD (%)
Di-n-Butylphthalate	73	44	50
Fluoranthene	76	52	38
Pyrene	93	240 U	NC
Benzo(a)pyrene	43	42	2
NC-RPD not calculable due to a nondetect in the field duplicate.			

Compound	CBS-CSB-T18-W1 (µg/Kg)	CBS-CSB-T18-W1D (µg/Kg)	RPD (%)
Di-n-Butylphthalate	78	78	0

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Quantitation Limits and Sample Results

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids <50%.

Calculations were spot-checked. There were no discrepancies noted.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5561

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 38 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	270	U
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
541-73-1	1,3-Dichlorobenzene	270	U
106-46-7	1,4-Dichlorobenzene	270	U
95-50-1	1,2-Dichlorobenzene	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	bis(2-Chloroisopropyl)ether	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
106-44-5	3&4-Methylphenol	270	U
67-72-1	Hexachloroethane	270	U
98-95-3	Nitrobenzene	270	U
78-59-1	Isophorone	270	U
88-75-5	2-Nitrophenol	270	U
111-91-1	Bis(2-chloroethoxy)methane	270	U
120-83-2	2,4-Dichlorophenol	270	U
120-82-1	1,2,4-Trichlorobenzene	270	U
91-20-3	Naphthalene	270	U
106-47-8	4-Chloroaniline	530	U
87-68-3	Hexachlorobutadiene	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	270	U
77-47-4	Hexachlorocyclopentadiene	270	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	1400	U
208-96-8	Acenaphthylene	270	U
606-20-2	2,6-Dinitrotoluene	270	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	270	U
51-28-5	2,4-Dinitrophenol	1400	U
132-64-9	Dibenzofuran	270	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5561

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 38 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1400	U
121-14-2	2,4-Dinitrotoluene	270	U
86-73-7	Fluorene	270	U
131-11-3	Dimethylphthalate	270	U
84-66-2	Diethylphthalate	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-Nitrosodiphenylamine (1)	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
84-74-2	Di-n-Butylphthalate	85	J
206-44-0	Fluoranthene	270	U
129-00-0	Pyrene	270	U
85-68-7	Butylbenzylphthalate	270	U
56-55-3	Benzo(a)Anthracene	270	U
91-94-1	3,3'-Dichlorobenzidine	530	U
218-01-9	Chrysene	270	U
117-81-7	Bis(2-ethylhexyl)phthalate	270	U
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	U
207-08-9	Benzo(k)fluoranthene	270	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	270	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	270	U
86-74-8	Carbazole	270	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5561

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 38 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.06	960	JA
2.	UNKNOWN	10.60	220	J
3. 7704-34-9	SULFUR	17.35	320	NJ
4.	UNKNOWN AMIDE	20.16	1500	JB
5.				
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-1RE

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: D4486

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 38 decanted: (Y/N) N Date Extracted:12/04/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	270	U
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
541-73-1	1,3-Dichlorobenzene	270	U
106-46-7	1,4-Dichlorobenzene	270	U
95-50-1	1,2-Dichlorobenzene	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	bis(2-Chloroisopropyl)ether	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
106-44-5	3&4-Methylphenol	270	U
67-72-1	Hexachloroethane	270	U
98-95-3	Nitrobenzene	270	U
78-59-1	Isophorone	270	U
88-75-5	2-Nitrophenol	270	U
111-91-1	Bis(2-chloroethoxy)methane	270	U
120-83-2	2,4-Dichlorophenol	270	U
120-82-1	1,2,4-Trichlorobenzene	270	U
91-20-3	Naphthalene	270	U
106-47-8	4-Chloroaniline	530	U
87-68-3	Hexachlorobutadiene	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	270	U
77-47-4	Hexachlorocyclopentadiene	270	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	1400	U
208-96-8	Acenaphthylene	270	U
606-20-2	2,6-Dinitrotoluene	270	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	270	U
51-28-5	2,4-Dinitrophenol	1400	U
132-64-9	Dibenzofuran	270	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-1RE

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: D4486

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 38 decanted: (Y/N) N Date Extracted: 12/04/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1400	UJ
121-14-2	2,4-Dinitrotoluene	270	U
86-73-7	Fluorene	270	U
131-11-3	Dimethylphthalate	270	U
84-66-2	Diethylphthalate	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-Nitrosodiphenylamine (1)	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
84-74-2	Di-n-Butylphthalate	100	J
206-44-0	Fluoranthene	270	UJ
129-00-0	Pyrene	270	U
85-68-7	Butylbenzylphthalate	270	U
56-55-3	Benzo(a)Anthracene	270	U
91-94-1	3,3'-Dichlorobenzidine	530	U
218-01-9	Chrysene	270	U
117-81-7	Bis(2-ethylhexyl)phthalate	270	U
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	64	J
207-08-9	Benzo(k)fluoranthene	58	J
50-32-8	Benzo(a)pyrene	89	J
193-39-5	Indeno(1,2,3-cd)pyrene	200	J
53-70-3	Dibenzo(a,h)anthracene	190	J
191-24-2	Benzo(g,h,i)perylene	190	J
86-74-8	Carbazole	270	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-1RE

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: D4486

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 38 decanted: (Y/N) N Date Extracted:12/04/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	3.91	820	JAB
2.	UNKNOWN	9.52	550	J
3.	UNKNOWN	10.77	390	JB
4.	UNKNOWN	10.82	500	JB
5.	UNKNOWN	10.87	400	JB
6.	UNKNOWN	11.05	400	JB
7.	UNKNOWN	11.10	390	JB
8.	UNKNOWN	13.05	480	J
9.	UNKNOWN	13.17	470	J
10.	UNKNOWN	13.31	730	J
11. 10544-50-0	SULFUR, MOL. (S8)	13.38	1200	NJ
12.	UNKNOWN AMIDE	15.74	310	J
13.	UNKNOWN AMIDE	16.74	3300	JB
14.	UNKNOWN	17.42	270	J
15.	UNKNOWN ORGANIC ACID	20.08	290	J
16.	UNKNOWN	20.20	300	J
17.	UNKNOWN	22.39	700	J
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FORM I SV-TIC

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5562

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 31 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5562

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 31 decanted: (Y/N) N Date Extracted:11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	73	J
206-44-0	Fluoranthene	76	J
129-00-0	Pyrene	93	J
85-68-7	Butylbenzylphthalate	250	UJ
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	43	J
193-39-5	Indeno(1,2,3-cd)pyrene	250	UJ
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5562

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 31 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.06	870	JA
2.		UNKNOWN	10.60	290	J
3.		UNKNOWN	16.94	200	J
4.		UNKNOWN	17.11	380	JB
5.	10544-50-0	SULFUR, MOL. (S8)	17.34	250	NJ
6.		UNKNOWN	17.97	220	J
7.		UNKNOWN	18.09	290	J
8.		UNKNOWN	18.22	190	J
9.		UNKNOWN ALKANE	19.05	360	J
10.		UNKNOWN	20.16	1500	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5563

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5563

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	44	J
206-44-0	Fluoranthene	52	J
129-00-0	Pyrene	240	UJ
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	42	J
193-39-5	Indeno(1,2,3-cd)pyrene	240	UJ
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-E1D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5563

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 28 decanted: (Y/N) N Date Extracted:11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN AMIDE	4.06	690	J
2.	UNKNOWN	10.59	280	J
3.	UNKNOWN	16.20	190	J
4.	UNKNOWN	16.80	210	J
5.	UNKNOWN	16.94	200	J
6.	UNKNOWN	17.11	510	JB
7.	UNKNOWN ORGANIC ACID	17.27	410	J
8. 10544-50-0	SULFUR, MOL. (S8)	17.34	220	NJ
9.	UNKNOWN PAH	17.67	200	J
10.	UNKNOWN	18.22	230	J
11.	UNKNOWN AMIDE	20.16	820	JB
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-WI

Sample wt/vol: 30 (g/mL) G Lab File ID: J5564

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 29 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	98	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-WI

Sample wt/vol: 30 (g/mL) G Lab File ID: J5564

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 29 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	98	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	98	J
206-44-0	Fluoranthene	240	UJ
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T17-WI

Sample wt/vol: 30 (g/mL) G Lab File ID: J5564

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 29 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.05	710	JA
2.		UNKNOWN	15.30	200	J
3.		UNKNOWN	15.49	190	J
4.		UNKNOWN PHTHALATE	16.21	220	J
5.	10544-50-0	SULFUR, MOL. (S8)	17.35	680	NJ
6.		UNKNOWN AMIDE	20.16	1800	JB
7.		UNKNOWN	20.25	350	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5565

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 26 decanted: (Y/N) N Date Extracted:11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U ✓

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5565

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	74	J
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

1 - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5565

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 26 decanted: (Y/N) N Date Extracted:11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.06	690	JA
2.	UNKNOWN	10.59	200	J
3.	UNKNOWN	12.62	240	J
4. 7704-34-9	SULFUR	17.35	250	NJ
5.	UNKNOWN	20.16	790	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-6

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5566

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/30/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-6

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5566

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	78	J
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-6

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5566

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.07	690	JA
2.		UNKNOWN	10.60	200	J
3.		UNKNOWN AMIDE	20.15	460	JB
4.					
5.					
6.					
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5567

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5567

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	78	J
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-W1D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5567

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 26 decanted: (Y/N) N Date Extracted:11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.06	750	JA
2.	UNKNOWN AMIDE	20.15	500	JB
3.				
4.				
5.				
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5568

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17355-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5568

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 28 decanted: (Y/N) N Date Extracted:11/16/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/30/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	56	J
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

17355-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL071

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T18-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5568

Level: (low/med) LOW Date Received: 11/12/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/16/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 11/30/01

Injection Volume: 1.0 uL Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.05	890	JA
2.	UNKNOWN ORGANIC ACID	10.60	210	J
3.	UNKNOWN	20.15	240	J
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ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 24, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO013SVOCLN.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, Illinois STL SDG SIL072	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for ten sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on November 19, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG)SIL072.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination or qualified as estimated (J/UJ) due to non-conformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T11-C1	CBS-CSB-T12-W1
CBS-CSB-T11-C1-D (duplicate of CBS-CSB-T11-C1)	CBS-CSB-T12-E1
CBS-CSB-T11-W1	CBS-CSB-T13-C1
CBS-CSB-T11-E1	CBS-CSB-T13-W1
CBS-CSB-T12-C1	CBS-CSB-T13-E1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results

- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC, with the exception of samples SP-008, SP-008-D and SP-009, which were not included in the scope of this data validation effort.

The laboratory reported the full field sample identification (ID) in the lab ID field on the Form Is in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Di-n-butylphthalate was detected in the laboratory method blank. The presence of blank contamination indicates that false positives may exist for this compound in the associated samples. An Action Level (AL) was established at 10x the concentration detected in the blank for di-n-butylphthalate. The following table summarizes the AL.

Type of Blank	Compound	Concentration Detected (µg/kg)	Action Level (µg/kg)
Laboratory Blank-11/26/01	Di-n-butylphthalate	42	420
Associated samples CBS-CSB-T11-C1, CBS-CSB-T11-C1-D, CBS-CSB-T11-W1, CBS-CSB-T11-E1, CBS-CSB-T12-C1, CBS-CSB-T12-W1, CBS-CSB-T12-E1, CBS-CSB-T13-C1, CBS-CSB-T13-W1 and CBS-CSB-T13-E1			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as non-detect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as non-detect (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSB-T13-E1 was submitted for MS/MSD analyses with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds were within the QC acceptance limits except for the RPD for hexachlorocyclopentadiene (52%). The non-detect hexachlorocyclopentadiene result in the associated sample was qualified as estimated (UJ).

Field Duplicate Results

Samples CBS-CSB-T11-C1/CBS-CSB-T11-C1-D were submitted as the field duplicate pair with this sample set. The following table summarizes the RPD of the detected analyte in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPD tabulated below are informational only.

Compound	Sample (µg/kg)	Duplicate (µg/kg)	RPD (%)
Benzo(g,h,i)perylene	41 J	230 U	NC
NC –RPD was not calculable due to a non-detect in the field duplicate.			

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids < 50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The non-detects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

The laboratory identified sample CBS-CSB-T11-C1-D as having a high internal standard recovery. The internal standard summary was inspected and determined by the validator to be slightly high. This sample was qualified as estimated (J/UJ) due to the internal standard non-conformance.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5662

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 29 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	98	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5662

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 29 decanted: (Y/N) N Date Extracted:11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	98	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	~~120 JB~~ 240	U J B
206-44-0	Fluoranthene	240	U J
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	41	J
86-74-8	Carbazole	240	U J

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1-D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5663

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J-Z
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1-D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5663

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 27 decanted: (Y/N) N Date Extracted:11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J-I
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	~~97 JB~~ 230	U J-B-I
206-44-0	Fluoranthene	230	U J-I
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-2RE

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil water) SOIL Lab Sample ID: CBS-CSB-T11-C1-D

Sample wt vol: 30 (g/mL) G Lab File ID: J5694

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/06/01

Injection Volume: 1.0(uL Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do NOT Report - LN 042402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-2RE

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-C1-D

Sample wt/vol: 30 (g/mL) G Lab File ID: J5694

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report

LN 042402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	~~95~~ ~~JB~~ 230	U-B
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5664

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	89	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5664

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	89	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	~~160 JB~~ 220 U J-B	
206-44-0	Fluoranthene	220	U J
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	420	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	110	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	110	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5665

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 18 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	210	UJ
111-44-4	Bis(2-chloroethyl)ether	210	U
95-57-8	2-Chlorophenol	210	U
541-73-1	1,3-Dichlorobenzene	210	U
106-46-7	1,4-Dichlorobenzene	210	U
95-50-1	1,2-Dichlorobenzene	210	U
95-48-7	2-Methylphenol	210	U
108-60-1	bis(2-Chloroisopropyl)ether	210	U
621-64-7	N-Nitroso-di-n-propylamine	210	U
106-44-5	3&4-Methylphenol	210	U
67-72-1	Hexachloroethane	210	U
98-95-3	Nitrobenzene	210	U
78-59-1	Isophorone	210	U
88-75-5	2-Nitrophenol	210	U
111-91-1	Bis(2-chloroethoxy)methane	210	U
120-83-2	2,4-Dichlorophenol	210	U
120-82-1	1,2,4-Trichlorobenzene	210	U
91-20-3	Naphthalene	210	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	210	U
59-50-7	4-Chloro-3-methylphenol	210	U
91-57-6	2-Methylnaphthalene	210	U
77-47-4	Hexachlorocyclopentadiene	210	U
88-06-2	2,4,6-Trichlorophenol	85	U
95-95-4	2,4,5-Trichlorophenol	210	U
91-58-7	2-Chloronaphthalene	210	U
88-74-4	2-Nitroaniline	1000	U
208-96-8	Acenaphthylene	210	U
606-20-2	2,6-Dinitrotoluene	210	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	210	U
51-28-5	2,4-Dinitrophenol	1000	U
132-64-9	Dibenzofuran	210	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T11-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5665

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 18 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1000	U J
121-14-2	2,4-Dinitrotoluene	210	U
86-73-7	Fluorene	210	U
131-11-3	Dimethylphthalate	210	U
84-66-2	Diethylphthalate	210	U
7005-72-3	4-Chlorophenyl-phenylether	210	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine (1)	210	U
101-55-3	4-Bromophenyl-phenylether	210	U
118-74-1	Hexachlorobenzene	85	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	210	U
120-12-7	Anthracene	210	U
84-74-2	Di-n-Butylphthalate	~~64 JB~~ 210	~~J~~ U-B
206-44-0	Fluoranthene	210	U J
129-00-0	Pyrene	210	U
85-68-7	Butylbenzylphthalate	210	U
56-55-3	Benzo(a)Anthracene	210	U
91-94-1	3,3'-Dichlorobenzidine	400	U
218-01-9	Chrysene	210	U
117-81-7	Bis(2-ethylhexyl)phthalate	210	U
117-84-0	Di-n-octylphthalate	210	U
205-99-2	Benzo(b)fluoranthene	210	U
207-08-9	Benzo(k)fluoranthene	210	U
50-32-8	Benzo(a)pyrene	110	U
193-39-5	Indeno(1,2,3-cd)pyrene	210	U
53-70-3	Dibenzo(a,h)anthracene	110	U
191-24-2	Benzo(g,h,i)perylene	210	U
86-74-8	Carbazole	210	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5666

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	UJ
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	240	J
95-50-1	1,2-Dichlorobenzene	250	UJ
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	40	J
91-20-3	Naphthalene	250	UJ
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	62	J
51-28-5	2,4-Dinitrophenol	1300	UJ
132-64-9	Dibenzofuran	250	UJ

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-5

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5666

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	52	J
120-12-7	Anthracene	190	J
84-74-2	Di-n-Butylphthalate	~~120~~	~~JB~~ 250 U J-B
206-44-0	Fluoranthene	1600	
129-00-0	Pyrene	1500	
85-68-7	Butylbenzylphthalate	250	U J
56-55-3	Benzo(a)Anthracene	800	
91-94-1	3,3'-Dichlorobenzidine	490	U J
218-01-9	Chrysene	770	
117-81-7	Bis(2-ethylhexyl)phthalate	250	U J
117-84-0	Di-n-octylphthalate	250	U J
205-99-2	Benzo(b)fluoranthene	700	
207-08-9	Benzo(k)fluoranthene	810	
50-32-8	Benzo(a)pyrene	840	
193-39-5	Indeno(1,2,3-cd)pyrene	340	
53-70-3	Dibenzo(a,h)anthracene	180	J
191-24-2	Benzo(g,h,i)perylene	310	J
86-74-8	Carbazole	250	U J

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-6

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5667

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	92	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-6

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5667

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	92	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	~~72 JB~~ 220	U J B
206-44-0	Fluoranthene	220	U J
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5668

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 15 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 12/05/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	200	UJ
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	bis(2-Chloroisopropyl)ether	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
106-44-5	3&4-Methylphenol	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	200	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U
88-06-2	2,4,6-Trichlorophenol	82	U
95-95-4	2,4,5-Trichlorophenol	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	1000	U
208-96-8	Acenaphthylene	200	U
606-20-2	2,6-Dinitrotoluene	200	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	1000	U
132-64-9	Dibenzofuran	200	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-7

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T12-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5668

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 15 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1000	UJ
121-14-2	2,4-Dinitrotoluene	200	U
86-73-7	Fluorene	200	U
131-11-3	Dimethylphthalate	200	U
84-66-2	Diethylphthalate	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	82	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
84-74-2	Di-n-Butylphthalate	~~58 JB~~ 200	U-B
206-44-0	Fluoranthene	200	UJ
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
56-55-3	Benzo(a)Anthracene	200	U
91-94-1	3,3'-Dichlorobenzidine	390	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	100	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	100	U
191-24-2	Benzo(g,h,i)perylene	200	U
86-74-8	Carbazole	200	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5674

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	UJ
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-8

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-C1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5674

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/05/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	~~73 BJ~~ 240	U B
206-44-0	Fluoranthene	240	U J
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	77	J
193-39-5	Indeno(1,2,3-cd)pyrene	240	U J
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-9

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5675

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 12/06/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-9

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-W1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5675

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	~~86 BJ~~ 230 J µ-B	
206-44-0	Fluoranthene	230	U J
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-10

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5695

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 15 decanted: (Y/N) N Date Extracted: 11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	200	U J
111-44-4	Bis(2-chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
541-73-1	1,3-Dichlorobenzene	200	U
106-46-7	1,4-Dichlorobenzene	200	U
95-50-1	1,2-Dichlorobenzene	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	bis(2-Chloroisopropyl)ether	200	U
621-64-7	N-Nitroso-di-n-propylamine	200	U
106-44-5	3&4-Methylphenol	200	U
67-72-1	Hexachloroethane	200	U
98-95-3	Nitrobenzene	200	U
78-59-1	Isophorone	200	U
88-75-5	2-Nitrophenol	200	U
111-91-1	Bis(2-chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
120-82-1	1,2,4-Trichlorobenzene	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	200	U
59-50-7	4-Chloro-3-methylphenol	200	U
91-57-6	2-Methylnaphthalene	200	U
77-47-4	Hexachlorocyclopentadiene	200	U J-M
88-06-2	2,4,6-Trichlorophenol	82	U J
95-95-4	2,4,5-Trichlorophenol	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	1000	U
208-96-8	Acenaphthylene	200	U
606-20-2	2,6-Dinitrotoluene	200	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	200	U
51-28-5	2,4-Dinitrophenol	1000	U
132-64-9	Dibenzofuran	200	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

17553-10

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL072

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T13-E1

Sample wt/vol: 30 (g/mL) G Lab File ID: J5695

Level: (low/med) LOW Date Received: 11/20/01

% Moisture: 15 decanted: (Y/N) N Date Extracted:11/26/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/06/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1000	U J
121-14-2	2,4-Dinitrotoluene	200	U
86-73-7	Fluorene	200	U
131-11-3	Dimethylphthalate	200	U
84-66-2	Diethylphthalate	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine (1)	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	82	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
84-74-2	Di-n-Butylphthalate	~~64~~ ~~JB~~ 200	~~J~~ U-B
206-44-0	Fluoranthene	200	U J
129-00-0	Pyrene	200	U
85-68-7	Butylbenzylphthalate	200	U
56-55-3	Benzo(a)Anthracene	200	U
91-94-1	3,3'-Dichlorobenzidine	390	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	200	U
117-84-0	Di-n-octylphthalate	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	100	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	100	U
191-24-2	Benzo(g,h,i)perylene	200	U
86-74-8	Carbazole	200	U

(1) - Cannot be separated from Diphenylamine

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 24, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO014SVOCLN.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, Illinois STL SDG SIL074	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for sixteen sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on December 12 and 13, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL074.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSD-T1-1	CBS-CSC-T3-1
CBS-CSD-T2-1	CBS-CSC-T4-1
CBS-CSD-T3-1	CBS-CSC-T4-1-FD (field duplicate of CBS-CSC-T4-1)
CBS-CSD-T4-1	CBS-CSC-T5-1
CBS-CSD-T5-1	CBS-CSC-T6-1
CBS-CSD-T6-1	CBS-CSC-T7-1
CBS-CSC-T1-1	CBS-CSC-T8-1
CBS-CSC-T2-1	CBS-CSC-T9-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries

- Matrix spike matrix spike duplicate (MS MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Benzo(a)anthracene, chrysene, benzo(b)fluoranthene and benzo(k)fluoranthene were detected in the laboratory method blank. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at 5x the concentration detected in the blank for benzo(a)anthracene, chrysene, benzo(k)fluoranthene and benzo(b)fluoranthene. The following table summarizes the ALs.

Type of Blank	Compound	Concentration Detected (µg/kg)	Action Level (µg/kg)
Laboratory Blank-12/19/01	Benzo(a)anthracene	25	125
	Chrysene	26	130
	Benzo(b)fluoranthene	25	125
	Benzo(k)fluoranthene	28	140
Associated samples: CBS-CSD-T1-1, CBS-CSD-T2-1, CBS-CSD-T3-1, CBS-CSD-T4-1, CBS-CSD-T5-1, CBS-CSD-T6-1, CBS-CSC-T1-1, CBS-CSC-T2-1, CBS-CSC-T3-1, CBS-CSC-T4-1, CBS-CSC-T4-1-FD, CBS-CSC-T5-1, CBS-CSC-T6-1, CBS-CSC-T7-1, CBS-CSC-T8-1 and CBS-CSC-T9-1.			

Sample results were qualified as follows:

- If the sample result was ≤ AL and ≤ the sample quantitation limit (SQL), the result was qualified as non-detect (U) at the SQL.
- If the sample result was ≤ AL and > SQL, the result was qualified as non-detect (U) at the reported concentration.
- If the sample result was > AL, the result was not qualified.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on client sample CBS-CSF-T4-1, which was not submitted with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits except for the RPD for 4-chloro-3-methylphenol (33%). *Qualification of the data was not required since the associated sample was* not included in this sample set.

Field Duplicate Results

Samples CBS-CSC-T4-1 and CBS-CSC-T4-1-FD were submitted as the field duplicate pair with this sample set. Target analytes were not detected in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids < 50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The non-detects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T1-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5932

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	130	J
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T1-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5932

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	69	J
129-00-0	Pyrene	250	U J
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T2-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5933

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 34 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	260	U J
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
541-73-1	1,3-Dichlorobenzene	260	U
106-46-7	1,4-Dichlorobenzene	260	U
95-50-1	1,2-Dichlorobenzene	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	bis(2-Chloroisopropyl)ether	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
106-44-5	3&4-Methylphenol	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
120-82-1	1,2,4-Trichlorobenzene	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	500	U
87-68-3	Hexachlorobutadiene	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	260	U
606-20-2	2,6-Dinitrotoluene	260	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	260	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	260	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T2-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5933

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 34 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	260	U
86-73-7	Fluorene	260	U
131-11-3	Dimethylphthalate	260	U
84-66-2	Diethylphthalate	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
84-74-2	Di-n-Butylphthalate	260	U
206-44-0	Fluoranthene	170	J
129-00-0	Pyrene	150	J
85-68-7	Butylbenzylphthalate	260	U J
56-55-3	Benzo(a)Anthracene	~~71~~ ~~JB~~ 260	UJB
91-94-1	3,3'-Dichlorobenzidine	500	U J
218-01-9	Chrysene	~~70~~ ~~JB~~ 260	UJB
117-81-7	Bis(2-ethylhexyl)phthalate	260	U J
117-84-0	Di-n-octylphthalate	260	U J
205-99-2	Benzo(b)fluoranthene	~~52~~ ~~JB~~ 260	UJB
207-08-9	Benzo(k)fluoranthene	~~59~~ ~~JB~~ 260	UJB
50-32-8	Benzo(a)pyrene	49	J
193-39-5	Indeno(1,2,3-cd)pyrene	260	U J
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	260	U
86-74-8	Carbazole	260	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T3-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5934

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T3-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5934

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	470	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T4-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5935

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	53	J
95-50-1	1,2-Dichlorobenzene	250	U J
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T4-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5935

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	47	J
120-12-7	Anthracene	250	UJ
84-74-2	Di-n-Butylphthalate	250	UJ
206-44-0	Fluoranthene	120	J
129-00-0	Pyrene	120	J
85-68-7	Butylbenzylphthalate	250	UJ
56-55-3	Benzo(a)Anthracene	~~63~~ ~~JB~~ 250 UJB	
91-94-1	3,3'-Dichlorobenzidine	490	UJ
218-01-9	Chrysene	~~120~~ ~~JB~~ 250 UJB	
117-81-7	Bis(2-ethylhexyl)phthalate	250	UJ
117-84-0	Di-n-octylphthalate	250	UJ
205-99-2	Benzo(b)fluoranthene	~~150~~ ~~JB~~ 250 UJB	
207-08-9	Benzo(k)fluoranthene	~~90~~ ~~JB~~ 250 UJB	
50-32-8	Benzo(a)pyrene	130	J
193-39-5	Indeno(1,2,3-cd)pyrene	110	J
53-70-3	Dibenzo(a,h)anthracene	130	UJ
191-24-2	Benzo(g,h,i)perylene	130	J
86-74-8	Carbazole	250	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T5-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5950

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T5-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5950

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T6-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5937

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18127-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSD-T6-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5937

Level: (low/med) LOW Date Received: 12/13/01

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	UJ
85-01-8	Phenanthrene	120	J
120-12-7	Anthracene	250	UJ
84-74-2	Di-n-Butylphthalate	250	UJ
206-44-0	Fluoranthene	190	J
129-00-0	Pyrene	160	J
85-68-7	Butylbenzylphthalate	250	UJ
56-55-3	Benzo(a)Anthracene	~~97~~ ~~JB~~ 250	UJB
91-94-1	3,3'-Dichlorobenzidine	480	UJ
218-01-9	Chrysene	~~170~~ ~~JB~~ 250	UJB
117-81-7	Bis(2-ethylhexyl)phthalate	250	UJ
117-84-0	Di-n-octylphthalate	250	UJ
205-99-2	Benzo(b)fluoranthene	200	J~~B~~
207-08-9	Benzo(k)fluoranthene	210	J~~B~~
50-32-8	Benzo(a)pyrene	140	J
193-39-5	Indeno(1,2,3-cd)pyrene	180	J
53-70-3	Dibenzo(a,h)anthracene	130	UJ
191-24-2	Benzo(g,h,i)perylene	220	J
86-74-8	Carbazole	250	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T1-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5951

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 27 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 12/29/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	UJ
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T1-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5951

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 27 decanted: (Y/N) N Date Extracted:12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T2-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5952

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	UJ
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T2-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5952

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	25	J
120-12-7	Anthracene	240	UJ
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	470	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T3-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5953

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 35 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	260	UJ
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
541-73-1	1,3-Dichlorobenzene	260	U
106-46-7	1,4-Dichlorobenzene	260	U
95-50-1	1,2-Dichlorobenzene	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	bis(2-Chloroisopropyl)ether	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
106-44-5	3&4-Methylphenol	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
120-82-1	1,2,4-Trichlorobenzene	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	510	U
87-68-3	Hexachlorobutadiene	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	260	U
606-20-2	2,6-Dinitrotoluene	260	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	260	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	260	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T3-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5953

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 35 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	260	U
86-73-7	Fluorene	260	U
131-11-3	Dimethylphthalate	260	U
84-66-2	Diethylphthalate	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
84-74-2	Di-n-Butylphthalate	260	U
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	260	U
56-55-3	Benzo(a)Anthracene	260	U
91-94-1	3,3'-Dichlorobenzidine	510	U
218-01-9	Chrysene	260	U
117-81-7	Bis(2-ethylhexyl)phthalate	260	U
117-84-0	Di-n-octylphthalate	260	U
205-99-2	Benzo(b)fluoranthene	260	U
207-08-9	Benzo(k)fluoranthene	260	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	260	U
86-74-8	Carbazole	260	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T4-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5954

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T4-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5954

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T4-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: G5955

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 34 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 12/29/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	260	U J
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
541-73-1	1,3-Dichlorobenzene	260	U
106-46-7	1,4-Dichlorobenzene	260	U
95-50-1	1,2-Dichlorobenzene	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	bis(2-Chloroisopropyl)ether	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
106-44-5	3&4-Methylphenol	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
120-82-1	1,2,4-Trichlorobenzene	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	500	U
87-68-3	Hexachlorobutadiene	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	260	U
606-20-2	2,6-Dinitrotoluene	260	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	260	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	260	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T4-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: G5955

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 34 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	260	U
86-73-7	Fluorene	260	U
131-11-3	Dimethylphthalate	260	U
84-66-2	Diethylphthalate	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
84-74-2	Di-n-Butylphthalate	260	U
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	260	U
56-55-3	Benzo(a)Anthracene	260	U
91-94-1	3,3'-Dichlorobenzidine	500	U
218-01-9	Chrysene	260	U
117-81-7	Bis(2-ethylhexyl)phthalate	260	U
117-84-0	Di-n-octylphthalate	260	U
205-99-2	Benzo(b)fluoranthene	260	U
207-08-9	Benzo(k)fluoranthene	260	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	260	U
86-74-8	Carbazole	260	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T5-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5956

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 36 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 12/29/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	260	U
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
541-73-1	1,3-Dichlorobenzene	260	U
106-46-7	1,4-Dichlorobenzene	260	U
95-50-1	1,2-Dichlorobenzene	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	bis(2-Chloroisopropyl)ether	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
106-44-5	3&4-Methylphenol	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
120-82-1	1,2,4-Trichlorobenzene	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	520	U
87-68-3	Hexachlorobutadiene	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	260	U
606-20-2	2,6-Dinitrotoluene	260	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	260	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	260	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T5-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5956

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 36 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	260	U
86-73-7	Fluorene	260	U
131-11-3	Dimethylphthalate	260	U
84-66-2	Diethylphthalate	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
84-74-2	Di-n-Butylphthalate	260	U
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	260	U
56-55-3	Benzo(a)Anthracene	260	U
91-94-1	3,3'-Dichlorobenzidine	520	U
218-01-9	Chrysene	260	U
117-81-7	Bis(2-ethylhexyl)phthalate	260	U
117-84-0	Di-n-octylphthalate	260	U
205-99-2	Benzo(b)fluoranthene	260	U
207-08-9	Benzo(k)fluoranthene	260	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	260	U
86-74-8	Carbazole	260	U

(1) - Cannot be separated from Diphenylamine

FORM I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T6-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5974

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 37 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	270	U J
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
541-73-1	1,3-Dichlorobenzene	270	U
106-46-7	1,4-Dichlorobenzene	270	U
95-50-1	1,2-Dichlorobenzene	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	bis(2-Chloroisopropyl)ether	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
106-44-5	3&4-Methylphenol	270	U
67-72-1	Hexachloroethane	270	U
98-95-3	Nitrobenzene	270	U
78-59-1	Isophorone	270	U
88-75-5	2-Nitrophenol	270	U
111-91-1	Bis(2-chloroethoxy)methane	270	U
120-83-2	2,4-Dichlorophenol	270	U
120-82-1	1,2,4-Trichlorobenzene	270	U
91-20-3	Naphthalene	270	U
106-47-8	4-Chloroaniline	520	U
87-68-3	Hexachlorobutadiene	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	270	U
77-47-4	Hexachlorocyclopentadiene	270	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	270	U
606-20-2	2,6-Dinitrotoluene	270	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	270	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	270	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T6-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5974

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 37 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	270	U
86-73-7	Fluorene	270	U
131-11-3	Dimethylphthalate	270	U
84-66-2	Diethylphthalate	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
84-74-2	Di-n-Butylphthalate	270	U
206-44-0	Fluoranthene	270	U
129-00-0	Pyrene	270	U
85-68-7	Butylbenzylphthalate	270	U
56-55-3	Benzo(a)Anthracene	270	U
91-94-1	3,3'-Dichlorobenzidine	520	U
218-01-9	Chrysene	270	U
117-81-7	Bis(2-ethylhexyl)phthalate	270	U
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	~~38 JB~~ 270 UJB	
207-08-9	Benzo(k)fluoranthene	~~42 JB~~ 270 UJB	
50-32-8	Benzo(a)pyrene	140	U J
193-39-5	Indeno(1,2,3-cd)pyrene	270	U J
53-70-3	Dibenzo(a,h)anthracene	140	U J
191-24-2	Benzo(g,h,i)perylene	65	J
86-74-8	Carbazole	270	U J

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T7-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5958

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T7-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5958

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T8-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5959

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 12/29/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	UJ
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T8-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5959

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5960

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18162-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL074

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSC-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5960

Level: (low/med) LOW Date Received: 12/14/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 12/19/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/29/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	UJ
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 19, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO015svocjas.doc 06105-012-202
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG# SIL081	**CC:**	D. McGrath/Westford

SUMMARY

Full validation was performed on the data for four sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on January 16, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL081.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to nonconformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSF-T6-1	CBS-CSF-T6-1-FD (field duplicate of CBS-CSF-T6-1)
CBS-CSF-T7-1	CBS-CSF-T13-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes
- Initial and continuing calibrations

- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Internal standard performance
- Field duplicate results
- Laboratory control sample (LCS) results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding times.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

GC/MS Tunes

The frequency and abundance of the decafluorotriphenylphosphine (DFTPP) tunes were within the QC acceptance criteria. All samples were analyzed within 12 hours from the DFTPP tune.

Initial and Continuing Calibrations

The relative percent standard deviations (%RSDs), correlation coefficients (r^2), percent differences (%Ds), and/or response factors (RFs) were within the QC acceptance criteria in the initial calibration and continuing calibration standards.

Blank Analysis Results

Target analytes were not detected in the laboratory method blanks.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSF-T7-1 was submitted for MS/MSD analyses with this sample set. The following table summarizes the percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses which were outside the QC acceptance limits.

Compound	CBS-CSF-T7-1 MS and/or MSD (%R)	RPD (%)
Bis(2-chloroethyl)ether	14	ok
1,3-Dichlorobenzene	19	52
1,2-Dichlorobenzene	20	55
2-Methylphenol	26	54
2-Nitrophenol	24	53
Bis(2-chloroethoxy)methane	24	58
2,4-Dichlorophenol	28	ok
Naphthalene	24	53
Hexachlorobutadiene	26	ok
Hexachlorocyclopentadiene	ok	106
2-Methylnaphthalene	28	ok
2,4,6-Trichlorophenol	33	38
2-Chloronaphthalene	26	54
Dibenzofuran	33	ok
Dimethylphthalate	37/48	ok
4-Chlorophenyl phenyl ether	33	ok
N-Nitrosodiphenyl amine	37/43	ok
Butylbenzylphthalate	39/41	ok
Benzo(a)anthracene	50	ok
Chrysene	48/52	ok
Bis(2-ethylhexyl)phthalate	39/41	ok
Phenol	ok	53
2-Chlorophenol	ok	48
1,4-Dichlorobenzene	ok	49
Bis(2-chloroisopropyl)ether	ok	48
N-Nitrosodi-n-propylamine	ok	53
3+4-Methylphenol	ok	54
Hexachloroethane	ok	58
Nitrobenzene	ok	53
1,2,4-Trichlorobenzene	ok	53
4-Chloro-3-methylphenol	ok	38
Acenaphthylene	30	ok

Nondetects were reported for these compounds in the unspiked sample CBS-CSF-T7-1; these nondetects were qualified as estimated (UJ)

Internal Standard Performance

Internal standard performance met the QC acceptance criteria in all sample analyses.

Field Duplicate Results

Samples CBS-CSF-T6-1 and CBS-CSF-T6-1 FD was submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

ENSR

Compound	CBS-CSF-T6-1 (µg/L)	CBS-CSF-T6-1-FD (µg/L)	RPD (%)
Fluoranthene	62	240 U	NC
Chrysene	35	240 U	NC
Benzo(b)fluoranthene	40	240 U	NC
Benzo(g,h,i)perylene	58	240 U	NC
NC-Not calculable due to a nondetect result in the field duplicate.			

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Quantitation Limits and Sample Results

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids <50%.

Calculations were spot-checked. There were no discrepancies noted.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL and postive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1639

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 33 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM I

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: soil water SOIL Lab Sample ID: CBS-CSF-T6-1

Sample wt vol: 30 (g/mL) G Lab File ID: E1639

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 33 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	62	J
129-00-0	Pyrene	250	UJ
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	35	J
117-81-7	Bis(2-ethylhexyl)phthalate	250	UJ
117-84-0	Di-n-octylphthalate	250	UJ
205-99-2	Benzo(b)fluoranthene	40	J
207-08-9	Benzo(k)fluoranthene	250	UJ
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	58	J
86-74-8	Carbazole	250	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

40367-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1639

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 33 decanted: (Y/N) N Date Extracted:01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	3.20	4900	JAB
2.	UNKNOWN	12.60	410	J
3. 10544-50-0	SULFUR, MOL. (S8)	14.08	310	NJ
4.	UNKNOWN ALKANE	16.67	230	J
5.	UNKNOWN ALKANE	17.29	240	J
6.	UNKNOWN ALKANE	17.88	240	J
7.	UNKNOWN	18.71	390	J
8.	UNKNOWN	19.07	530	J
9.	UNKNOWN	19.11	840	J
10.	UNKNOWN	19.28	360	J
11.	UNKNOWN	20.33	440	J
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FORM I SV-TIC

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: E1640

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 30 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	UJ
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: E1640

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 30 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	470	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

40367-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T6-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: E1640

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 30 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	3.21	4700	JAB
2.		UNKNOWN	18.70	300	J
3.		UNKNOWN	19.07	400	J
4.		UNKNOWN	19.11	490	J
5.					
6.					
7.					
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T7-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1641

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 28 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	UJ-M
111-44-4	Bis(2-chloroethyl)ether	240	UJ-M
95-57-8	2-Chlorophenol	240	UJ-M
541-73-1	1,3-Dichlorobenzene	240	UJ-M
106-46-7	1,4-Dichlorobenzene	240	UJ-M
95-50-1	1,2-Dichlorobenzene	240	UJ-M
95-48-7	2-Methylphenol	240	UJ-M
108-60-1	bis(2-Chloroisopropyl)ether	240	UJ-M
621-64-7	N-Nitroso-di-n-propylamine	240	UJ-M
106-44-5	3&4-Methylphenol	240	UJ-M
67-72-1	Hexachloroethane	240	UJ-M
98-95-3	Nitrobenzene	240	UJ-M
78-59-1	Isophorone	240	UJ
88-75-5	2-Nitrophenol	240	UJ-M
111-91-1	Bis(2-chloroethoxy)methane	240	UJ-M
120-83-2	2,4-Dichlorophenol	240	UJ-M
120-82-1	1,2,4-Trichlorobenzene	240	UJ-M
91-20-3	Naphthalene	240	UJ-M
106-47-8	4-Chloroaniline	460	UJ
87-68-3	Hexachlorobutadiene	240	UJ-M
59-50-7	4-Chloro-3-methylphenol	240	UJ-M
91-57-6	2-Methylnaphthalene	240	UJ-M
77-47-4	Hexachlorocyclopentadiene	240	UJ-M
88-06-2	2,4,6-Trichlorophenol	97	UJ-M
95-95-4	2,4,5-Trichlorophenol	240	UJ
91-58-7	2-Chloronaphthalene	240	UJ-M
88-74-4	2-Nitroaniline	1200	UJ
208-96-8	Acenaphthylene	240	UJ-M
606-20-2	2,6-Dinitrotoluene	240	UJ
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	UJ-M

FORM I SV

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: soil/water) SOIL Lab Sample ID: CBS-CSF-T7-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1641

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 28 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	UJ-M
84-66-2	Diethylphthalate	240	UJ-M
7005-72-3	4-Chlorophenyl-phenylether	240	UJ-M
100-01-6	4-Nitroaniline	1200	UJ
534-52-1	4,6-Dinitro-2-methylphenol	1200	UJ
86-30-6	N-Nitrosodiphenylamine (1)	240	UJ-M
101-55-3	4-Bromophenyl-phenylether	240	UJ
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	UJ-M
56-55-3	Benzo(a)Anthracene	240	UJ-M
91-94-1	3,3'-Dichlorobenzidine	460	UJ
218-01-9	Chrysene	240	UJ-M
117-81-7	Bis(2-ethylhexyl)phthalate	240	UJ-M
117-84-0	Di-n-octylphthalate	240	UJ
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

40367-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T7-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1641

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 28 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	3.26	2200	JAB
2.	10544-50-0	SULFUR, MOL. (S8)	14.08	190	NJ
3.		UNKNOWN	16.99	230	J
4.		UNKNOWN	19.07	500	J
5.		UNKNOWN	20.33	390	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T13-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1644

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 25 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1 (mL) Date Analyzed: 01/31/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	93	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40367-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T13-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1644

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 25 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	93	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

40367-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL081

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T13-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1644

Level: (low/med) LOW Date Received: 01/17/02

% Moisture: 25 decanted: (Y/N) N Date Extracted: 01/23/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/31/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	3.20	4900	JAB
2.		UNKNOWN AMIDE	17.00	240	J
3.		UNKNOWN	20.33	240	J
4.					
5.					
6.					
7.					
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FORM I SV-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 26, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO016SVOCLN.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, Illinois STL SDG SIL075	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for ten sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on December 18, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL075.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to non-conformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSE-T1-1	CBS-CSE-T5-1
CBS-CSE-T2-1	CBS-CSE-T14-1
CBS-CSE-T3-1	CBS-CSE-T15-1
CBS-CSE-T3-1-FD (field duplicate of CBS-CSE-T3-1)	CBS-CSE-T15-1-FD (field duplicate of CBS-CSE-T15-1)
CBS-CSE-T4-1	CBS-CSE-T6-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results

- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on client sample CBS-CSE-T-10-1, which was not submitted with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits except for the %R for butylbenzylphthalate (56%) in the MSD analysis. Qualification of the data was not required since the associated sample was not included in this sample set.

Field Duplicate Results

Samples CBS-CSE-T3-1/CBS-CSE-T3-1-FD and CBS-CSE-T15-1/CBS-CSE-T15-1-FD were submitted as field duplicate pairs with this sample set. Target analytes were not detected in the CBS-CSE-T3-1/CBS-CSE-T3-1-FD field duplicate pair. Precision was deemed acceptable. The following table summarizes the RPDs of the detected analytes in the CBS-CSE-T15-1/CBS-CSE-T15-1-FD field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

Compound	CBS-CSE-T15-1 (µg/kg)	CBS-CSE-T15-1-FD (µg/kg)	RPD (%)
Di-n-butylphthalate	74 J	220 U	NC
Phenanthrene	220 U	23 J	NC
NC = Not calculable due to a non-detect result in the sample or field duplicate.			

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

ENSR

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The non-detects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

The laboratory's Case Narrative noted that sample CBS-CSE-T3-1-FD exhibited high internal standard recoveries. The internal standard summary was inspected and determined by the validator to be slightly high. Sample CBS-CSE-T3-1-FD was re-analyzed yielding similar internal standard recovery results. Results from both analyses of this sample were non-detects. The initial analysis of sample CBS-CSE-T3-1-FD was reported by the validator and qualified as estimated (UJ) due to internal standards non-conformance.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T1-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5989

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 33 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	UJ
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T1-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5989

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 01/01/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T2-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6009

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T2-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6009

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 26 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T3-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6010

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T3-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6010

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T3-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: G5992

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 29 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J-I
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	98	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T3-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: G5992

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 29 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J-I
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	98	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T4-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6012

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 28 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T4-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6012

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 28 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T5-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5994

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 23 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	91	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T5-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5994

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 23 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	91	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T14-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6014

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-7

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T14-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6014

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T15-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6015

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	89	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-8

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T15-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6015

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	89	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	74	J
206-44-0	Fluoranthene	220	U J
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	420	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	110	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	110	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T15-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: G5997

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	90	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-9

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T15-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: G5997

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	90	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	23	J
120-12-7	Anthracene	220	U J
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	420	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T6-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6017

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-10

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T6-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6017

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	470	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-4RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T3-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: G6011

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 29 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	98	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18270-4RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL075

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T3-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: G6011

Level: (low/med) LOW Date Received: 12/19/01

% Moisture: 29 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	98	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 23, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO017SVOCLN.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, Illinois STL SDG SIL082	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for six sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on January 23 and 25, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL082.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were negated (U) due to blank contamination or qualified as estimated (J/UJ) due to non-conformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSF-T8-1	CBS-CSF-T12-1
CBS-CSF-T9-1	CBS-CSF-T10-1
CBS-CSF-T9-1-FD (field duplicate of CBS-CSF-T9-1)	CBS-CSF-T11-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding times with the exception of sample CBS-CSF-T12-1. This sample was re-extracted outside of the 14 day holding time due to low surrogate recoveries. Results from the re-extraction were not reported, although surrogate recoveries were acceptable. Results of sample CBS-CSF-T12-1 were reported from the initial analysis.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries for 2-fluorobiphenyl and terphenyl-d_{14} (29% and 19%, respectively) fell below the QC acceptance limit in soil sample CBS-CSF-T12-1. The sample was re-analyzed yielding similar results. Sample CBS-CSF-T12-1 was then re-extracted on 02/08/02 (outside of the 14 day hold time for extraction) yielding acceptable surrogate recoveries. It was the opinion of the validator to report the results from the initial analysis. Base/Neutral results of sample CBS-CSF-T12-1 were qualified as estimated (J/UJ) due to the surrogate recoveries non-conformance.

MS/MSD Results

Sample CBS-CSF-T11-1 was submitted for MS/MSD analyses with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds were within the QC acceptance limits except as noted below. The following table summarizes the non-compliant %Rs of butylbenzylphthalate. The non-detect butylbenzylphthalate result in the associated sample was qualified as estimated (UJ).

Compound	CBS-CSF-T11-1 MS (%R)	CBS-CSF-T11-1 MSD (%R)	RPD (%)
Butylbenzylphthalate	52	52	ok

Field Duplicate Results

Samples CBS-CSF-T9-1 and CBS-CSF-T9-1-FD were submitted as the field duplicate pair with this sample set. Target analytes were not detected in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids < 50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The non-detects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

The laboratory identified several samples as having low internal standard recoveries. The internal standard summary was inspected and determined by the validator to be slightly low. The following samples were qualified as estimated (J/UJ) due to internal standards non-conformance: CBS-CSF-T9-1 and CBS-CSF-T9-1-FD.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T8-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1692

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 27 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	96	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T8-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1692

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 27 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	96	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	450	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1685

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 33 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J-L
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1685

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 33 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ-I
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-2RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1693

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 33 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do not Report -LW 04/24/02

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-2RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1693

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 33 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do not report -LW 0402402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: E1686

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 24 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J-I
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	92	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: E1686

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 24 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J-I
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	92	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-3RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: E1694

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 24 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do NOT Report LD 042402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	92	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-3RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T9-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: E1694

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 24 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report -W 042402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	92	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1687

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 26 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U J-X S
95-57-8	2-Chlorophenol	230	U J
541-73-1	1,3-Dichlorobenzene	230	U J-X S
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U J
108-60-1	bis(2-Chloroisopropyl)ether	230	U J-X S
621-64-7	N-Nitroso-di-n-propylamine	230	U J-X S
106-44-5	3&4-Methylphenol	230	U J
67-72-1	Hexachloroethane	230	U J-X S
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U J
111-91-1	Bis(2-chloroethoxy)methane	230	U J-X S
120-83-2	2,4-Dichlorophenol	230	U J
120-82-1	1,2,4-Trichlorobenzene	230	U J-X S
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U J
91-57-6	2-Methylnaphthalene	230	U J-S
77-47-4	Hexachlorocyclopentadiene	230	U J-S
88-06-2	2,4,6-Trichlorophenol	94	U J
95-95-4	2,4,5-Trichlorophenol	230	U J
91-58-7	2-Chloronaphthalene	230	U J-S
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U J
132-64-9	Dibenzofuran	230	U J-S

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1687

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 26 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1 (mL) Date Analyzed: 02/01/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	UJ
121-14-2	2,4-Dinitrotoluene	230	UJ-S
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	UJ
86-30-6	N-Nitrosodiphenylamine (1)	230	UJ-S
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	UJ
85-01-8	Phenanthrene	230	UJ-S
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-4RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1695

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 26 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report - LW 04/24/02

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-4RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1695

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 26 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report -LD 042402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	230	U
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-4RE2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6584

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 26 decanted: (Y/N) N Date Extracted: 02/08/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/11/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report -W 042402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40504-4RE2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6584

Level: (low/med) LOW Date Received: 01/24/02

% Moisture: 26 decanted: (Y/N) N Date Extracted: 02/08/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/11/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report
LN 042402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	230	U
120-12-7	Anthracene	230	U
84-74-2	Di-n-Butylphthalate	230	U
206-44-0	Fluoranthene	230	U
129-00-0	Pyrene	230	U
85-68-7	Butylbenzylphthalate	230	U
56-55-3	Benzo(a)Anthracene	230	U
91-94-1	3,3'-Dichlorobenzidine	440	U
218-01-9	Chrysene	230	U
117-81-7	Bis(2-ethylhexyl)phthalate	230	U
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	230	U
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	~~38~~ ~~JB~~ 230U-B	
86-74-8	Carbazole	230	U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40588-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T10-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1688

Level: (low/med) LOW Date Received: 01/28/02

% Moisture: 23 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	91	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40588-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T10-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1688

Level: (low/med) LOW Date Received: 01/28/02

% Moisture: 23 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1 (mL) Date Analyzed: 02/01/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	91	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40588-1RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T10-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1696

Level: (low/med) LOW Date Received: 01/28/02

% Moisture: 23 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1 (mL) Date Analyzed: 02/01/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	91	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40588-1RE

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T10-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1696

Level: (low/med) LOW Date Received: 01/28/02

% Moisture: 23 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Do Not Report

LD 020402

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	91	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40588-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T11-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1697

Level: (low/med) LOW Date Received: 01/28/02

% Moisture: 28 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40588-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL082

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T11-1

Sample wt/vol: 30 (g/mL) G Lab File ID: E1697

Level: (low/med) LOW Date Received: 01/28/02

% Moisture: 28 decanted: (Y/N) N Date Extracted: 01/29/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U J-M
56-55-3	Benzo(a)Anthracene	240	U J
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 26, 2001
FROM:	Joanne Sprague/Westford	**FILE:**	SO018svocjas.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG SIL077	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for six sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on December 19, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group SIL077.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. The nondetect result for hexachlorocyclopentadiene in sample CBS-CSE-T10-1 was rejected (R) due to percent recoveries (%Rs) <10% in the MS/MSD analyses. Selected data points were also qualified as estimated (J/UJ) due to nonconformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSE-T12-1	CBS-CSE-T11-1
CBS-CSE-T7-1	CBS-CSE-T8-1
CBS-CSE-T9-1	CBS-CSE-T10-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results

ENSR

- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding times.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

Sample CBS-CSE-T10-1 was submitted for MS/MSD analyses with this sample set. The following table summarizes the %Rs and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses, which were outside the QC acceptance limits. The nondetect result for butylbenzylphthalate was qualified as estimated (UJ) in sample CBS-CSE-T10-1. The nondetect result for hexachlorocyclopentadiene was rejected (R) due to %Rs < 10%.

Compound	MS (%R)	MSD (%R)	RPD (%)
Hexachlorocyclopentadiene	5	9	9
Butylbenzylphthalate	ok	56	56

Field Duplicate Results

A field duplicate pair was not submitted with this sample set.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results/Quantitation Limits

Dilutions were not performed on any samples in this sample set.

There were no samples reported with percent solids <50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: soil/water) SOIL Lab Sample ID: CBS-CSE-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5999

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 35 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	260	U
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
541-73-1	1,3-Dichlorobenzene	260	U
106-46-7	1,4-Dichlorobenzene	260	U
95-50-1	1,2-Dichlorobenzene	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	bis(2-Chloroisopropyl)ether	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
106-44-5	3&4-Methylphenol	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
120-82-1	1,2,4-Trichlorobenzene	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	510	U
87-68-3	Hexachlorobutadiene	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	260	U
606-20-2	2,6-Dinitrotoluene	260	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	260	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	260	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5999

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 35 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	260	U
86-73-7	Fluorene	260	U
131-11-3	Dimethylphthalate	260	U
84-66-2	Diethylphthalate	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
84-74-2	Di-n-Butylphthalate	260	U
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	260	U
56-55-3	Benzo(a)Anthracene	260	U
91-94-1	3,3'-Dichlorobenzidine	510	U
218-01-9	Chrysene	260	U
117-81-7	Bis(2-ethylhexyl)phthalate	260	U
117-84-0	Di-n-octylphthalate	260	U
205-99-2	Benzo(b)fluoranthene	260	U
207-08-9	Benzo(k)fluoranthene	260	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	260	U
86-74-8	Carbazole	260	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

18334A-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T12-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G5999

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 35 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.74	18000	JAB
2.	UNKNOWN	15.85	320	J
3.	UNKNOWN ORGANIC ACID	16.64	240	J
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T11-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6000

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 32 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T11-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6000

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 32 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	59	J
129-00-0	Pyrene	250	UJ
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	37	J
117-81-7	Bis(2-ethylhexyl)phthalate	77	J
117-84-0	Di-n-octylphthalate	250	UJ
205-99-2	Benzo(b)fluoranthene	37	J
207-08-9	Benzo(k)fluoranthene	250	UJ
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

18334A-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T11-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6000

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 32 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.73	12000	JAB
2.	UNKNOWN	15.85	380	J
3.	UNKNOWN ORGANIC ACID	16.64	280	J
4.	UNKNOWN ALKANE	18.40	300	J
5.	UNKNOWN PAH	20.94	250	J
6.	UNKNOWN PAH	21.14	200	J
7.	UNKNOWN ORGANIC ACID	21.43	430	J
8.	UNKNOWN	21.54	390	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T7-1

Sample wt/vol: 30 g/mL) G Lab File ID: G6020

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T7-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6020

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	480	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

18334A-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: soil/water SOIL Lab Sample ID: CBS-CSE-T7-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6020

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.72	18000	JAB
2.	UNKNOWN	15.82	320	J
3.	UNKNOWN ORGANIC ACID	16.60	240	J
4.	UNKNOWN ALKANE	18.35	240	J
5.	UNKNOWN	21.06	200	J
6.	UNKNOWN ORGANIC ACID	21.34	440	J
7.	UNKNOWN	21.44	340	J
8.	UNKNOWN	21.84	200	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T8-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6002

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 37 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	270	U J
111-44-4	Bis(2-chloroethyl)ether	270	U
95-57-8	2-Chlorophenol	270	U
541-73-1	1,3-Dichlorobenzene	270	U
106-46-7	1,4-Dichlorobenzene	270	U
95-50-1	1,2-Dichlorobenzene	270	U
95-48-7	2-Methylphenol	270	U
108-60-1	bis(2-Chloroisopropyl)ether	270	U
621-64-7	N-Nitroso-di-n-propylamine	270	U
106-44-5	3&4-Methylphenol	270	U
67-72-1	Hexachloroethane	270	U
98-95-3	Nitrobenzene	270	U
78-59-1	Isophorone	270	U
88-75-5	2-Nitrophenol	270	U
111-91-1	Bis(2-chloroethoxy)methane	270	U
120-83-2	2,4-Dichlorophenol	270	U
120-82-1	1,2,4-Trichlorobenzene	270	U
91-20-3	Naphthalene	270	U
106-47-8	4-Chloroaniline	520	U
87-68-3	Hexachlorobutadiene	270	U
59-50-7	4-Chloro-3-methylphenol	270	U
91-57-6	2-Methylnaphthalene	270	U
77-47-4	Hexachlorocyclopentadiene	270	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	270	U
91-58-7	2-Chloronaphthalene	270	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	270	U
606-20-2	2,6-Dinitrotoluene	270	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	270	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	270	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T8-1

Sample wt vol: 30 (g/mL) G Lab File ID: G6002

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 37 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 01/01/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	270	U
86-73-7	Fluorene	270	U
131-11-3	Dimethylphthalate	270	U
84-66-2	Diethylphthalate	270	U
7005-72-3	4-Chlorophenyl-phenylether	270	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	270	U
101-55-3	4-Bromophenyl-phenylether	270	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	270	U
120-12-7	Anthracene	270	U
84-74-2	Di-n-Butylphthalate	270	U
206-44-0	Fluoranthene	270	U
129-00-0	Pyrene	270	U
85-68-7	Butylbenzylphthalate	270	U
56-55-3	Benzo(a)Anthracene	270	U
91-94-1	3,3'-Dichlorobenzidine	520	U
218-01-9	Chrysene	270	U
117-81-7	Bis(2-ethylhexyl)phthalate	270	U
117-84-0	Di-n-octylphthalate	270	U
205-99-2	Benzo(b)fluoranthene	270	U
207-08-9	Benzo(k)fluoranthene	270	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	270	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	270	U
86-74-8	Carbazole	270	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

18334A-4

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T8-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6002

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 37 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.73	10000	JAB
2.	UNKNOWN	15.85	210	J
3.	UNKNOWN ORGANIC ACID	21.44	320	J
4.	UNKNOWN	21.54	310	J
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FORM I SV-TIC

FORM I
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6022

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6022

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	250	U
120-12-7	Anthracene	250	U
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	250	U
129-00-0	Pyrene	250	U
85-68-7	Butylbenzylphthalate	250	U
56-55-3	Benzo(a)Anthracene	250	U
91-94-1	3,3'-Dichlorobenzidine	490	U
218-01-9	Chrysene	250	U
117-81-7	Bis(2-ethylhexyl)phthalate	250	U
117-84-0	Di-n-octylphthalate	250	U
205-99-2	Benzo(b)fluoranthene	250	U
207-08-9	Benzo(k)fluoranthene	250	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	250	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	250	U
86-74-8	Carbazole	250	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

18334A-5

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T9-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6022

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 33 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/02/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALDOL CONDENSATE	4.71	12000	JAB
2.		UNKNOWN	15.82	260	J
3.		UNKNOWN	16.46	350	J
4.		UNKNOWN ORGANIC ACID	21.34	500	J
5.		UNKNOWN ORGANIC ACID	21.44	350	J
6.		UNKNOWN	21.51	360	J
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FORM I SV-TIC

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T10-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6004

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	~~240~~	~~U~~ R-M
88-06-2	2,4,6-Trichlorophenol	97	U J
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18334A-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T10-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6004

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 28 decanted: (Y/N) N Date Extracted: 12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	460	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

18334A-6

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL077

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T10-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6004

Level: (low/med) LOW Date Received: 12/20/01

% Moisture: 28 decanted: (Y/N) N Date Extracted:12/21/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/01/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALDOL CONDENSATE	4.73	12000	JAB
2.	UNKNOWN ALKANE	16.67	250	J
3.	UNKNOWN	21.14	230	J
4.	UNKNOWN ORGANIC ACID	21.43	300	J
5.	UNKNOWN	21.53	240	J
6.				
7.				
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FORM I SV-TIC

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 26, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO019svocjas.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG SIL083	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for one sediment sample analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The sample was collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on February 6, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the sample and reported the results under sample delivery group SIL083.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J, UJ) due to certain QC nonconformance (see discussion below).

SAMPLES

The sample included in this review is listed below:

Sample Identifications
CBS-CSF-T16-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC with the exception of sample SP and SW samples, which were not included in the scope of this data validation effort.

Holding Times and Sample Preservation

The sample was extracted and analyzed within the method specified holding times.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in the sample analysis.

MS/MSD Results

Batch MS/MSD analyses were reported with this sample set. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits.

Field Duplicate Results

A field duplicate pair was not submitted with this sample set.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results/Quantitation Limits

Dilutions were not performed on the sample in this sample set.

There were no samples reported with percent solids <50%.

It should be noted that the sample quantitation limits (SQLs) for this sample were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL reported below the lowest calibration standard were qualified as estimated (UJ).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40850-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL083

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T16-1

Sample wt/vol: 30 (g/mL) G Lab File ID: K4924

Level: (low/med) LOW Date Received: 02/07/02

% Moisture: 30 decanted: (Y/N) N Date Extracted: 02/13/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40850-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL083

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T16-1

Sample wt/vol: 30 (g/mL) G Lab File ID: K4924

Level: (low/med) LOW Date Received: 02/07/02

% Moisture: 30 decanted: (Y/N) N Date Extracted: 02/13/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	U J
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	240	U
120-12-7	Anthracene	240	U
84-74-2	Di-n-Butylphthalate	240	U
206-44-0	Fluoranthene	240	U
129-00-0	Pyrene	240	U
85-68-7	Butylbenzylphthalate	240	U
56-55-3	Benzo(a)Anthracene	240	U
91-94-1	3,3'-Dichlorobenzidine	470	U
218-01-9	Chrysene	240	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	U
117-84-0	Di-n-octylphthalate	240	U
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	130	U
193-39-5	Indeno(1,2,3-cd)pyrene	240	U
53-70-3	Dibenzo(a,h)anthracene	130	U
191-24-2	Benzo(g,h,i)perylene	240	U
86-74-8	Carbazole	240	U

(1) - Cannot be separated from Diphenylamine

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 25, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO020SVOCLN.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, Illinois STL SDG SIL079	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for six sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on December 20 and 21, 2001 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group SIL079.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were estimated (J/UJ) due to % solids < 50% (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSB-T15-1	CBS-CSE-T16-1
CBS-CSB-T16-1	CBS-CSE-T17-1
CBS-CSB-T14-1	CBS-CSF-T1-1

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC. The date relinquished appearing on the COC (12/07/01) is probably an error. No action was taken other than this notation.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on a non-client sample with this sample set. No action was taken based on MS/MSD analyses.

Field Duplicate Results

Field duplicates were not submitted with this sample set.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for samples in the data set were > 50%, except for sample CBS-CSE-T16-1, which was 49% solid. Results for this sample were qualified as estimated (J positive, UJ non-detect).

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The non-detects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T15-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6051

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	U J
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	92	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T15-1

Sample wt./vol: 30 (g/mL) G Lab File ID: G6051

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 01/03/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	U J
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	92	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	220	U
129-00-0	Pyrene	220	U
85-68-7	Butylbenzylphthalate	220	U
56-55-3	Benzo(a)Anthracene	220	U
91-94-1	3,3'-Dichlorobenzidine	430	U
218-01-9	Chrysene	220	U
117-81-7	Bis(2-ethylhexyl)phthalate	220	U
117-84-0	Di-n-octylphthalate	220	U
205-99-2	Benzo(b)fluoranthene	220	U
207-08-9	Benzo(k)fluoranthene	220	U
50-32-8	Benzo(a)pyrene	120	U
193-39-5	Indeno(1,2,3-cd)pyrene	220	U
53-70-3	Dibenzo(a,h)anthracene	120	U
191-24-2	Benzo(g,h,i)perylene	220	U
86-74-8	Carbazole	220	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T16-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6052

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: 31 decanted: (Y/N) N Date Extracted:12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U J
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	250	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T16-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6052

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: 31 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	71	J
120-12-7	Anthracene	42	J
84-74-2	Di-n-Butylphthalate	250	UJ
206-44-0	Fluoranthene	580	
129-00-0	Pyrene	630	
85-68-7	Butylbenzylphthalate	250	UJ
56-55-3	Benzo(a)Anthracene	260	J
91-94-1	3,3'-Dichlorobenzidine	480	UJ
218-01-9	Chrysene	270	J
117-81-7	Bis(2-ethylhexyl)phthalate	250	UJ
117-84-0	Di-n-octylphthalate	250	UJ
205-99-2	Benzo(b)fluoranthene	230	J
207-08-9	Benzo(k)fluoranthene	250	J
50-32-8	Benzo(a)pyrene	290	J
193-39-5	Indeno(1,2,3-cd)pyrene	150	J
53-70-3	Dibenzo(a,h)anthracene	130	UJ
191-24-2	Benzo(g,h,i)perylene	160	J
86-74-8	Carbazole	250	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T14-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6053

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: 35 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	260	U J
111-44-4	Bis(2-chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
541-73-1	1,3-Dichlorobenzene	260	U
106-46-7	1,4-Dichlorobenzene	260	U
95-50-1	1,2-Dichlorobenzene	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	bis(2-Chloroisopropyl)ether	260	U
621-64-7	N-Nitroso-di-n-propylamine	260	U
106-44-5	3&4-Methylphenol	260	U
67-72-1	Hexachloroethane	260	U
98-95-3	Nitrobenzene	260	U
78-59-1	Isophorone	260	U
88-75-5	2-Nitrophenol	260	U
111-91-1	Bis(2-chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
120-82-1	1,2,4-Trichlorobenzene	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	510	U
87-68-3	Hexachlorobutadiene	260	U
59-50-7	4-Chloro-3-methylphenol	260	U
91-57-6	2-Methylnaphthalene	260	U
77-47-4	Hexachlorocyclopentadiene	260	U
88-06-2	2,4,6-Trichlorophenol	110	U
95-95-4	2,4,5-Trichlorophenol	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	260	U
606-20-2	2,6-Dinitrotoluene	260	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	260	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	260	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18395-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSB-T14-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6053

Level: (low/med) LOW Date Received: 12/21/01

% Moisture: 35 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1 (mL) Date Analyzed: 01/03/02

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	U J
121-14-2	2,4-Dinitrotoluene	260	U
86-73-7	Fluorene	260	U
131-11-3	Dimethylphthalate	260	U
84-66-2	Diethylphthalate	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	110	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
84-74-2	Di-n-Butylphthalate	260	U
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	260	U
56-55-3	Benzo(a)Anthracene	260	U
91-94-1	3,3'-Dichlorobenzidine	510	U
218-01-9	Chrysene	260	U
117-81-7	Bis(2-ethylhexyl)phthalate	260	U
117-84-0	Di-n-octylphthalate	260	U
205-99-2	Benzo(b)fluoranthene	260	U
207-08-9	Benzo(k)fluoranthene	260	U
50-32-8	Benzo(a)pyrene	140	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	140	U
191-24-2	Benzo(g,h,i)perylene	260	U
86-74-8	Carbazole	260	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T17-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6054

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: 43 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	300	UJ
111-44-4	Bis(2-chloroethyl)ether	300	U
95-57-8	2-Chlorophenol	300	U
541-73-1	1,3-Dichlorobenzene	300	U
106-46-7	1,4-Dichlorobenzene	300	U
95-50-1	1,2-Dichlorobenzene	300	U
95-48-7	2-Methylphenol	300	U
108-60-1	bis(2-Chloroisopropyl)ether	300	U
621-64-7	N-Nitroso-di-n-propylamine	300	U
106-44-5	3&4-Methylphenol	300	U
67-72-1	Hexachloroethane	300	U
98-95-3	Nitrobenzene	300	U
78-59-1	Isophorone	300	U
88-75-5	2-Nitrophenol	300	U
111-91-1	Bis(2-chloroethoxy)methane	300	U
120-83-2	2,4-Dichlorophenol	300	U
120-82-1	1,2,4-Trichlorobenzene	300	U
91-20-3	Naphthalene	300	U
106-47-8	4-Chloroaniline	580	U
87-68-3	Hexachlorobutadiene	300	U
59-50-7	4-Chloro-3-methylphenol	300	U
91-57-6	2-Methylnaphthalene	300	U
77-47-4	Hexachlorocyclopentadiene	300	U
88-06-2	2,4,6-Trichlorophenol	120	U
95-95-4	2,4,5-Trichlorophenol	300	U
91-58-7	2-Chloronaphthalene	300	U
88-74-4	2-Nitroaniline	1500	U
208-96-8	Acenaphthylene	300	U
606-20-2	2,6-Dinitrotoluene	300	U
99-09-2	3-Nitroaniline	1500	U
83-32-9	Acenaphthene	300	U
51-28-5	2,4-Dinitrophenol	1500	U
132-64-9	Dibenzofuran	300	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T17-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6054

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: 43 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1500	UJ
121-14-2	2,4-Dinitrotoluene	300	U
86-73-7	Fluorene	300	U
131-11-3	Dimethylphthalate	300	U
84-66-2	Diethylphthalate	300	U
7005-72-3	4-Chlorophenyl-phenylether	300	U
100-01-6	4-Nitroaniline	1500	U
534-52-1	4,6-Dinitro-2-methylphenol	1500	U
86-30-6	N-Nitrosodiphenylamine (1)	300	U
101-55-3	4-Bromophenyl-phenylether	300	U
118-74-1	Hexachlorobenzene	120	U
87-86-5	Pentachlorophenol	1500	U
85-01-8	Phenanthrene	130	J
120-12-7	Anthracene	300	UJ
84-74-2	Di-n-Butylphthalate	300	UJ
206-44-0	Fluoranthene	300	J
129-00-0	Pyrene	220	J
85-68-7	Butylbenzylphthalate	300	UJ
56-55-3	Benzo(a)Anthracene	110	J
91-94-1	3,3'-Dichlorobenzidine	580	UJ
218-01-9	Chrysene	160	J
117-81-7	Bis(2-ethylhexyl)phthalate	300	UJ
117-84-0	Di-n-octylphthalate	300	UJ
205-99-2	Benzo(b)fluoranthene	170	J
207-08-9	Benzo(k)fluoranthene	140	J
50-32-8	Benzo(a)pyrene	140	J
193-39-5	Indeno(1,2,3-cd)pyrene	160	J
53-70-3	Dibenzo(a,h)anthracene	160	UJ
191-24-2	Benzo(g,h,i)perylene	170	J
86-74-8	Carbazole	300	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T1-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6061

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: 40 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	280	U J
111-44-4	Bis(2-chloroethyl)ether	280	U
95-57-8	2-Chlorophenol	280	U
541-73-1	1,3-Dichlorobenzene	280	U
106-46-7	1,4-Dichlorobenzene	280	U
95-50-1	1,2-Dichlorobenzene	280	U
95-48-7	2-Methylphenol	280	U
108-60-1	bis(2-Chloroisopropyl)ether	280	U
621-64-7	N-Nitroso-di-n-propylamine	280	U
106-44-5	3&4-Methylphenol	280	U
67-72-1	Hexachloroethane	280	U
98-95-3	Nitrobenzene	280	U
78-59-1	Isophorone	280	U
88-75-5	2-Nitrophenol	280	U
111-91-1	Bis(2-chloroethoxy)methane	280	U
120-83-2	2,4-Dichlorophenol	280	U
120-82-1	1,2,4-Trichlorobenzene	280	U
91-20-3	Naphthalene	280	U
106-47-8	4-Chloroaniline	550	U
87-68-3	Hexachlorobutadiene	280	U
59-50-7	4-Chloro-3-methylphenol	280	U
91-57-6	2-Methylnaphthalene	280	U
77-47-4	Hexachlorocyclopentadiene	280	U
88-06-2	2,4,6-Trichlorophenol	120	U
95-95-4	2,4,5-Trichlorophenol	280	U
91-58-7	2-Chloronaphthalene	280	U
88-74-4	2-Nitroaniline	1400	U
208-96-8	Acenaphthylene	280	U
606-20-2	2,6-Dinitrotoluene	280	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	280	U
51-28-5	2,4-Dinitrophenol	1400	U
132-64-9	Dibenzofuran	280	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-2

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T1-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6061

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: 40 decanted: (Y/N) N Date Extracted:12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1400	U J
121-14-2	2,4-Dinitrotoluene	280	U
86-73-7	Fluorene	280	U
131-11-3	Dimethylphthalate	280	U
84-66-2	Diethylphthalate	280	U
7005-72-3	4-Chlorophenyl-phenylether	280	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-Nitrosodiphenylamine (1)	280	U
101-55-3	4-Bromophenyl-phenylether	280	U
118-74-1	Hexachlorobenzene	120	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	280	U
120-12-7	Anthracene	280	U
84-74-2	Di-n-Butylphthalate	280	U
206-44-0	Fluoranthene	280	U
129-00-0	Pyrene	280	U
85-68-7	Butylbenzylphthalate	280	U
56-55-3	Benzo(a)Anthracene	280	U
91-94-1	3,3'-Dichlorobenzidine	550	U
218-01-9	Chrysene	280	U
117-81-7	Bis(2-ethylhexyl)phthalate	280	U
117-84-0	Di-n-octylphthalate	280	U
205-99-2	Benzo(b)fluoranthene	280	U
207-08-9	Benzo(k)fluoranthene	280	U
50-32-8	Benzo(a)pyrene	150	U
193-39-5	Indeno(1,2,3-cd)pyrene	280	U
53-70-3	Dibenzo(a,h)anthracene	150	U
191-24-2	Benzo(g,h,i)perylene	280	U
86-74-8	Carbazole	280	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T16-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6056

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: 51 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U J-X
111-44-4	Bis(2-chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	230	J
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	bis(2-Chloroisopropyl)ether	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
106-44-5	3&4-Methylphenol	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
111-91-1	Bis(2-chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	670	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	140	U
95-95-4	2,4,5-Trichlorophenol	350	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	1700	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	1700	U
132-64-9	Dibenzofuran	350	U

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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

18419-3

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL079

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T16-1

Sample wt/vol: 30 (g/mL) G Lab File ID: G6056

Level: (low/med) LOW Date Received: 12/22/01

% Moisture: 51 decanted: (Y/N) N Date Extracted: 12/28/01

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/03/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1700	U J-x
121-14-2	2,4-Dinitrotoluene	350	U
86-73-7	Fluorene	350	U
131-11-3	Dimethylphthalate	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	140	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	290	J-x
120-12-7	Anthracene	50	J-x
84-74-2	Di-n-Butylphthalate	350	U J-x
206-44-0	Fluoranthene	710	J-x
129-00-0	Pyrene	480	J-x
85-68-7	Butylbenzylphthalate	350	U J-x
56-55-3	Benzo(a)Anthracene	260	J-x
91-94-1	3,3'-Dichlorobenzidine	670	U J-x
218-01-9	Chrysene	370	J-x
117-81-7	Bis(2-ethylhexyl)phthalate	350	U J-x
117-84-0	Di-n-octylphthalate	350	U J-x
205-99-2	Benzo(b)fluoranthene	510	J-x
207-08-9	Benzo(k)fluoranthene	370	J-x
50-32-8	Benzo(a)pyrene	420	J-x
193-39-5	Indeno(1,2,3-cd)pyrene	350	J-x
53-70-3	Dibenzo(a,h)anthracene	140	J-x
191-24-2	Benzo(g,h,i)perylene	350	J-x
86-74-8	Carbazole	350	U J-x

(1) - Cannot be separated from Diphenylamine

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 26, 2002
FROM:	Lauren Nardone/Westford	**FILE:**	SO021SVOCLN.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia, Illinois STL SDG SIL080	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for four sediment samples analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The samples were collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on January 8, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the samples and reported the results under sample delivery group (SDG) SIL080.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99) and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J/UJ) due to non-conformance of certain QC criteria (see discussion below).

SAMPLES

The samples included in this review are listed below:

Sample Identifications	
CBS-CSF-T5-1	CBS-CSF-T15-1
CBS-CSF-T14-1	CBS-CSF-T15-1-FD (field duplicate of CBS-CSF-T15-1)

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

The laboratory reported the full field sample ID in the lab ID field on the sample results pages (Form 1s) in order to avoid truncating the IDs.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method specified holding time.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in all sample analyses.

MS/MSD Results

MS/MSD analyses were performed on sample CBS-CSF-T15-1. The percent recoveries (%Rs) and relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits except as noted below. The following table summarizes the non-compliant %Rs and RPDs. Results in the associated sample were qualified as estimated (J/UJ).

Compound	CBS-CSF-T15-1 MS (%R)	CBS-CSF-T15-1 MSD (%R)	RPD (%)
1,4-Dichlorobenzene	ok	ok	36
1,2-Dichlorobenzene	ok	ok	26
Hexachloroethane	ok	ok	33
1,2,4-Trichlorobenzene	ok	ok	31
4-Bromophenyl-phenyl ether	ok	ok	22
bis(2-Ethylhexyl)phthalate	ok	ok	23
Dimethylphthalate	ok	48	ok
Chrysene	ok	55	ok

Field Duplicate Results

Samples CBS-CSF-T15-1 and CBS-CSF-T15-1-FD were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair. Under Regional guidelines, sample results are not qualified on the basis of field duplicates. The results and RPDs tabulated below are informational only.

ENSR

Compound	CBS-CSF-T15-1 (µg/kg)	CBS-CSF-T15-1-FD (µg/kg)	RPD (%)
Phenanthrene	37 J	220 U	NC
Fluoranthene	56 J	49 J	13
Benzo(a)anthracene	44 J	32 J	32
Chrysene	43 J	34 J	23
bis(2-Ethylhexyl)phthalate	73 J	76 J	4.0
Benzo(b)fluoranthene	43 J	41 J	4.8
Benzo(k)fluoranthene	68 J	47 J	36
Benzo(a)pyrene	48 J	57 J	17
Benzo(g,h,i)perylene	79 J	58 J	31
NC = RPD was not calculable due to a non-detect result in the field duplicate.			

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results

Dilutions were not performed on any samples in this sample set.

The percent solids for all samples in the data set were > 50%.

It should be noted that the sample quantitation limits (SQLs) for these samples were reported by the laboratory at or below one-half of the lowest calibration standard. The non-detects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T5-1

Sample wt/vol: 30 (g/mL) G Lab File ID: D5322

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: 28 decanted: (Y/N) N Date Extracted: 01/14/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	U J
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	U
95-50-1	1,2-Dichlorobenzene	240	U
95-48-7	2-Methylphenol	240	U
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	U
98-95-3	Nitrobenzene	240	U
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	U
91-20-3	Naphthalene	240	U
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	97	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-1

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T5-1

Sample wt/vol: 30 (g/mL) G Lab File ID: D5322

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: 28 decanted: (Y/N) N Date Extracted: 01/14/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	U
84-66-2	Diethylphthalate	240	U
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	U
118-74-1	Hexachlorobenzene	97	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	30	J
120-12-7	Anthracene	240	UJ
84-74-2	Di-n-Butylphthalate	240	UJ
206-44-0	Fluoranthene	53	J
129-00-0	Pyrene	240	UJ
85-68-7	Butylbenzylphthalate	240	UJ
56-55-3	Benzo(a)Anthracene	35	J
91-94-1	3,3'-Dichlorobenzidine	460	UJ
218-01-9	Chrysene	46	J
117-81-7	Bis(2-ethylhexyl)phthalate	71	J
117-84-0	Di-n-octylphthalate	240	UJ
205-99-2	Benzo(b)fluoranthene	240	U
207-08-9	Benzo(k)fluoranthene	240	U
50-32-8	Benzo(a)pyrene	53	J
193-39-5	Indeno(1,2,3-cd)pyrene	240	UJ
53-70-3	Dibenzo(a,h)anthracene	120	UJ
191-24-2	Benzo(g,h,i)perylene	49	J
86-74-8	Carbazole	240	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T14-1

Sample wt/vol: 30 (g/mL) G Lab File ID: D5323

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: 26 decanted: (Y/N) N Date Extracted: 01/14/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	230	U J
111-44-4	Bis(2-chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
541-73-1	1,3-Dichlorobenzene	230	U
106-46-7	1,4-Dichlorobenzene	230	U
95-50-1	1,2-Dichlorobenzene	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	bis(2-Chloroisopropyl)ether	230	U
621-64-7	N-Nitroso-di-n-propylamine	230	U
106-44-5	3&4-Methylphenol	230	U
67-72-1	Hexachloroethane	230	U
98-95-3	Nitrobenzene	230	U
78-59-1	Isophorone	230	U
88-75-5	2-Nitrophenol	230	U
111-91-1	Bis(2-chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
120-82-1	1,2,4-Trichlorobenzene	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	61	J
59-50-7	4-Chloro-3-methylphenol	230	U J
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	U
88-06-2	2,4,6-Trichlorophenol	94	U
95-95-4	2,4,5-Trichlorophenol	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	230	U
606-20-2	2,6-Dinitrotoluene	230	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	230	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	230	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-2

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T14-1

Sample wt/vol: 30 (g/mL) G Lab File ID: D5323

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: 26 decanted: (Y/N) N Date Extracted: 01/14/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	UJ
121-14-2	2,4-Dinitrotoluene	230	U
86-73-7	Fluorene	230	U
131-11-3	Dimethylphthalate	230	U
84-66-2	Diethylphthalate	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	94	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	72	J
120-12-7	Anthracene	230	UJ
84-74-2	Di-n-Butylphthalate	230	UJ
206-44-0	Fluoranthene	110	J
129-00-0	Pyrene	110	J
85-68-7	Butylbenzylphthalate	230	UJ
56-55-3	Benzo(a)Anthracene	84	J
91-94-1	3,3'-Dichlorobenzidine	440	UJ
218-01-9	Chrysene	120	J
117-81-7	Bis(2-ethylhexyl)phthalate	68	J
117-84-0	Di-n-octylphthalate	230	UJ
205-99-2	Benzo(b)fluoranthene	180	J
207-08-9	Benzo(k)fluoranthene	130	J
50-32-8	Benzo(a)pyrene	80	J
193-39-5	Indeno(1,2,3-cd)pyrene	92	J
53-70-3	Dibenzo(a,h)anthracene	120	UJ
191-24-2	Benzo(g,h,i)perylene	100	J
86-74-8	Carbazole	230	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T15-1

Sample wt/vol: 30 (g/mL) G Lab File ID: D5325

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: 30 decanted: (Y/N) N Date Extracted: 01/14/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	240	UJ
111-44-4	Bis(2-chloroethyl)ether	240	U
95-57-8	2-Chlorophenol	240	U
541-73-1	1,3-Dichlorobenzene	240	U
106-46-7	1,4-Dichlorobenzene	240	UJ-M
95-50-1	1,2-Dichlorobenzene	240	UJ-M
95-48-7	2-Methylphenol	240	UJ
108-60-1	bis(2-Chloroisopropyl)ether	240	U
621-64-7	N-Nitroso-di-n-propylamine	240	U
106-44-5	3&4-Methylphenol	240	U
67-72-1	Hexachloroethane	240	UJ-M
98-95-3	Nitrobenzene	240	UJ
78-59-1	Isophorone	240	U
88-75-5	2-Nitrophenol	240	U
111-91-1	Bis(2-chloroethoxy)methane	240	U
120-83-2	2,4-Dichlorophenol	240	U
120-82-1	1,2,4-Trichlorobenzene	240	UJ-M
91-20-3	Naphthalene	240	UJ
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	240	U
59-50-7	4-Chloro-3-methylphenol	240	U
91-57-6	2-Methylnaphthalene	240	U
77-47-4	Hexachlorocyclopentadiene	240	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	240	U
91-58-7	2-Chloronaphthalene	240	U
88-74-4	2-Nitroaniline	1200	U
208-96-8	Acenaphthylene	240	U
606-20-2	2,6-Dinitrotoluene	240	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	240	U
51-28-5	2,4-Dinitrophenol	1200	U
132-64-9	Dibenzofuran	240	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-3

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T15-1

Sample wt/vol: 30 (g/mL) G Lab File ID: D5325

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: 30 decanted: (Y/N) N Date Extracted: 01/14/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1200	UJ
121-14-2	2,4-Dinitrotoluene	240	U
86-73-7	Fluorene	240	U
131-11-3	Dimethylphthalate	240	UJ-M
84-66-2	Diethylphthalate	240	UJ
7005-72-3	4-Chlorophenyl-phenylether	240	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-Nitrosodiphenylamine (1)	240	U
101-55-3	4-Bromophenyl-phenylether	240	UJ-M
118-74-1	Hexachlorobenzene	100	UJ
87-86-5	Pentachlorophenol	1200	UJ
85-01-8	Phenanthrene	37	J
120-12-7	Anthracene	240	UJ
84-74-2	Di-n-Butylphthalate	240	UJ
206-44-0	Fluoranthene	56	J
129-00-0	Pyrene	240	UJ
85-68-7	Butylbenzylphthalate	240	UJ
56-55-3	Benzo(a)Anthracene	44	J
91-94-1	3,3'-Dichlorobenzidine	470	UJ
218-01-9	Chrysene	43	J-M
117-81-7	Bis(2-ethylhexyl)phthalate	73	J-M
117-84-0	Di-n-octylphthalate	240	UJ
205-99-2	Benzo(b)fluoranthene	43	J
207-08-9	Benzo(k)fluoranthene	68	J
50-32-8	Benzo(a)pyrene	48	J
193-39-5	Indeno(1,2,3-cd)pyrene	240	UJ
53-70-3	Dibenzo(a,h)anthracene	130	UJ
191-24-2	Benzo(g,h,i)perylene	79	J
86-74-8	Carbazole	240	UJ

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T15-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: D5324

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: 24 decanted: (Y/N) N Date Extracted: 01/14/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	220	UJ
111-44-4	Bis(2-chloroethyl)ether	220	U
95-57-8	2-Chlorophenol	220	U
541-73-1	1,3-Dichlorobenzene	220	U
106-46-7	1,4-Dichlorobenzene	220	U
95-50-1	1,2-Dichlorobenzene	220	U
95-48-7	2-Methylphenol	220	U
108-60-1	bis(2-Chloroisopropyl)ether	220	U
621-64-7	N-Nitroso-di-n-propylamine	220	U
106-44-5	3&4-Methylphenol	220	U
67-72-1	Hexachloroethane	220	U
98-95-3	Nitrobenzene	220	U
78-59-1	Isophorone	220	U
88-75-5	2-Nitrophenol	220	U
111-91-1	Bis(2-chloroethoxy)methane	220	U
120-83-2	2,4-Dichlorophenol	220	U
120-82-1	1,2,4-Trichlorobenzene	220	U
91-20-3	Naphthalene	220	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	220	U
59-50-7	4-Chloro-3-methylphenol	220	U
91-57-6	2-Methylnaphthalene	220	U
77-47-4	Hexachlorocyclopentadiene	220	U
88-06-2	2,4,6-Trichlorophenol	92	U
95-95-4	2,4,5-Trichlorophenol	220	U
91-58-7	2-Chloronaphthalene	220	U
88-74-4	2-Nitroaniline	1100	U
208-96-8	Acenaphthylene	220	U
606-20-2	2,6-Dinitrotoluene	220	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	220	U
51-28-5	2,4-Dinitrophenol	1100	U
132-64-9	Dibenzofuran	220	U

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

40124-4

Lab Name: STL SAVANNAH Contract:

Lab Code: Case No.: SAS No.: SDG No.: SIL080

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSF-T15-1-FD

Sample wt/vol: 30 (g/mL) G Lab File ID: D5324

Level: (low/med) LOW Date Received: 01/09/02

% Moisture: 24 decanted: (Y/N) N Date Extracted: 01/14/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 01/18/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1100	UJ
121-14-2	2,4-Dinitrotoluene	220	U
86-73-7	Fluorene	220	U
131-11-3	Dimethylphthalate	220	U
84-66-2	Diethylphthalate	220	U
7005-72-3	4-Chlorophenyl-phenylether	220	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	220	U
101-55-3	4-Bromophenyl-phenylether	220	U
118-74-1	Hexachlorobenzene	92	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	220	U
120-12-7	Anthracene	220	U
84-74-2	Di-n-Butylphthalate	220	U
206-44-0	Fluoranthene	49	J
129-00-0	Pyrene	220	UJ
85-68-7	Butylbenzylphthalate	220	UJ
56-55-3	Benzo(a)Anthracene	32	J
91-94-1	3,3'-Dichlorobenzidine	430	UJ
218-01-9	Chrysene	34	J
117-81-7	Bis(2-ethylhexyl)phthalate	76	J
117-84-0	Di-n-octylphthalate	220	UJ
205-99-2	Benzo(b)fluoranthene	41	J
207-08-9	Benzo(k)fluoranthene	47	J
50-32-8	Benzo(a)pyrene	57	J
193-39-5	Indeno(1,2,3-cd)pyrene	220	UJ
53-70-3	Dibenzo(a,h)anthracene	120	UJ
191-24-2	Benzo(g,h,i)perylene	58	J
86-74-8	Carbazole	220	UJ

(1) - Cannot be separated from Diphenylamine

ENSR

MEMORANDUM

TO:	Lisa Bradley/Westford	**DATE:**	April 26, 2002
FROM:	Joanne Sprague/Westford	**FILE:**	SO022svocjas.doc 06105-012-201
RE:	Data Validation SVOC Analysis Solutia Inc., Creek Bottom Sediment Removal Action Sauget and Cahokia , Illinois STL SDG SIL084	**CC:**	D. McGrath/Westford

SUMMARY

Limited validation was performed on the data for one sediment sample analyzed for Target Compound List (TCL) semivolatile organic compounds (SVOCs) using SW-846 method 8270C. The sample was collected at the Sauget Area 1 (SA1) site in Sauget and Cahokia, IL on February 14, 2002 and submitted to Severn Trent Laboratories (STL) in Savannah, GA. STL logged in the sample and reported the results under sample delivery group SIL084.

The analytical data were evaluated with reference to the USEPA Region V *Standard Operating Procedures for Validation of Contract Laboratory Program Organic Data* (1997), the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (10/99), and the quality control (QC) criteria specified in the Quality Assurance Project Plan (QAPP). The Regional and National Functional Guidelines were modified to accommodate the non-CLP methodology.

In general, the data are valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated (J, UJ) due to certain QC nonconformances (see discussion below).

SAMPLES

The sample included in this review is listed below:

Sample Identifications
CBS-CSE-T13-2

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with the chain of custody (COC) requests
- Holding times and sample preservation
- Blank analysis results
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Field duplicate results
- Laboratory control sample (LCS) results
- Sample results

ENSR

DISCUSSION

Agreement of Analyses Conducted with COC Requests

Sample reports corresponded to the analytical requests designated on the COC.

It should be noted that this sample is a resample of sample CBS-CSE-T13-1 which was not initially analyzed.

Holding Times and Sample Preservation

The sample was extracted and analyzed within the method specified holding times.

The laboratory does not record cooler receipt temperatures on COC forms unless there is a non-conformance (cooler temperature outside of the acceptable range of 4°C ± 2°C). Non-conformances were not observed for this sample set.

Blank Analysis Results

Target analytes were not detected in the laboratory method blank.

Surrogate Spike Recoveries

The surrogate recoveries were within the QC acceptance limits in the sample analysis.

MS/MSD Results

Batch MS/MSD analyses were reported with this sample set. The percent recovery (%R) for dimethylphthalate was outside the QC acceptance criteria. No validation action was taken due to differences in sample matrix. The relative percent differences (RPDs) of the spiked target compounds in the MS/MSD analyses were within the QC acceptance limits.

Field Duplicate Results

A field duplicate pair was not submitted with this sample set.

LCS Results

The %Rs of all spiked analytes met the QC acceptance criteria in the LCS analysis.

Sample Results/Quantitation Limits

Dilutions were not performed on the sample in this sample set.

There were no samples reported with percent solids <50%.

It should be noted that the sample quantitation limits (SQLs) for this sample were reported by the laboratory at or below one-half of the lowest calibration standard. The nondetects at the SQL and positive results reported below the lowest calibration standard were qualified as estimated (UJ and J, respectively).

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

41071-1

Lab Name: STL SAVANNAH Contract:

Lab Code: SL-SAV Case No.: SAS No.: SDG No.: SIL084

Matrix: (soil/water) SOIL Lab Sample ID: CBS-CSE-T13-2

Sample wt/vol: 30 (g/mL) G Lab File ID: E1847

Level: (low/med) LOW Date Received: 02/15/02

% Moisture: 33 decanted: (Y/N) N Date Extracted: 02/18/02

Concentrated Extract Volume: 1(mL) Date Analyzed: 02/20/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	250	U
111-44-4	Bis(2-chloroethyl)ether	250	U
95-57-8	2-Chlorophenol	250	U
541-73-1	1,3-Dichlorobenzene	250	U
106-46-7	1,4-Dichlorobenzene	250	U
95-50-1	1,2-Dichlorobenzene	250	U
95-48-7	2-Methylphenol	250	U
108-60-1	bis(2-Chloroisopropyl)ether	250	U
621-64-7	N-Nitroso-di-n-propylamine	250	U
106-44-5	3&4-Methylphenol	250	U
67-72-1	Hexachloroethane	250	U
98-95-3	Nitrobenzene	250	U
78-59-1	Isophorone	250	U
88-75-5	2-Nitrophenol	250	U
111-91-1	Bis(2-chloroethoxy)methane	250	U
120-83-2	2,4-Dichlorophenol	250	U
120-82-1	1,2,4-Trichlorobenzene	250	U
91-20-3	Naphthalene	250	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	250	U
59-50-7	4-Chloro-3-methylphenol	250	U
91-57-6	2-Methylnaphthalene	250	U
77-47-4	Hexachlorocyclopentadiene	250	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	250	U
91-58-7	2-Chloronaphthalene	250	U
88-74-4	2-Nitroaniline	1300	U
208-96-8	Acenaphthylene	250	U
606-20-2	2,6-Dinitrotoluene	250	U
99-09-2	3-Nitroaniline	1300	U
83-32-9	Acenaphthene	250	U
51-28-5	2,4-Dinitrophenol	1300	U
132-64-9	Dibenzofuran	250	U

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Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-02-7	4-Nitrophenol	1300	UJ
121-14-2	2,4-Dinitrotoluene	250	U
86-73-7	Fluorene	250	U
131-11-3	Dimethylphthalate	250	U
84-66-2	Diethylphthalate	250	U
7005-72-3	4-Chlorophenyl-phenylether	250	U
100-01-6	4-Nitroaniline	1300	U
534-52-1	4,6-Dinitro-2-methylphenol	1300	U
86-30-6	N-Nitrosodiphenylamine (1)	250	U
101-55-3	4-Bromophenyl-phenylether	250	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	1300	U
85-01-8	Phenanthrene	51	J
120-12-7	Anthracene	250	UJ
84-74-2	Di-n-Butylphthalate	250	U
206-44-0	Fluoranthene	120	J
129-00-0	Pyrene	100	J
85-68-7	Butylbenzylphthalate	250	UJ
56-55-3	Benzo(a)Anthracene	58	J
91-94-1	3,3'-Dichlorobenzidine	490	UJ
218-01-9	Chrysene	86	J
117-81-7	Bis(2-ethylhexyl)phthalate	250	UJ
117-84-0	Di-n-octylphthalate	250	UJ
205-99-2	Benzo(b)fluoranthene	92	J
207-08-9	Benzo(k)fluoranthene	83	J
50-32-8	Benzo(a)pyrene	72	J
193-39-5	Indeno(1,2,3-cd)pyrene	250	UJ
53-70-3	Dibenzo(a,h)anthracene	130	UJ
191-24-2	Benzo(g,h,i)perylene	69	J
86-74-8	Carbazole	250	UJ

(1) - Cannot be separated from Diphenylamine