APPENDIX F
MEL QUALITY ASSURANCE REVIEW AND ANALYTICAL DATA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Inorganic Results from the USEPA Region 10 Laboratory

PROJECT NAME: Warmhouse Beach Dump

PROJECT CODE: TEC-971A

FROM: Gerald Dodo, Supervisory Chemist
Office of Environmental Assessment
USEPA Region 10 Laboratory

TO: Kathy Parker, Project Manager
Office of Environmental Cleanup, Emergency Response Unit, USEPA Region 10

CC: Amy Dahl, TechLaw, Inc.

I have authorized release of this data package. Attached you will find the SPLP Metals results for the Warmhouse Beach Dump project for the samples collected on 01/26/2010, 01/27/2010 and 01/29/2010. For further information regarding the attached data, contact Stephanie Le at 360-871-8715.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR INORGANIC CHEMICAL ANALYSES

DATE: March 11, 2010

TO: Kathy Parker, Project Manager
Office of Environmental Cleanup, Emergency Response Unit, US EPA Region 10

From: Stephanie Le, Chemist
Office of Environmental Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of Warmhouse Beach Dump Project
Results for SPLP Metals

Project Code: TEC-971A
Account Code: 10T10P302DD2C10HVLA00

CC: Amy Dahl, TechLaw, Inc.

The following is a quality assurance review of the results of the analysis of 4 soil samples for Synthetic Precipitation Leaching Procedure (SPLP) metals. These samples were submitted for the Warmhouse Beach Dump Project. The analyses were performed by ESAT chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following samples:

10044200 10044201 10044202 10044203

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with **"Laboratory/QAPP Criteria Not Met".**

For those tests for which the USEPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met. The Region 10 Laboratory's Quality System has been accredited to the standards of the National Environmental Laboratory Accreditation Conference (NELAC).

1. Sample Transport and Receipt

Upon sample receipt, all sample conditions met Laboratory/QAPP procedures for this project.

2. Sample Holding Times

The concentration of an analyte in a sample or sample extract may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples and extracts of samples. The samples covered by this review met method holding time recommendations.

3. Sample Preparation

Samples were prepared according to the method outlined in the SOP for this analyte for this type of matrix. No qualification of the data was required based on sample preparation.

4. Initial Calibration and Calibration Verification

The calibration factors generated for the initial calibration met method criteria. The low point of the calibration curve is usually the Minimum Reporting Level (MRL) of the method. All calibration verification checks met the frequency and recovery criteria on the day of analysis. No qualification was required based on calibration or calibration verification.

5. Laboratory Control Samples

All laboratory control sample results met the recovery acceptance criteria for the method. No qualification was required based on laboratory control sample analysis.

6. Blank Analysis - Laboratory/QAPP Criteria Not Met

The method blanks did not contain detectable levels of the analytes of interest, with the exception of barium and zinc in the extraction blanks. Barium is often observed in these blanks, and has been traced to the filters that are required by the method. Barium and zinc results for all samples were qualified (J), estimated. No other qualification was required based on blank analysis.

7. Duplicate Analysis - Laboratory/QAPP Criteria Not Met

Duplicate analysis was performed on sample 10044200. Sample results which were above the Low Range Standard level were within 20% RPD requirements, with the exception of barium (27% RPD). Barium results for all samples were qualified (J), estimated. No other qualification was required based on duplicate analysis.

8. Matrix Spike/Matrix Spike Duplicate Analysis

Matrix spike analyses were performed on sample 10044200. Sample results were within the 75-125% recovery requirements. No qualification was required based on matrix spike analyses.

9. Reporting Limits

Sample results above the MRL but below the LRS are reported to two significant figures; results above the LRS level are reported to three significant figures.

10. Data Qualifiers

The (U) qualifier was attached to those results which were below the Method Reporting Limit (MRL).

All barium results were qualified (J), estimated due to contamination in the extraction blank and high relative percent

difference in the duplication.

All zinc results were qualified (J), estimated due to contamination in the extraction blank. No other qualification was required.

The definition for the data qualifier is as follows:

U - The analyte was not detected at or above the reported value.

J - The identification of the analyte is acceptable; however the reported value is an estimate.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Stephanie Le at the Region 10 Laboratory, phone number (360) 871-8715.

11. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Duplicate Analysis – when a duplicate of a sample (DS), a matrix spike (MSD), or a laboratory control sample (LCSD) is analyzed, it is possible to use the comparison of the results in terms of relative percent difference (RPD) to calculate precision.

Internal standards - Compounds used to help evaluate instrument analytical performance for individual samples. Internal standards provide an instrument response for reference to accurately quantify the analytes for all associated instrumental analyses.

Laboratory Control Sample (LCS) - a clean matrix spiked with known quantities of analytes. The LCS is processed with samples through every step of preparation and analysis. Measuring percent recovery of each analyte in the LCS provides a measurement of accuracy for the analyte in the project samples. A laboratory control sample is prepared and analyzed at a frequency no less than one for every 20 project samples.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) - Sample analyses performed to provide information about the effect of the sample matrix on analyte recovery and measurement within the project samples. To create the MS/MSD, a project sample is spiked with known quantities of analyte(s) and the percent recovery of the analyte is determined.

Method Blank- An analytical control that is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background and reagent contamination. A method blank is prepared and analyzed for every batch of samples at a minimum frequency of one per every 20 samples. To produce unqualified data, the result of the method blank analysis is required to be less than the MRL and less than 10 times the amount of analyte found in any project sample.

Minimum Reporting Level (MRL) - the smallest measured concentration of a substance that can be reliably measured using a given analytical method.

Peak Integrations - The output of many analytical instruments is a peak which represents the quantity of analyte in the sample. The instrument automatically integrates the peak area to provide the concentration of the analyte; however, sometimes these peaks need to be manually integrated by the analyst.

Precision – the degree of mutual agreement or repeatability among a series of individual results.

Reference materials – Samples with analyte values that are homogeneous and well established. This allows the reference material to be used to assess the accuracy of the measurement method.

Relative Percent Difference – The difference between two sample results divided by their mean and expressed as a percentage.

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Other	
Project Officer:	KATHY PARKER	**Sample Number:**	10044200	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-14-SPLP			

MET

Parameter : SPLP-ICP — Wet Weight — Container ID : N1
Method : 200.8 — ICPMS 18 Elements — Analysis Date : 3/8/2010
Prep Method : 1312 — Synthetic Precipitation Leaching Procedure — Prep Date : 3/4/2010

			Result	Units	Qlfr
Analytes(s):	**7440360**	**Antimony**	**1.2**	**ug/L**	
	7440382	Arsenic	0.63	ug/L	U
	7440393	**Barium**	**17**	**ug/L**	**J**
	7440417	Beryllium	0.050	ug/L	U
	7440439	Cadmium	0.13	ug/L	U
	7440473	Chromium	1.3	ug/L	U
	7440508	**Copper**	**2.7**	**ug/L**	
	7439921	**Lead**	**1.3**	**ug/L**	
	7440020	**Nickel**	**1.2**	**ug/L**	
	7782492	Selenium	1.3	ug/L	U
	7440280	Thallium	0.63	ug/L	U
	7440666	**Zinc**	**22**	**ug/L**	**J**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044200
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

MET

Parameter : SPLP-ICP — Wet Weight — Container ID : N1
Method : 200.8 — ICPMS 18 Elements — Analysis Date : 3/8/2010
Prep Method : 1312 — Synthetic Precipitation Leaching Procedure — Prep Date : 3/4/2010

			Result	Units	Qlfr
Analytes(s):	**7440360**	**Antimony**	**1.2**	**ug/L**	
	7440382	**Arsenic**	**0.65**	**ug/L**	
	7440393	**Barium**	**13**	**ug/L**	**J**
	7440417	Beryllium	0.050	ug/L	U
	7440439	Cadmium	0.13	ug/L	U
	7440473	**Chromium**	**1.8**	**ug/L**	
	7440508	**Copper**	**4.5**	**ug/L**	
	7439921	**Lead**	**1.8**	**ug/L**	
	7440020	**Nickel**	**1.5**	**ug/L**	
	7782492	Selenium	1.3	ug/L	U
	7440280	Thallium	0.63	ug/L	U
	7440666	**Zinc**	**22**	**ug/L**	**J**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044200
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

MET

Parameter : SPLP-ICP Wet Weight Container ID : N1
Method : 200.8 ICPMS 18 Elements Analysis Date : 3/8/2010
Prep Method : 1312 Synthetic Precipitation Leaching Procedure Prep Date : 3/4/2010

			Result	Units	Qlfr
Surrogate(s :	7440360	Antimony	94	%Rec	
	7440382	Arsenic	92	%Rec	
	7440393	Barium	92	%Rec	
	7440417	Beryllium	95	%Rec	
	7440439	Cadmium	94	%Rec	
	7440473	Chromium	96	%Rec	
	7440508	Copper	98	%Rec	
	7439921	Lead	97	%Rec	
	7440020	Nickel	93	%Rec	
	7782492	Selenium	91	%Rec	
	7440280	Thallium	92	%Rec	
	7440666	Zinc	94	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044200
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

MET

Parameter : SPLP-ICP — Wet Weight — Container ID : N1
Method : 200.8 — ICPMS 18 Elements — Analysis Date : 3/8/2010
Prep Method : 1312 — Synthetic Precipitation Leaching Procedure — Prep Date : 3/4/2010

			Result	Units	Qlfr
Surrogate(s :	7440360	Antimony	94	%Rec	
	7440382	Arsenic	93	%Rec	
	7440393	Barium	90	%Rec	
	7440417	Beryllium	94	%Rec	
	7440439	Cadmium	93	%Rec	
	7440473	Chromium	96	%Rec	
	7440508	Copper	97	%Rec	
	7439921	Lead	96	%Rec	
	7440020	Nickel	93	%Rec	
	7782492	Selenium	91	%Rec	
	7440280	Thallium	92	%Rec	
	7440666	Zinc	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Other	
Project Officer:	KATHY PARKER	**Sample Number:**	10044201	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-15-SPLP			

MET

Parameter : SPLP-ICP — Wet Weight — Container ID : N1
Method : 200.8 — ICPMS 18 Elements — Analysis Date : 3/8/2010
Prep Method : 1312 — Synthetic Precipitation Leaching Procedure — Prep Date : 3/4/2010

			Result	Units	Qlfr
Analytes(s):	**7440360**	**Antimony**	**20.3**	**ug/L**	
	7440382	Arsenic	0.63	ug/L	U
	7440393	**Barium**	**29**	**ug/L**	**J**
	7440417	Beryllium	0.050	ug/L	U
	7440439	Cadmium	0.13	ug/L	U
	7440473	Chromium	1.3	ug/L	U
	7440508	**Copper**	**15.3**	**ug/L**	
	7439921	**Lead**	**1.7**	**ug/L**	
	7440020	**Nickel**	**1.7**	**ug/L**	
	7782492	Selenium	1.3	ug/L	U
	7440280	Thallium	0.63	ug/L	U
	7440666	**Zinc**	**22**	**ug/L**	**J**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Other	
Project Officer:	KATHY PARKER	**Sample Number:**	10044202	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-16-SPLP			

MET

Parameter : SPLP-ICP — Wet Weight — Container ID : NC
Method : 200.8 — ICPMS 18 Elements — Analysis Date : 3/8/2010
Prep Method : 1312 — Synthetic Precipitation Leaching Procedure — Prep Date : 3/4/2010

			Result	Units	Qlfr
Analytes(s):	**7440360**	**Antimony**	**2.7**	**ug/L**	
	7440382	Arsenic	0.63	ug/L	U
	7440393	**Barium**	**20**	**ug/L**	**J**
	7440417	Beryllium	0.050	ug/L	U
	7440439	Cadmium	0.13	ug/L	U
	7440473	**Chromium**	**1.4**	**ug/L**	
	7440508	**Copper**	**8.44**	**ug/L**	
	7439921	**Lead**	**3.5**	**ug/L**	
	7440020	**Nickel**	**1.2**	**ug/L**	
	7782492	Selenium	1.3	ug/L	U
	7440280	Thallium	0.63	ug/L	U
	7440666	**Zinc**	**33**	**ug/L**	**J**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Other	
Project Officer:	KATHY PARKER	**Sample Number:**	10044203	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-17-SPLP			

MET

Parameter : SPLP-ICP — Wet Weight — Container ID : N1
Method : 200.8 — ICPMS 18 Elements — Analysis Date : 3/8/2010
Prep Method : 1312 — Synthetic Precipitation Leaching Procedure — Prep Date : 3/4/2010

			Result	Units	Qlfr
Analytes(s):	**7440360**	**Antimony**	**10.2**	**ug/L**	
	7440382	**Arsenic**	**0.90**	**ug/L**	
	7440393	**Barium**	**38**	**ug/L**	**J**
	7440417	Beryllium	0.050	ug/L	U
	7440439	Cadmium	0.13	ug/L	U
	7440473	Chromium	1.3	ug/L	U
	7440508	**Copper**	**4.7**	**ug/L**	
	7439921	**Lead**	**3.7**	**ug/L**	
	7440020	**Nickel**	**1.8**	**ug/L**	
	7782492	Selenium	1.3	ug/L	U
	7440280	Thallium	0.63	ug/L	U
	7440666	**Zinc**	**23**	**ug/L**	**J**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW020810A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

MET

Parameter : SPLP-ICP Wet Weight Container ID :
Method : 200.8 ICPMS 18 Elements Analysis Date : 3/8/2010
Prep Method : 1312 Synthetic Precipitation Leaching Procedure Prep Date : 3/4/2010

			Result	Units	Qlfr
Analytes(s):	7440360	Antimony	1.0	ug/L	U
	7440382	Arsenic	0.63	ug/L	U
	7440393	**Barium**	**4.4**	**ug/L**	
	7440417	Beryllium	0.050	ug/L	U
	7440439	Cadmium	0.13	ug/L	U
	7440473	Chromium	1.3	ug/L	U
	7440508	Copper	1.3	ug/L	U
	7439921	Lead	0.13	ug/L	U
	7440020	Nickel	0.38	ug/L	U
	7782492	Selenium	1.3	ug/L	U
	7440280	Thallium	0.63	ug/L	U
	7440666	**Zinc**	**5.9**	**ug/L**	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW030410A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

MET

Parameter : SPLP-ICP — Wet Weight — Container ID :
Method : 200.8 — ICPMS 18 Elements — Analysis Date : 3/8/2010
Prep Method : 1312 — Synthetic Precipitation Leaching Procedure — Prep Date : 3/4/2010

			Result	Units	Qlfr
Analytes(s):	7440360	Antimony	1.0	ug/L	U
	7440382	Arsenic	0.63	ug/L	U
	7440393	Barium	2.5	ug/L	U
	7440417	Beryllium	0.050	ug/L	U
	7440439	Cadmium	0.13	ug/L	U
	7440473	Chromium	1.3	ug/L	U
	7440508	Copper	1.3	ug/L	U
	7439921	Lead	0.13	ug/L	U
	7440020	Nickel	0.38	ug/L	U
	7782492	Selenium	1.3	ug/L	U
	7440280	Thallium	0.63	ug/L	U
	7440666	Zinc	2.5	ug/L	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW030410A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

MET

Parameter : SPLP-ICP Wet Weight Container ID :
Method : 200.8 ICPMS 18 Elements Analysis Date : 3/8/2010
Prep Method : 1312 Synthetic Precipitation Leaching Procedure Prep Date : 3/4/2010

			Result	Units	Qlfr
Surrogate(s :	7440360	Antimony	95	%Rec	
	7440382	Arsenic	93	%Rec	
	7440393	Barium	93	%Rec	
	7440417	Beryllium	93	%Rec	
	7440439	Cadmium	94	%Rec	
	7440473	Chromium	93	%Rec	
	7440508	Copper	98	%Rec	
	7439921	Lead	95	%Rec	
	7440020	Nickel	93	%Rec	
	7782492	Selenium	91	%Rec	
	7440280	Thallium	92	%Rec	
	7440666	Zinc	95	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW030410A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

MET

Parameter : SPLP-ICP Wet Weight Container ID :
Method : 200.8 ICPMS 18 Elements Analysis Date : 3/8/2010
Prep Method : 1312 Synthetic Precipitation Leaching Procedure Prep Date : 3/4/2010

			Result	Units	Qlfr
Surrogate(s :	7440360	Antimony	96	%Rec	
	7440382	Arsenic	92	%Rec	
	7440393	Barium	93	%Rec	
	7440417	Beryllium	95	%Rec	
	7440439	Cadmium	95	%Rec	
	7440473	Chromium	94	%Rec	
	7440508	Copper	99	%Rec	
	7439921	Lead	96	%Rec	
	7440020	Nickel	94	%Rec	
	7782492	Selenium	91	%Rec	
	7440280	Thallium	92	%Rec	
	7440666	Zinc	97	%Rec	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Inorganic Results from the USEPA Region 10 Laboratory

PROJECT NAME: Warmhouse Beach Dump

PROJECT CODE: TEC-971A

FROM: Gerald Dodo, Supervisory Chemist
Office of Environmental Assessment
USEPA Region 10 Laboratory

TO: Kathy Parker, Project Manager
Office of Environmental Cleanup, Emergency Response Unit, USEPA Region 10

CC: Amy Dahl, TechLaw, Inc.

I have authorized release of this data package. Attached you will find the SPLP Mercury results for the Warmhouse Beach Dump project for the samples collected on 01/26/2010, 01/27/2010 and 01/29/2010. For further information regarding the attached data, contact Stephanie Le at 360-871-8715.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR INORGANIC CHEMICAL ANALYSES

DATE: March 15, 2010

TO: Kathy Parker, Project Manager
Office of Environmental Cleanup, Emergency Response Unit, US EPA Region 10

From: Stephanie Le, Chemist
Office of Environmental Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of Warmhouse Beach Dump Project
Results for Mercury

Project Code: TEC-971A
Account Code: 10T10P302DD2C10HVLA00

CC: Amy Dahl, TechLaw, Inc.

The following is a quality assurance review of the results of the analysis of 4 soil samples for Synthetic Precipitation Leaching Procedure (SPLP) mercury. These samples were submitted for the Warmhouse Beach Dump Project. The analyses were performed by ESAT chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following samples:

10044200 10044201 10044202 10044203

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with **"Laboratory/QAPP Criteria Not Met".**

For those tests for which the USEPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met. The Region 10 Laboratory's Quality System has been accredited to the standards of the National Environmental Laboratory Accreditation Conference (NELAC).

1. Sample Transport and Receipt

Upon sample receipt, all sample conditions met Laboratory/QAPP procedures for this project.

2. Sample Holding Times

The concentration of an analyte in a sample or sample extract may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples and extracts of samples. The samples covered by this review met method holding time recommendations.

3. Sample Preparation

Samples were prepared according to the method outlined in the SOP for this analyte for this type of matrix. No qualification of the data was required based on sample preparation.

4. Initial Calibration and Calibration Verification

The calibration factors generated for the initial calibration met method criteria. The low point of the calibration curve is usually the Minimum Reporting Level (MRL) of the method. All calibration verification checks met the frequency and recovery criteria on the day of analysis. No qualification was required based on calibration or calibration verification.

5. Laboratory Control Samples - Laboratory/QAPP Criteria Not Met

The results for the two laboratory control samples (LCS) met the recovery acceptance criterion (90 – 110% of the standard's true value) for the method. However, the result for the laboratory fortified blank sample had a recovery of 71%. The LFB standard was created at the time of the extract filtration and preservation (as specified in the SPLP method), whereas the LCSs were created at the time of the sample digestion, several days later. The low recovery from the LFB suggests some mercury loss during the storage of the extracts. All mercury results were qualified (J), estimated.

6. Blank Analysis

The method blank did not contain detectable levels of analyte which would require data qualification.

7. Duplicate Analysis

Duplicate analysis was performed on sample 10044200. Sample duplicates agree within 20% RPD at level greater than 4X spike amount. No qualification was required based on duplicate analysis.

8. Matrix Spike/Matrix Spike Duplicate Analysis - Laboratory/QAPP Criteria Not Met

Matrix spike analyses were performed on sample 10044200. The matrix spikes were created at the time of the extract filtration and preservation (as specified in the SPLP method). The matrix spike results were not within the acceptance window of 75-125% recovery (the spike recoveries were 62%/62%). This is similar to the LFB recovery described in Section 5, and suggests that some mercury loss took place during the storage of the sample extracts. All mercury results were qualified (J), estimated.

9. Reporting Limits

All sample results that fall below the MRL are assigned the value of the MRL and the 'U' qualifier is attached.

10. Data Qualifiers

The (U) qualifier was attached to those results which were below the Method Reporting Limit (MRL). All mercury results were qualified (J), estimated due to low recoveries for laboratory fortified blank and matrix spikes. No other qualification was required. The definition for the data qualifier is as follows:

U - The analyte was not detected at or above the reported value.

UJ - The analyte was not detected at or above the reported value. The reported value is an estimate.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Stephanie Le at the Region 10 Laboratory, phone number (360) 871-8715.

11. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Duplicate Analysis – when a duplicate of a sample (DS), a matrix spike (MSD), or a laboratory control sample (LCSD) is analyzed, it is possible to use the comparison of the results in terms of relative percent difference (RPD) to calculate precision.

Internal standards - Compounds used to help evaluate instrument analytical performance for individual samples. Internal standards provide an instrument response for reference to accurately quantify the analytes for all associated instrumental analyses.

Laboratory Control Sample (LCS) - a clean matrix spiked with known quantities of analytes. The LCS is processed with samples through every step of preparation and analysis. Measuring percent recovery of each analyte in the LCS provides a measurement of accuracy for the analyte in the project samples. A laboratory control sample is prepared and analyzed at a frequency no less than one for every 20 project samples.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) - Sample analyses performed to provide information about the effect of the sample matrix on analyte recovery and measurement within the project samples. To create the MS/MSD, a project sample is spiked with known quantities of analyte(s) and the percent recovery of the analyte is determined.

Method Blank- An analytical control that is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background and reagent contamination. A method blank is prepared and analyzed for every batch of samples at a minimum frequency of one per every 20 samples. To produce unqualified data, the result of the method blank analysis is required to be less than the MRL and less than 10 times the amount of analyte found in any project sample.

Minimum Reporting Level (MRL) - the smallest measured concentration of a substance that can be reliably measured using a given analytical method.

Peak Integrations - The output of many analytical instruments is a peak which represents the quantity of analyte in the sample. The instrument automatically integrates the peak area to provide the concentration of the analyte; however, sometimes these peaks need to be manually integrated by the analyst.

Precision – the degree of mutual agreement or repeatability among a series of individual results.

Reference materials – Samples with analyte values that are homogeneous and well established. This allows the reference material to be used to assess the accuracy of the measurement method.

Relative Percent Difference – The difference between two sample results divided by their mean and expressed as a percentage.

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Other	
Project Officer:	KATHY PARKER	**Sample Number:**	10044200	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-14-SPLP			

MET

Parameter : All MERCURY tests — Container ID : N1
Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010
Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

			Result	Units	Qlfr
Analytes(s):	7439976	Mercury	0.050	ug/L	UJ

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044200
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

			Result	Units	Qlfr

MET

Parameter : All MERCURY tests — Container ID : N1

Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010

Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Analytes(s):	7439976	Mercury	0.050	ug/L	UJ

10044200 Duplicate .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044200
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

		Result	Units	Qlfr

MET

Parameter : All MERCURY tests — Container ID : N1

Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010

Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Surrogate(s :	7439976	Mercury	62	%Rec

10044200 Matrix Spike .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044200
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

	Result	Units	Qlfr

MET

Parameter : All MERCURY tests — Container ID : N1

Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010

Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Surrogate(s :	7439976	Mercury	62	%Rec

10044200 Matrix Spike Du .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Other	
Project Officer:	KATHY PARKER	**Sample Number:**	10044201	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-15-SPLP			

			Result	Units	Qlfr

MET

Parameter : All MERCURY tests — Container ID : N1

Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010

Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Analytes(s):	7439976	Mercury	0.050	ug/L	UJ

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Other	
Project Officer:	KATHY PARKER	**Sample Number:**	10044202	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-16-SPLP			

			Result	Units	Qlfr
MET					
Parameter	: All MERCURY tests				Container ID : NC
Method	: 245.1	Cold vapor mercury in water			Analysis Date : 3/1/2010
Prep Method	: 245.1	Cold vapor mercury in water			Prep Date : 3/1/2010
Analytes(s):	7439976	Mercury	0.050	ug/L	UJ

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Other	
Project Officer:	KATHY PARKER	**Sample Number:**	10044203	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-17-SPLP			

MET

Parameter : All MERCURY tests — Container ID : N1

Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010

Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Analytes(s):		Result	Units	Qlfr
7439976	Mercury	0.050	ug/L	UJ

Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW020810A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr

MET

Parameter : All MERCURY tests — Container ID :

Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010

Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Analytes(s):	7439976	Mercury	0.050	ug/L	U

IW020810A Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW030110A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr

MET

Parameter : All MERCURY tests — Container ID :
Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010
Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Analytes(s):	7439976	Mercury	0.050	ug/L	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW030110A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

			Result	Units	Qlfr

MET

Parameter : All MERCURY tests — Container ID :
Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010
Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Surrogate(s :	7439976	Mercury	101	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW030110A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

			Result	Units	Qlfr

MET

Parameter : All MERCURY tests — Container ID :
Method : 245.1 Cold vapor mercury in water — Analysis Date : 3/1/2010
Prep Method : 245.1 Cold vapor mercury in water — Prep Date : 3/1/2010

Surrogate(s :	7439976	Mercury	100	%Rec	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Inorganic Results from the USEPA Region 10 Laboratory

PROJECT NAME: Warmhouse Beach Dump

PROJECT CODE: TEC-971A

FROM: Gerald Dodo, Supervisory Chemist
Office of Environmental Assessment
USEPA Region 10 Laboratory

TO: Kathy Parker, Project Manager
Office of Environmental Cleanup, Emergency Response Unit, USEPA Region 10

CC: Amy Dahl, TechLaw, Inc.

I have authorized release of this data package. Attached you will find the Perchlorate results for the Warmhouse Beach Dump project for the samples collected on 01/26/2010, 01/27/2010 and 01/29/2010. For further information regarding the attached data, contact Stephanie Le at 360-871-8715.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR INORGANIC CHEMICAL ANALYSES

DATE: March 03, 2010

TO: Kathy Parker, Project Manager
Office of Environmental Cleanup, Emergency Response Unit, US EPA Region 10

From: Stephanie Le, Chemist
Office of Environmental Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of Warmhouse Beach Dump Project for Perchlorate

Project Code: TEC-971A
Account Code: 10T10P302DD2C10HVLA00

CC: Amy Dahl, TechLaw, Inc.

The following is a quality assurance review of the results of the analysis of 19 soil and 15 water samples for Perchlorate. These samples were submitted for the Warmhouse Beach Dump Project. The analyses were performed by ESAT chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA and Laboratory guidelines.

This review was conducted for the following samples:

Water	10044224	10044226	10044228	10044230	10044232	10044234	10044236
	10044238	10044240	10044242	10044244	10044246	10044248	10044249
	10044250						
Soil	10044204	10044205	10044206	10044207	10044208	10044209	10044210
	10044211	10044212	10044213	10044214	10044215	10044216	10044217
	10044218	10044219	10044220	10044221	10044222		

Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

All measures of quality control met Laboratory/QAPP criteria.

For those tests for which the USEPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met. The Region 10 Laboratory's Quality System has been accredited to the standards of the National Environmental Laboratory Accreditation Conference (NELAC).

1. Sample Transport and Receipt

Upon sample receipt, all sample conditions met Laboratory/QAPP procedures for this project.

2. Sample Holding Times

The concentration of an analyte in a sample or sample extract may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are recommended for samples and extracts of samples. The samples covered by this review met method holding time recommendations.

3. Sample Preparation

Samples were prepared according to the method outlined in the SOP for this analyte for this type of matrix. No qualification of the data was required based on sample preparation.

4. Initial Calibration and Calibration Verification

The calibration factors generated for the initial calibration met method criteria. The low point of the calibration curve is usually the Minimum Reporting Level (MRL) of the method. All calibration verification checks met the frequency and recovery criteria on the day of analysis. No qualification was required based on calibration or calibration verification.

5. Laboratory Control Samples

All laboratory control sample results met the recovery acceptance criteria for the method. No qualification was required based on laboratory control sample analysis.

6. Blank Analysis

The method blank did not contain detectable levels of analyte which would require data qualification.

7. Internal Standards

All internal standards met instrument response criteria.

8. Duplicate Analysis

Duplicate analysis was performed on samples 10044218 (soil) and 10044240 (water). Sample duplicates agree with ≤50% RPD at concentrations near the MRL or ≤15% RPD at concentration near or above the mid range of calibration. No qualification was required based on duplicate analysis.

9. Matrix Spike/Matrix Spike Duplicate Analysis

Matrix spike analyses were performed on samples 10044218 (soil) and 10044240 (water). Sample results were within the 80-120% recovery for water sample and 70-130% for soil sample. No qualification was required based on matrix spike analyses.

10. Reference Materials

A reference material was prepared and analyzed with these samples. Analytical values for this sample were within the range of acceptable results. No qualification was necessary based on analysis of the reference material.

11. Instrument Peak Integrations

No manual integrations were performed.

12. Reporting Limits

All sample results that fall below the MRL are assigned the value of the MRL and the 'U' qualifier is attached.

13. Data Qualifiers

The (U) qualifier was attached to those results which were below the Method Reporting Limit (MRL). No other qualification was required. The definition for the data qualifier is as follows:

U - The analyte was not detected at or above the reported value.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Stephanie Le at the Region 10 Laboratory, phone number (360) 871-8715.

14. Definitions

Accuracy - the degree of conformity of a measured or calculated quantity to its actual value.

Duplicate Analysis – when a duplicate of a sample (DS), a matrix spike (MSD), or a laboratory control sample (LCSD) is analyzed, it is possible to use the comparison of the results in terms of relative percent difference (RPD) to calculate precision.

Internal standards - Compounds used to help evaluate instrument analytical performance for individual samples. Internal standards provide an instrument response for reference to accurately quantify the analytes for all associated instrumental analyses.

Laboratory Control Sample (LCS) - a clean matrix spiked with known quantities of analytes. The LCS is processed with samples through every step of preparation and analysis. Measuring percent recovery of each analyte in the LCS provides a measurement of accuracy for the analyte in the project samples. A laboratory control sample is prepared and analyzed at a frequency no less than one for every 20 project samples.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) - Sample analyses performed to provide information about the effect of the sample matrix on analyte recovery and measurement within the project samples. To create the MS/MSD, a project sample is spiked with known quantities of analyte(s) and the percent recovery of the analyte is determined.

Method Blank- An analytical control that is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background and reagent contamination. A method blank is prepared and analyzed for every batch of samples at a minimum frequency of one per every 20 samples. To produce unqualified data, the result of the method blank analysis is required to be less than the MRL and less than 10 times the amount of analyte found in any project sample.

Minimum Reporting Level (MRL) - the smallest measured concentration of a substance that can be reliably measured using a given analytical method.

Peak Integrations - The output of many analytical instruments is a peak which represents the quantity of analyte in the sample. The instrument automatically integrates the peak area to provide the concentration of the analyte; however, sometimes these peaks need to be manually integrated by the analyst.

Precision – the degree of mutual agreement or repeatability among a series of individual results.

Reference materials – Samples with analyte values that are homogeneous and well established. This allows the reference material to be used to assess the accuracy of the measurement method.

Relative Percent Difference – The difference between two sample results divided by their mean and expressed as a percentage.

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044204	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-14-SS			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):				
*90180	Perchlorate	1.2	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044205	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-15-SS			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	*90180	Perchlorate	1.4	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044206	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-16-SS			

		Result	Units	Qlfr
GEN				
Parameter :	Ion Chromatography/Mass Spec.		Dry Weight	Container ID : N3
Method :	6860 Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method :	6860 Perchlorate by IC/MS			Prep Date : 2/11/2010
Analytes(s):	*90180 Perchlorate	1.4	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044207	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-17-SS			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	*90180	Perchlorate	1.9	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044208	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-18-SS			

		Result	Units	Qlfr
GEN				
Parameter	: Ion Chromatography/Mass Spec.		Dry Weight	Container ID : N3
Method	: 6860 Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method	: 6860 Perchlorate by IC/MS			Prep Date : 2/11/2010
Analytes(s):	*90180 Perchlorate	1.4	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044209	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SD			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	*90180	Perchlorate	2.1	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044210	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SS			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	*90180	Perchlorate	2.3	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**15:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044211	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SD			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	*90180	Perchlorate	2.3	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044212	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SD			

		Result	Units	Qlfr
GEN				
Parameter :	Ion Chromatography/Mass Spec.		Dry Weight	Container ID : N3
Method :	6860 Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method :	6860 Perchlorate by IC/MS			Prep Date : 2/11/2010
Analytes(s):	*90180 Perchlorate	1.8	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044213	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SD			

		Result	Units	Qlfr
GEN				
Parameter :	Ion Chromatography/Mass Spec.		Dry Weight	Container ID : N3
Method :	6860 Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method :	6860 Perchlorate by IC/MS			Prep Date : 2/11/2010
Analytes(s):	*90180 Perchlorate	1.7	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044214	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SD			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	*90180	Perchlorate	1.4	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044215	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SD			

			Result	Units	Qlfr
GEN					
Parameter	: Ion Chromatography/Mass Spec.			Dry Weight	Container ID : N3
Method	: 6860	Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method	: 6860	Perchlorate by IC/MS			Prep Date : 2/11/2010
Analytes(s):	*90180	Perchlorate	2.8	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044216	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SD			

		Result	Units	Qlfr
GEN				
Parameter :	Ion Chromatography/Mass Spec.		Dry Weight	Container ID : N3
Method :	6860 Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method :	6860 Perchlorate by IC/MS			Prep Date : 2/11/2010
Analytes(s):	*90180 Perchlorate	1.6	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044217	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SD			

		Result	Units	Qlfr
GEN				
Parameter :	Ion Chromatography/Mass Spec.		Dry Weight	Container ID : N3
Method :	6860 Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method :	6860 Perchlorate by IC/MS			Prep Date : 2/11/2010
Analytes(s):	*90180 Perchlorate	5.6	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**13:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044218	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SD			

		Result	Units	Qlfr
GEN				
Parameter :	Ion Chromatography/Mass Spec.		Dry Weight	Container ID : N3
Method :	6860 Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method :	6860 Perchlorate by IC/MS			Prep Date : 2/11/2010
Analytes(s):	*90180 Perchlorate	5.2	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

			Result	Units	Qlfr
Analytes(s):	*90180	Perchlorate	5.0	ug/kg	U

10044218 Duplicate .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Surrogate(s :	*90180	Perchlorate	104	%Rec

10044218 Matrix Spike .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Surrogate(s :	*90180	Perchlorate	108	%Rec

10044218 Matrix Spike Du .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044219	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SD			

		Result	**Units**	**Qlfr**

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	***90180**	**Perchlorate**	**13.6**	**ug/kg**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**10:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044220	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SD			

		Result	**Units**	**Qlfr**

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	***90180**	**Perchlorate**	**5.61**	**ug/kg**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:48:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044221	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SD			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	*90180	Perchlorate	2.6	ug/kg	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044222	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SD			

		Result	**Units**	**Qlfr**

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID : N3
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	***90180**	**Perchlorate**	**13.9**	**ug/kg**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044224	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SW			

GEN

Parameter	: Ion Chromatography/Mass Spec.		Wet Weight	Container ID : N1
Method	: 6860	Perchlorate by IC/MS		Analysis Date : 2/8/2010
Prep Method	: 6860	Perchlorate by IC/MS		Prep Date : 2/8/2010

			Result	Units	Qlfr
Analytes(s):	*90180	Perchlorate	0.10	ug/L	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**14:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044226	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SW			

		Result	Units	Qlfr
GEN				
Parameter :	Ion Chromatography/Mass Spec.		Wet Weight	Container ID : N1
Method :	6860 Perchlorate by IC/MS			Analysis Date : 2/8/2010
Prep Method :	6860 Perchlorate by IC/MS			Prep Date : 2/8/2010
Analytes(s):	*90180 Perchlorate	0.10	ug/L	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:35:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044228	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SW			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/8/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/8/2010

Analytes(s):	***90180**	**Perchlorate**	**2.93**	**ug/L**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**11:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044230	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SW			

		Result	**Units**	**Qlfr**

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/8/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/8/2010

Analytes(s):	***90180**	**Perchlorate**	**2.06**	**ug/L**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:31:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044232	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SW			

			Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/8/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/8/2010

Analytes(s):	***90180**	**Perchlorate**	**1.96**	**ug/L**	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044234	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SW			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/8/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/8/2010

Analytes(s):	***90180**	**Perchlorate**	**1.92**	**ug/L**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**11:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044236	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SW			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/8/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/8/2010

Analytes(s):				
***90180**	**Perchlorate**	**2.04**	**ug/L**	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044238	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SW			

	Result	**Units**	**Qlfr**

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Analytes(s):				
	***90180**	**Perchlorate**	**52.9**	**ug/L**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**12:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044240	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SW			

		Result	**Units**	**Qlfr**

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Analytes(s):	***90180**	**Perchlorate**	**44.1**	**ug/L**

Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered
Project Officer:	KATHY PARKER	**Sample Number:**	10044240
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1

Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010

Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Analytes(s):	***90180**	**Perchlorate**	**43.6**	**ug/L**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered
Project Officer:	KATHY PARKER	**Sample Number:**	10044240
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Surrogate(s :	*90180	Perchlorate	NA	%Rec

10044240 Matrix Spike .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered
Project Officer:	KATHY PARKER	**Sample Number:**	10044240
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Surrogate(s :	*90180	Perchlorate	NA	%Rec

10044240 Matrix Spike Du .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044242	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SW			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Analytes(s):	***90180**	**Perchlorate**	**42.1**	**ug/L**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**9:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044244	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SW			

			Result	Units	Qlfr
GEN					
Parameter	: Ion Chromatography/Mass Spec.		Wet Weight		Container ID : N1
Method	: 6860	Perchlorate by IC/MS			Analysis Date : 2/9/2010
Prep Method	: 6860	Perchlorate by IC/MS			Prep Date : 2/9/2010
Analytes(s):	***90180**	**Perchlorate**	**26.6**	**ug/L**	

10044244 Reg sample .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044246	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SW			

			Result	Units	Qlfr
GEN					
Parameter	: Ion Chromatography/Mass Spec.		Wet Weight		Container ID : N1
Method	: 6860	Perchlorate by IC/MS			Analysis Date : 2/9/2010
Prep Method	: 6860	Perchlorate by IC/MS			Prep Date : 2/9/2010
Analytes(s):	***90180**	**Perchlorate**	**24.7**	**ug/L**	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044248	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SW			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Analytes(s):	***90180**	**Perchlorate**	**41.0**	**ug/L**

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/29/10	**9:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044249	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-19-RB			

			Result	Units	Qlfr
GEN					
Parameter	: Ion Chromatography/Mass Spec.			Wet Weight	Container ID : N3
Method	: 6860	Perchlorate by IC/MS			Analysis Date : 2/9/2010
Prep Method	: 6860	Perchlorate by IC/MS			Prep Date : 2/8/2010
Analytes(s):	*90180	Perchlorate	0.10	ug/L	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/29/10	**9:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered	
Project Officer:	KATHY PARKER	**Sample Number:**	10044250	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-20-FB			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID : N1
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/8/2010

Analytes(s):	*90180	Perchlorate	0.10	ug/L	U

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	IS021110A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID :
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Analytes(s):	*90180	Perchlorate	1.0	ug/kg	U

IS021110A Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	IS021110A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Control
Station Description:			

			Result	Units	Qlfr
GEN					
Parameter	: Ion Chromatography/Mass Spec.			Dry Weight	Container ID :
Method	: 6860	Perchlorate by IC/MS			Analysis Date : 2/11/2010
Prep Method	: 6860	Perchlorate by IC/MS			Prep Date : 2/11/2010
Surrogate(s :	*90180	Perchlorate	105	%Rec	

IS021110A Control .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	IS021110A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

		Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID :
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Surrogate(s :	*90180	Perchlorate	105	%Rec

IS021110A LCS .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	IS021110A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Dry Weight Container ID :
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/11/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/11/2010

Surrogate(s :	*90180	Perchlorate	105	%Rec

IS021110A LCSD .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	IW020810A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr
GEN					
Parameter	: Ion Chromatography/Mass Spec.			Wet Weight	Container ID :
Method	: 6860	Perchlorate by IC/MS			Analysis Date : 2/8/2010
Prep Method	: 6860	Perchlorate by IC/MS			Prep Date : 2/8/2010
Analytes(s):	*90180	Perchlorate	0.10	ug/L	U

IW020810A Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered
Project Officer:	KATHY PARKER	**Sample Number:**	IW020810A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID :
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/8/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/8/2010

Surrogate(s :	*90180	Perchlorate	107	%Rec

IW020810A LCS .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered
Project Officer:	KATHY PARKER	**Sample Number:**	IW020810A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID :
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/8/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/8/2010

Surrogate(s :	*90180	Perchlorate	109	%Rec

IW020810A LCSD .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered
Project Officer:	KATHY PARKER	**Sample Number:**	IW020910A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr
GEN					
Parameter	: Ion Chromatography/Mass Spec.			Wet Weight	Container ID :
Method	: 6860	Perchlorate by IC/MS			Analysis Date : 2/9/2010
Prep Method	: 6860	Perchlorate by IC/MS			Prep Date : 2/9/2010
Analytes(s):	*90180	Perchlorate	0.10	ug/L	U

IW020910A Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered
Project Officer:	KATHY PARKER	**Sample Number:**	IW020910A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

	Result	Units	Qlfr

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID :
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Surrogate(s :	*90180	Perchlorate	103	%Rec

IW020910A LCS .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liq-Filtered
Project Officer:	KATHY PARKER	**Sample Number:**	IW020910A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

	Result	**Units**	**Qlfr**

GEN

Parameter : Ion Chromatography/Mass Spec. Wet Weight Container ID :
Method : 6860 Perchlorate by IC/MS Analysis Date : 2/9/2010
Prep Method : 6860 Perchlorate by IC/MS Prep Date : 2/9/2010

Surrogate(s :	*90180	Perchlorate	107	%Rec

IW020910A LCSD .

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT:	Data Release for Nitroaromatics, Nitramines, and Nitrate Esters Analysis Results from the USEPA Region 10 Laboratory
PROJECT NAME:	Warmhouse Beach Dump, Neah Bay, WA
PROJECT CODE:	TEC-971A
FROM:	Gerald Dodo, Supervisory Chemist Office of Environmental Assessment, USEPA Region 10 Laboratory
TO:	Kathy Parker,, OSC Office of Environmental Cleanup, USEPA Region 10
CC:	Amy Dahl, TechLaw, Inc.

I have authorized release of this data package. Attached you will find the Nitroaromatics, Nitramines, and Nitrate Esters results for the Warmhouse Beach Dump project for the samples collected 01/26/10 to 01/29/10. For further information regarding the attached data, contact Chris Pace at 360-871-8703.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR ORGANIC CHEMICAL ANALYSES

Date: April 6, 2010

To: Kathy Parker, OSC
Office of Environmental Cleanup, USEPA Region 10

From: Chris Pace, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review for the Warmhouse Beach Dump, Neah Bay, WA Project

Project Code: TEC-971A
Account Code: 10T10P302DD2C10HVLA00

CC: Amy Dahl, TechLaw, Inc.

The following is a quality assurance review of the data for nitroaromatics, nitramines, and nitrate esters analysis of soil and water samples from the above referenced site. The analyses were performed by the EPA Region 10 Laboratory ESAT contractor using EPA SW846 method 8330A with the three additional analytes found in 8330B.

We're following Method 8330A for the analysis of the explosives which describes air drying the samples, sieving and homogenizing before extracting. Due to the samples being very wet and contain wood debris, the drying step was not completed at the 14 day holding time limit for extractions. At this point we homogenize the sample wet by mixing in a beaker then removed an aliquot for extraction to not exceed holding times. This modification will not necessarily results in results being qualified as other QC data would need to be evaluated. The solid samples are reported on a wet-weight basis.

This review was conducted for the following samples:

Soil:

10044204	10044205	10044206	10044207	10044208	10044209
10044210	10044211	10044212	10044213	10044214	10044215
10044216	10044217	10044218	10044219	10044220	10044221
10044222					

Water:

10044223	10044225	10044227	10044229	10044231	10044233
10044235	10044237	10044239	10044241	10044243	10044245
10044247	10044249				

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "L*aboratory/QAPP Criteria Not Met*".

For those tests for which the EPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met.

2. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied for the extraction of soil samples is 14 days and water samples is 7 days from the time of collection. Extracts have a holding time maximum of 40 days from the time of preparation. All samples were extracted and analyzed within these criteria.

4. Sample Preparation

For soil samples see introductory statements in the second paragraph. Water samples were prepared and analyzed according to the method.

5. Initial Calibration/Continuing Calibration Verification (CCV) - *Laboratory/QAPP Criteria Not Met*

Initial calibration was performed on 02/17/10. Correlation coefficients met the criteria of ≥0.99. Due to coelution of a number of analytes two standard and spiking solutions were used.

The CCVs for samples met the criteria for frequency of analysis. The percent accuracies were 85-115% of the true value except for the following.

1,3,5- Trinitrobenzene and tetryl resulted with <85% accuracy in all CCVs. All sample results were non-detects and qualified as estimated, "UJ". Both 1,3,5- Trinitrobenzene and tetryl have shown some instability in our lab and others under certain conditions. The instability in our lab is being investigated.

6. Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD)

LCS/LCSD are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the criteria of 70-130% with a relative percent difference (RPD) of ≤30 for water.

To reduce sample QC, only one soil LCS was analyzed. The LCS recovery was within the criteria of 70-130%.

7. Blank Analysis

Method blanks were analyzed with each sample batch to evaluate the potential for laboratory contamination and effects on the sample results. Target analytes were not detected in method blanks.

8. Duplicate Sample Analysis

Duplicate sample analyses are performed to provide information on the precision, in the matrix of interest, of the analytical method. Duplicate analyses were performed using soil sample 10044218 duplicate. All results which were above 5 times the reporting limit met the relative percent difference (RPD) criteria of ≤20.

9. Surrogate Spikes

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. The surrogate compound used for these analyses was 1,2-dinitrobenzene. All surrogate recoveries were within the criteria of 70-130%.

10. Matrix Spike/Matrix Spike Duplicate Analysis (MS/MSD) - *Laboratory/QAPP Criteria Not Met*

MS/MSD analyses are performed to provide information on the effects of sample matrices toward the analytical method. An MS/MSD analysis was performed using water sample 10044239(S1/S2/S3/S4 – two mixes). The recoveries met the criteria of 70-130% with a relative percent difference (RPD) of ≤30.

To reduce sample QC, only one soil matrix spike was analyzed, 10044218(S1/S2 – two mixes). The matrix spike recovery was within the criteria of 70-130% except for the following.

Matrix Spike 10044218S1 result with a slightly low recovery for PETN. None of the sample data were qualified on the basis.

Matrix Spike 10044218S2 result with a low recovery for tetryl. The non-detected tetryl in the native sample was qualified as estimated, “UJ”.

11. Compound Quantitation

The initial calibration functions from the primary column were used for calculations. Reported quantitation limits and detected analyte results were based on the initial calibration standards and sample size used for the analysis.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

12. Identification

Method 8330B analytes and the surrogate were identified based on chromatographic retention times of two dissimilar liquid chromatography columns.

13. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project’s data quality objectives. Should questions arise regarding the data, contact Chris Pace at the Region 10 Laboratory, phone number (360) 871 - 8703.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. No value is reported with this qualification.
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. No value is reported with this qualification.

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044204	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-14-SS			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	130	ug/kg	UJ
	99650	1,3-Dinitrobenzene	130	ug/kg	U
	118967	2,4,6-Trinitrotoluene	130	ug/kg	U
	121142	2,4-Dinitrotoluene	130	ug/kg	U
	606202	2,6-Dinitrotoluene	130	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	130	ug/kg	U
	88722	2-Nitrotoluene	130	ug/kg	U
	99081	3-Nitrotoluene	130	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	130	ug/kg	U
	99990	4-Nitrotoluene	130	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	130	ug/kg	U
	2691410	HMX	130	ug/kg	U
	98953	Nitrobenzene	130	ug/kg	U
	55630	Nitroglycerine	130	ug/kg	U
	78115	PETN	270	ug/kg	U
	121824	RDX	270	ug/kg	U
	479458	TETRYL	130	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	97	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044205	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-15-SS			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	160	ug/kg	UJ
	99650	1,3-Dinitrobenzene	160	ug/kg	U
	118967	2,4,6-Trinitrotoluene	160	ug/kg	U
	121142	2,4-Dinitrotoluene	160	ug/kg	U
	606202	2,6-Dinitrotoluene	160	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	160	ug/kg	U
	88722	2-Nitrotoluene	160	ug/kg	U
	99081	3-Nitrotoluene	160	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	160	ug/kg	U
	99990	4-Nitrotoluene	160	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	160	ug/kg	U
	2691410	HMX	160	ug/kg	U
	98953	Nitrobenzene	160	ug/kg	U
	55630	Nitroglycerine	160	ug/kg	U
	78115	PETN	320	ug/kg	U
	121824	RDX	320	ug/kg	U
	479458	TETRYL	160	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	92	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044206	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-16-SS			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	160	ug/kg	UJ
	99650	1,3-Dinitrobenzene	160	ug/kg	U
	118967	2,4,6-Trinitrotoluene	160	ug/kg	U
	121142	2,4-Dinitrotoluene	160	ug/kg	U
	606202	2,6-Dinitrotoluene	160	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	160	ug/kg	U
	88722	2-Nitrotoluene	160	ug/kg	U
	99081	3-Nitrotoluene	160	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	160	ug/kg	U
	99990	4-Nitrotoluene	160	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	160	ug/kg	U
	2691410	HMX	160	ug/kg	U
	98953	Nitrobenzene	160	ug/kg	U
	55630	Nitroglycerine	160	ug/kg	U
	78115	PETN	320	ug/kg	U
	121824	RDX	320	ug/kg	U
	479458	TETRYL	160	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	90	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044207	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-17-SS			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	200	ug/kg	UJ
	99650	1,3-Dinitrobenzene	200	ug/kg	U
	118967	2,4,6-Trinitrotoluene	200	ug/kg	U
	121142	2,4-Dinitrotoluene	200	ug/kg	U
	606202	2,6-Dinitrotoluene	200	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	200	ug/kg	U
	88722	2-Nitrotoluene	200	ug/kg	U
	99081	3-Nitrotoluene	200	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	200	ug/kg	U
	99990	4-Nitrotoluene	200	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	200	ug/kg	U
	2691410	HMX	200	ug/kg	U
	98953	Nitrobenzene	200	ug/kg	U
	55630	Nitroglycerine	200	ug/kg	U
	78115	PETN	410	ug/kg	U
	121824	RDX	410	ug/kg	U
	479458	TETRYL	200	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	80	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044208	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-18-SS			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	150	ug/kg	UJ
	99650	1,3-Dinitrobenzene	150	ug/kg	U
	118967	2,4,6-Trinitrotoluene	150	ug/kg	U
	121142	2,4-Dinitrotoluene	150	ug/kg	U
	606202	2,6-Dinitrotoluene	150	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	150	ug/kg	U
	88722	2-Nitrotoluene	150	ug/kg	U
	99081	3-Nitrotoluene	150	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	150	ug/kg	U
	99990	4-Nitrotoluene	150	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	150	ug/kg	U
	2691410	HMX	150	ug/kg	U
	98953	Nitrobenzene	150	ug/kg	U
	55630	Nitroglycerine	150	ug/kg	U
	78115	PETN	300	ug/kg	U
	121824	RDX	300	ug/kg	U
	479458	TETRYL	150	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	86	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044209	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	230	ug/kg	UJ
	99650	1,3-Dinitrobenzene	230	ug/kg	U
	118967	2,4,6-Trinitrotoluene	230	ug/kg	U
	121142	2,4-Dinitrotoluene	230	ug/kg	U
	606202	2,6-Dinitrotoluene	230	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	230	ug/kg	U
	88722	2-Nitrotoluene	230	ug/kg	U
	99081	3-Nitrotoluene	230	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	230	ug/kg	U
	99990	4-Nitrotoluene	230	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	230	ug/kg	U
	2691410	HMX	230	ug/kg	U
	98953	Nitrobenzene	230	ug/kg	U
	55630	Nitroglycerine	230	ug/kg	U
	78115	PETN	460	ug/kg	U
	121824	RDX	460	ug/kg	U
	479458	TETRYL	230	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	86	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044210	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SS			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	240	ug/kg	UJ
	99650	1,3-Dinitrobenzene	240	ug/kg	U
	118967	2,4,6-Trinitrotoluene	240	ug/kg	U
	121142	2,4-Dinitrotoluene	240	ug/kg	U
	606202	2,6-Dinitrotoluene	240	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	240	ug/kg	U
	88722	2-Nitrotoluene	240	ug/kg	U
	99081	3-Nitrotoluene	240	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	240	ug/kg	U
	99990	4-Nitrotoluene	240	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	240	ug/kg	U
	2691410	HMX	240	ug/kg	U
	98953	Nitrobenzene	240	ug/kg	U
	55630	Nitroglycerine	240	ug/kg	U
	78115	PETN	490	ug/kg	U
	121824	RDX	490	ug/kg	U
	479458	TETRYL	240	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	91	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**15:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044211	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	250	ug/kg	UJ
	99650	1,3-Dinitrobenzene	250	ug/kg	U
	118967	2,4,6-Trinitrotoluene	250	ug/kg	U
	121142	2,4-Dinitrotoluene	250	ug/kg	U
	606202	2,6-Dinitrotoluene	250	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	250	ug/kg	U
	88722	2-Nitrotoluene	250	ug/kg	U
	99081	3-Nitrotoluene	250	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	250	ug/kg	U
	99990	4-Nitrotoluene	250	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	250	ug/kg	U
	2691410	HMX	250	ug/kg	U
	98953	Nitrobenzene	250	ug/kg	U
	55630	Nitroglycerine	250	ug/kg	U
	78115	PETN	500	ug/kg	U
	121824	RDX	500	ug/kg	U
	479458	TETRYL	250	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	87	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044212	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	180	ug/kg	UJ
	99650	1,3-Dinitrobenzene	180	ug/kg	U
	118967	2,4,6-Trinitrotoluene	180	ug/kg	U
	121142	2,4-Dinitrotoluene	180	ug/kg	U
	606202	2,6-Dinitrotoluene	180	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	180	ug/kg	U
	88722	2-Nitrotoluene	180	ug/kg	U
	99081	3-Nitrotoluene	180	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	180	ug/kg	U
	99990	4-Nitrotoluene	180	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	180	ug/kg	U
	2691410	HMX	180	ug/kg	U
	98953	Nitrobenzene	180	ug/kg	U
	55630	Nitroglycerine	180	ug/kg	U
	78115	PETN	360	ug/kg	U
	121824	RDX	360	ug/kg	U
	479458	TETRYL	180	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	87	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044213	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	180	ug/kg	UJ
	99650	1,3-Dinitrobenzene	180	ug/kg	U
	118967	2,4,6-Trinitrotoluene	180	ug/kg	U
	121142	2,4-Dinitrotoluene	180	ug/kg	U
	606202	2,6-Dinitrotoluene	180	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	180	ug/kg	U
	88722	2-Nitrotoluene	180	ug/kg	U
	99081	3-Nitrotoluene	180	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	180	ug/kg	U
	99990	4-Nitrotoluene	180	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	180	ug/kg	U
	2691410	HMX	180	ug/kg	U
	98953	Nitrobenzene	180	ug/kg	U
	55630	Nitroglycerine	180	ug/kg	U
	78115	PETN	360	ug/kg	U
	121824	RDX	360	ug/kg	U
	479458	TETRYL	180	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044214	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	150	ug/kg	UJ
	99650	1,3-Dinitrobenzene	150	ug/kg	U
	118967	2,4,6-Trinitrotoluene	150	ug/kg	U
	121142	2,4-Dinitrotoluene	150	ug/kg	U
	606202	2,6-Dinitrotoluene	150	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	150	ug/kg	U
	88722	2-Nitrotoluene	150	ug/kg	U
	99081	3-Nitrotoluene	150	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	150	ug/kg	U
	99990	4-Nitrotoluene	150	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	150	ug/kg	U
	2691410	HMX	150	ug/kg	U
	98953	Nitrobenzene	150	ug/kg	U
	55630	Nitroglycerine	150	ug/kg	U
	78115	PETN	300	ug/kg	U
	121824	RDX	300	ug/kg	U
	479458	TETRYL	150	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	120	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044215	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	300	ug/kg	UJ
	99650	1,3-Dinitrobenzene	300	ug/kg	U
	118967	2,4,6-Trinitrotoluene	300	ug/kg	U
	121142	2,4-Dinitrotoluene	300	ug/kg	U
	606202	2,6-Dinitrotoluene	300	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	300	ug/kg	U
	88722	2-Nitrotoluene	300	ug/kg	U
	99081	3-Nitrotoluene	300	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	300	ug/kg	U
	99990	4-Nitrotoluene	300	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	300	ug/kg	U
	2691410	HMX	300	ug/kg	U
	98953	Nitrobenzene	300	ug/kg	U
	55630	Nitroglycerine	300	ug/kg	U
	78115	PETN	610	ug/kg	U
	121824	RDX	610	ug/kg	U
	479458	TETRYL	300	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	84	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044216	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	170	ug/kg	UJ
	99650	1,3-Dinitrobenzene	170	ug/kg	U
	118967	2,4,6-Trinitrotoluene	170	ug/kg	U
	121142	2,4-Dinitrotoluene	170	ug/kg	U
	606202	2,6-Dinitrotoluene	170	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	170	ug/kg	U
	88722	2-Nitrotoluene	170	ug/kg	U
	99081	3-Nitrotoluene	170	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	170	ug/kg	U
	99990	4-Nitrotoluene	170	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	170	ug/kg	U
	2691410	HMX	170	ug/kg	U
	98953	Nitrobenzene	170	ug/kg	U
	55630	Nitroglycerine	170	ug/kg	U
	78115	PETN	340	ug/kg	U
	121824	RDX	340	ug/kg	U
	479458	TETRYL	170	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044217	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	600	ug/kg	UJ
	99650	1,3-Dinitrobenzene	600	ug/kg	U
	118967	2,4,6-Trinitrotoluene	600	ug/kg	U
	121142	2,4-Dinitrotoluene	600	ug/kg	U
	606202	2,6-Dinitrotoluene	600	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	600	ug/kg	U
	88722	2-Nitrotoluene	600	ug/kg	U
	99081	3-Nitrotoluene	600	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	600	ug/kg	U
	99990	4-Nitrotoluene	600	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	600	ug/kg	U
	2691410	HMX	600	ug/kg	U
	98953	Nitrobenzene	600	ug/kg	U
	55630	Nitroglycerine	600	ug/kg	U
	78115	PETN	1200	ug/kg	U
	121824	RDX	1200	ug/kg	U
	479458	TETRYL	600	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	78	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**13:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044218	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	540	ug/kg	UJ
	99650	1,3-Dinitrobenzene	540	ug/kg	U
	118967	2,4,6-Trinitrotoluene	540	ug/kg	U
	121142	2,4-Dinitrotoluene	540	ug/kg	U
	606202	2,6-Dinitrotoluene	540	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	540	ug/kg	U
	88722	2-Nitrotoluene	540	ug/kg	U
	99081	3-Nitrotoluene	540	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	540	ug/kg	U
	99990	4-Nitrotoluene	540	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	540	ug/kg	U
	2691410	HMX	540	ug/kg	U
	98953	Nitrobenzene	540	ug/kg	U
	55630	Nitroglycerine	540	ug/kg	U
	78115	PETN	1100	ug/kg	U
	121824	RDX	1100	ug/kg	U
	479458	TETRYL	540	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	80	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

ORG

Parameter : Explosives — Wet Weight — Container ID : N5
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	610	ug/kg	UJ
	99650	1,3-Dinitrobenzene	610	ug/kg	U
	118967	2,4,6-Trinitrotoluene	610	ug/kg	U
	121142	2,4-Dinitrotoluene	610	ug/kg	U
	606202	2,6-Dinitrotoluene	610	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	610	ug/kg	U
	88722	2-Nitrotoluene	610	ug/kg	U
	99081	3-Nitrotoluene	610	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	610	ug/kg	U
	99990	4-Nitrotoluene	610	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	610	ug/kg	U
	2691410	HMX	610	ug/kg	U
	98953	Nitrobenzene	610	ug/kg	U
	55630	Nitroglycerine	610	ug/kg	U
	78115	PETN	1200	ug/kg	U
	121824	RDX	1200	ug/kg	U
	479458	TETRYL	610	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	81	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Surrogate(s :	528290	1,2-Dinitrobenzene	100	%Rec	
	99354	1,3,5-Trinitrobenzene	82	%Rec	
	99650	1,3-Dinitrobenzene	77	%Rec	
	118967	2,4,6-Trinitrotoluene	79	%Rec	
	121142	2,4-Dinitrotoluene	74	%Rec	
	2691410	HMX	78	%Rec	
	98953	Nitrobenzene	76	%Rec	
	78115	PETN	69	%Rec	
	121824	RDX	71	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Surrogate(s :	606202	2,6-Dinitrotoluene	78	%Rec	
	35572782	2-amino, 4,6-Dinitrotoluene	75	%Rec	
	88722	2-Nitrotoluene	71	%Rec	
	99081	3-Nitrotoluene	81	%Rec	
	1946510	4-amino,2,6-Dinitrotoluene	72	%Rec	
	99990	4-Nitrotoluene	81	%Rec	
	618871	BENZENAMINE, 3,5-DINITRO-	77	%Rec	
	55630	Nitroglycerine	101	%Rec	
	479458	TETRYL	60	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044219	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	170	ug/kg	UJ
	99650	1,3-Dinitrobenzene	170	ug/kg	U
	118967	2,4,6-Trinitrotoluene	170	ug/kg	U
	121142	2,4-Dinitrotoluene	170	ug/kg	U
	606202	2,6-Dinitrotoluene	170	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	170	ug/kg	U
	88722	2-Nitrotoluene	170	ug/kg	U
	99081	3-Nitrotoluene	170	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	170	ug/kg	U
	99990	4-Nitrotoluene	170	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	170	ug/kg	U
	2691410	HMX	170	ug/kg	U
	98953	Nitrobenzene	170	ug/kg	U
	55630	Nitroglycerine	170	ug/kg	U
	78115	PETN	330	ug/kg	U
	121824	RDX	330	ug/kg	U
	479458	TETRYL	170	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**10:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044220	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	160	ug/kg	UJ
	99650	1,3-Dinitrobenzene	160	ug/kg	U
	118967	2,4,6-Trinitrotoluene	160	ug/kg	U
	121142	2,4-Dinitrotoluene	160	ug/kg	U
	606202	2,6-Dinitrotoluene	160	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	160	ug/kg	U
	88722	2-Nitrotoluene	160	ug/kg	U
	99081	3-Nitrotoluene	160	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	160	ug/kg	U
	99990	4-Nitrotoluene	160	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	160	ug/kg	U
	2691410	HMX	160	ug/kg	U
	98953	Nitrobenzene	160	ug/kg	U
	55630	Nitroglycerine	160	ug/kg	U
	78115	PETN	330	ug/kg	U
	121824	RDX	330	ug/kg	U
	479458	TETRYL	160	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	97	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:48:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044221	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	240	ug/kg	UJ
	99650	1,3-Dinitrobenzene	240	ug/kg	U
	118967	2,4,6-Trinitrotoluene	240	ug/kg	U
	121142	2,4-Dinitrotoluene	240	ug/kg	U
	606202	2,6-Dinitrotoluene	240	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	240	ug/kg	U
	88722	2-Nitrotoluene	240	ug/kg	U
	99081	3-Nitrotoluene	240	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	240	ug/kg	U
	99990	4-Nitrotoluene	240	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	240	ug/kg	U
	2691410	HMX	240	ug/kg	U
	98953	Nitrobenzene	240	ug/kg	U
	55630	Nitroglycerine	240	ug/kg	U
	78115	PETN	480	ug/kg	U
	121824	RDX	480	ug/kg	U
	479458	TETRYL	240	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	82	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044222	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SD			

ORG

Parameter : Explosives — Wet Weight — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	150	ug/kg	UJ
	99650	1,3-Dinitrobenzene	150	ug/kg	U
	118967	2,4,6-Trinitrotoluene	150	ug/kg	U
	121142	2,4-Dinitrotoluene	150	ug/kg	U
	606202	2,6-Dinitrotoluene	150	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	150	ug/kg	U
	88722	2-Nitrotoluene	150	ug/kg	U
	99081	3-Nitrotoluene	150	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	150	ug/kg	U
	99990	4-Nitrotoluene	150	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	150	ug/kg	U
	2691410	HMX	150	ug/kg	U
	98953	Nitrobenzene	150	ug/kg	U
	55630	Nitroglycerine	150	ug/kg	U
	78115	PETN	310	ug/kg	U
	121824	RDX	310	ug/kg	U
	479458	TETRYL	150	ug/kg	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044223	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.39	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.39	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.39	ug/L	U
	121142	2,4-Dinitrotoluene	0.39	ug/L	U
	606202	2,6-Dinitrotoluene	0.39	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.39	ug/L	U
	88722	2-Nitrotoluene	0.39	ug/L	U
	99081	3-Nitrotoluene	0.39	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.39	ug/L	U
	99990	4-Nitrotoluene	0.39	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.39	ug/L	U
	2691410	HMX	0.39	ug/L	U
	98953	Nitrobenzene	0.39	ug/L	U
	55630	Nitroglycerine	0.39	ug/L	U
	78115	PETN	0.98	ug/L	U
	121824	RDX	0.98	ug/L	U
	479458	TETRYL	0.39	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	96	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**14:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044225	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.38	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.38	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.38	ug/L	U
	121142	2,4-Dinitrotoluene	0.38	ug/L	U
	606202	2,6-Dinitrotoluene	0.38	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.38	ug/L	U
	88722	2-Nitrotoluene	0.38	ug/L	U
	99081	3-Nitrotoluene	0.38	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.38	ug/L	U
	99990	4-Nitrotoluene	0.38	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.38	ug/L	U
	2691410	HMX	0.38	ug/L	U
	98953	Nitrobenzene	0.38	ug/L	U
	55630	Nitroglycerine	0.38	ug/L	U
	78115	PETN	0.96	ug/L	U
	121824	RDX	0.96	ug/L	U
	479458	TETRYL	0.38	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	95	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:35:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044227	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.38	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.38	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.38	ug/L	U
	121142	2,4-Dinitrotoluene	0.38	ug/L	U
	606202	2,6-Dinitrotoluene	0.38	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.38	ug/L	U
	88722	2-Nitrotoluene	0.38	ug/L	U
	99081	3-Nitrotoluene	0.38	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.38	ug/L	U
	99990	4-Nitrotoluene	0.38	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.38	ug/L	U
	2691410	HMX	0.38	ug/L	U
	98953	Nitrobenzene	0.38	ug/L	U
	55630	Nitroglycerine	0.38	ug/L	U
	78115	PETN	0.94	ug/L	U
	121824	RDX	0.94	ug/L	U
	479458	TETRYL	0.38	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**11:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044229	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.37	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.37	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.37	ug/L	U
	121142	2,4-Dinitrotoluene	0.37	ug/L	U
	606202	2,6-Dinitrotoluene	0.37	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.37	ug/L	U
	88722	2-Nitrotoluene	0.37	ug/L	U
	99081	3-Nitrotoluene	0.37	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.37	ug/L	U
	99990	4-Nitrotoluene	0.37	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.37	ug/L	U
	2691410	HMX	0.37	ug/L	U
	98953	Nitrobenzene	0.37	ug/L	U
	55630	Nitroglycerine	0.37	ug/L	U
	78115	PETN	0.93	ug/L	U
	121824	RDX	0.93	ug/L	U
	479458	TETRYL	0.37	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	97	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:31:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044231	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.39	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.39	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.39	ug/L	U
	121142	2,4-Dinitrotoluene	0.39	ug/L	U
	606202	2,6-Dinitrotoluene	0.39	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.39	ug/L	U
	88722	2-Nitrotoluene	0.39	ug/L	U
	99081	3-Nitrotoluene	0.39	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.39	ug/L	U
	99990	4-Nitrotoluene	0.39	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.39	ug/L	U
	2691410	HMX	0.39	ug/L	U
	98953	Nitrobenzene	0.39	ug/L	U
	55630	Nitroglycerine	0.39	ug/L	U
	78115	PETN	0.98	ug/L	U
	121824	RDX	0.98	ug/L	U
	479458	TETRYL	0.39	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	99	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044233	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.38	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.38	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.38	ug/L	U
	121142	2,4-Dinitrotoluene	0.38	ug/L	U
	606202	2,6-Dinitrotoluene	0.38	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.38	ug/L	U
	88722	2-Nitrotoluene	0.38	ug/L	U
	99081	3-Nitrotoluene	0.38	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.38	ug/L	U
	99990	4-Nitrotoluene	0.38	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.38	ug/L	U
	2691410	HMX	0.38	ug/L	U
	98953	Nitrobenzene	0.38	ug/L	U
	55630	Nitroglycerine	0.38	ug/L	U
	78115	PETN	0.96	ug/L	U
	121824	RDX	0.96	ug/L	U
	479458	TETRYL	0.38	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	102	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**11:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044235	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.38	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.38	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.38	ug/L	U
	121142	2,4-Dinitrotoluene	0.38	ug/L	U
	606202	2,6-Dinitrotoluene	0.38	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.38	ug/L	U
	88722	2-Nitrotoluene	0.38	ug/L	U
	99081	3-Nitrotoluene	0.38	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.38	ug/L	U
	99990	4-Nitrotoluene	0.38	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.38	ug/L	U
	2691410	HMX	0.38	ug/L	U
	98953	Nitrobenzene	0.38	ug/L	U
	55630	Nitroglycerine	0.38	ug/L	U
	78115	PETN	0.94	ug/L	U
	121824	RDX	0.94	ug/L	U
	479458	TETRYL	0.38	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	106	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044237	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.38	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.38	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.38	ug/L	U
	121142	2,4-Dinitrotoluene	0.38	ug/L	U
	606202	2,6-Dinitrotoluene	0.38	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.38	ug/L	U
	88722	2-Nitrotoluene	0.38	ug/L	U
	99081	3-Nitrotoluene	0.38	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.38	ug/L	U
	99990	4-Nitrotoluene	0.38	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.38	ug/L	U
	2691410	HMX	0.38	ug/L	U
	98953	Nitrobenzene	0.38	ug/L	U
	55630	Nitroglycerine	0.38	ug/L	U
	78115	PETN	0.96	ug/L	U
	121824	RDX	0.96	ug/L	U
	479458	TETRYL	0.38	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	116	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**12:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044239	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.40	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.40	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.40	ug/L	U
	121142	2,4-Dinitrotoluene	0.40	ug/L	U
	606202	2,6-Dinitrotoluene	0.40	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.40	ug/L	U
	88722	2-Nitrotoluene	0.40	ug/L	U
	99081	3-Nitrotoluene	0.40	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.40	ug/L	U
	99990	4-Nitrotoluene	0.40	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.40	ug/L	U
	2691410	HMX	0.40	ug/L	U
	98953	Nitrobenzene	0.40	ug/L	U
	55630	Nitroglycerine	0.40	ug/L	U
	78115	PETN	1.0	ug/L	U
	121824	RDX	1.0	ug/L	U
	479458	TETRYL	0.40	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	102	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044239
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

ORG

Parameter : Explosives — Container ID : N2
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Surrogate(s :	528290	1,2-Dinitrobenzene	99	%Rec	
	99354	1,3,5-Trinitrobenzene	98	%Rec	
	99650	1,3-Dinitrobenzene	102	%Rec	
	118967	2,4,6-Trinitrotoluene	101	%Rec	
	121142	2,4-Dinitrotoluene	102	%Rec	
	2691410	HMX	89	%Rec	
	98953	Nitrobenzene	102	%Rec	
	78115	PETN	102	%Rec	
	121824	RDX	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044239
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

ORG

Parameter : Explosives — Container ID : N4
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Surrogate(s :	528290	1,2-Dinitrobenzene	109	%Rec	
	99354	1,3,5-Trinitrobenzene	103	%Rec	
	99650	1,3-Dinitrobenzene	108	%Rec	
	118967	2,4,6-Trinitrotoluene	106	%Rec	
	121142	2,4-Dinitrotoluene	108	%Rec	
	2691410	HMX	88	%Rec	
	98953	Nitrobenzene	107	%Rec	
	78115	PETN	82	%Rec	
	121824	RDX	95	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044239
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike #3
Station Description:			

ORG

Parameter : Explosives — Container ID : N3
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Surrogate(s :	606202	2,6-Dinitrotoluene	101	%Rec	
	35572782	2-amino, 4,6-Dinitrotoluene	99	%Rec	
	88722	2-Nitrotoluene	100	%Rec	
	99081	3-Nitrotoluene	101	%Rec	
	1946510	4-amino,2,6-Dinitrotoluene	99	%Rec	
	99990	4-Nitrotoluene	103	%Rec	
	618871	BENZENAMINE, 3,5-DINITRO-	106	%Rec	
	55630	Nitroglycerine	98	%Rec	
	479458	TETRYL	82	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044239
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike #4
Station Description:			

ORG

Parameter : Explosives — Container ID : N5
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Surrogate(s :	606202	2,6-Dinitrotoluene	99	%Rec	
	35572782	2-amino, 4,6-Dinitrotoluene	99	%Rec	
	88722	2-Nitrotoluene	97	%Rec	
	99081	3-Nitrotoluene	97	%Rec	
	1946510	4-amino,2,6-Dinitrotoluene	99	%Rec	
	99990	4-Nitrotoluene	98	%Rec	
	618871	BENZENAMINE, 3,5-DINITRO-	103	%Rec	
	55630	Nitroglycerine	94	%Rec	
	479458	TETRYL	79	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044241	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.37	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.37	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.37	ug/L	U
	121142	2,4-Dinitrotoluene	0.37	ug/L	U
	606202	2,6-Dinitrotoluene	0.37	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.37	ug/L	U
	88722	2-Nitrotoluene	0.37	ug/L	U
	99081	3-Nitrotoluene	0.37	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.37	ug/L	U
	99990	4-Nitrotoluene	0.37	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.37	ug/L	U
	2691410	HMX	0.37	ug/L	U
	98953	Nitrobenzene	0.37	ug/L	U
	55630	Nitroglycerine	0.37	ug/L	U
	78115	PETN	0.93	ug/L	U
	121824	RDX	0.93	ug/L	U
	479458	TETRYL	0.37	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	104	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**9:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044243	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.38	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.38	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.38	ug/L	U
	121142	2,4-Dinitrotoluene	0.38	ug/L	U
	606202	2,6-Dinitrotoluene	0.38	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.38	ug/L	U
	88722	2-Nitrotoluene	0.38	ug/L	U
	99081	3-Nitrotoluene	0.38	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.38	ug/L	U
	99990	4-Nitrotoluene	0.38	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.38	ug/L	U
	2691410	HMX	0.38	ug/L	U
	98953	Nitrobenzene	0.38	ug/L	U
	55630	Nitroglycerine	0.38	ug/L	U
	78115	PETN	0.96	ug/L	U
	121824	RDX	0.96	ug/L	U
	479458	TETRYL	0.38	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	109	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044245	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.38	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.38	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.38	ug/L	U
	121142	2,4-Dinitrotoluene	0.38	ug/L	U
	606202	2,6-Dinitrotoluene	0.38	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.38	ug/L	U
	88722	2-Nitrotoluene	0.38	ug/L	U
	99081	3-Nitrotoluene	0.38	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.38	ug/L	U
	99990	4-Nitrotoluene	0.38	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.38	ug/L	U
	2691410	HMX	0.38	ug/L	U
	98953	Nitrobenzene	0.38	ug/L	U
	55630	Nitroglycerine	0.38	ug/L	U
	78115	PETN	0.96	ug/L	U
	121824	RDX	0.96	ug/L	U
	479458	TETRYL	0.38	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	99	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044247	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SW			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.37	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.37	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.37	ug/L	U
	121142	2,4-Dinitrotoluene	0.37	ug/L	U
	606202	2,6-Dinitrotoluene	0.37	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.37	ug/L	U
	88722	2-Nitrotoluene	0.37	ug/L	U
	99081	3-Nitrotoluene	0.37	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.37	ug/L	U
	99990	4-Nitrotoluene	0.37	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.37	ug/L	U
	2691410	HMX	0.37	ug/L	U
	98953	Nitrobenzene	0.37	ug/L	U
	55630	Nitroglycerine	0.37	ug/L	U
	78115	PETN	0.93	ug/L	U
	121824	RDX	0.93	ug/L	U
	479458	TETRYL	0.37	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	106	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/29/10	**9:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044249	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-19-RB			

ORG

Parameter : Explosives — Container ID : N1
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.39	ug/L	UJ
	99650	1,3-Dinitrobenzene	0.39	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.39	ug/L	U
	121142	2,4-Dinitrotoluene	0.39	ug/L	U
	606202	2,6-Dinitrotoluene	0.39	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.39	ug/L	U
	88722	2-Nitrotoluene	0.39	ug/L	U
	99081	3-Nitrotoluene	0.39	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.39	ug/L	U
	99990	4-Nitrotoluene	0.39	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.39	ug/L	U
	2691410	HMX	0.39	ug/L	U
	98953	Nitrobenzene	0.39	ug/L	U
	55630	Nitroglycerine	0.39	ug/L	U
	78115	PETN	0.98	ug/L	U
	121824	RDX	0.98	ug/L	U
	479458	TETRYL	0.39	ug/L	UJ
Surrogate(s :	528290	1,2-Dinitrobenzene	104	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0033C
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

ORG

Parameter : Explosives — Container ID :
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Surrogate(s :	528290	1,2-Dinitrobenzene	102	%Rec	
	99354	1,3,5-Trinitrobenzene	91	%Rec	
	99650	1,3-Dinitrobenzene	97	%Rec	
	118967	2,4,6-Trinitrotoluene	99	%Rec	
	121142	2,4-Dinitrotoluene	101	%Rec	
	2691410	HMX	75	%Rec	
	98953	Nitrobenzene	98	%Rec	
	78115	PETN	100	%Rec	
	121824	RDX	74	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0033D
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

ORG

Parameter : Explosives — Container ID :
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Surrogate(s :	606202	2,6-Dinitrotoluene	92	%Rec	
	35572782	2-amino, 4,6-Dinitrotoluene	97	%Rec	
	88722	2-Nitrotoluene	96	%Rec	
	99081	3-Nitrotoluene	94	%Rec	
	1946510	4-amino,2,6-Dinitrotoluene	97	%Rec	
	99990	4-Nitrotoluene	92	%Rec	
	618871	BENZENAMINE, 3,5-DINITRO-	96	%Rec	
	55630	Nitroglycerine	90	%Rec	
	479458	TETRYL	78	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0033E
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

ORG

Parameter : Explosives — Container ID :
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Surrogate(s :	528290	1,2-Dinitrobenzene	104	%Rec	
	99354	1,3,5-Trinitrobenzene	97	%Rec	
	99650	1,3-Dinitrobenzene	103	%Rec	
	118967	2,4,6-Trinitrotoluene	104	%Rec	
	121142	2,4-Dinitrotoluene	106	%Rec	
	2691410	HMX	83	%Rec	
	98953	Nitrobenzene	103	%Rec	
	78115	PETN	110	%Rec	
	121824	RDX	84	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0033F
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

ORG

Parameter : Explosives — Container ID :
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Surrogate(s :	606202	2,6-Dinitrotoluene	103	%Rec	
	35572782	2-amino, 4,6-Dinitrotoluene	103	%Rec	
	88722	2-Nitrotoluene	99	%Rec	
	99081	3-Nitrotoluene	97	%Rec	
	1946510	4-amino,2,6-Dinitrotoluene	115	%Rec	
	99990	4-Nitrotoluene	95	%Rec	
	618871	BENZENAMINE, 3,5-DINITRO-	106	%Rec	
	55630	Nitroglycerine	98	%Rec	
	479458	TETRYL	73	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0040C
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

ORG

Parameter : Explosives — Wet Weight — Container ID :
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Surrogate(s :	528290	1,2-Dinitrobenzene	97	%Rec	
	99354	1,3,5-Trinitrobenzene	95	%Rec	
	99650	1,3-Dinitrobenzene	94	%Rec	
	118967	2,4,6-Trinitrotoluene	94	%Rec	
	121142	2,4-Dinitrotoluene	95	%Rec	
	2691410	HMX	96	%Rec	
	98953	Nitrobenzene	94	%Rec	
	78115	PETN	94	%Rec	
	121824	RDX	91	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0040D
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

ORG

Parameter : Explosives — Container ID :
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Surrogate(s :	121142	2,4-Dinitrotoluene	95	%Rec	
	606202	2,6-Dinitrotoluene	96	%Rec	
	35572782	2-amino, 4,6-Dinitrotoluene	95	%Rec	
	88722	2-Nitrotoluene	93	%Rec	
	99081	3-Nitrotoluene	94	%Rec	
	1946510	4-amino,2,6-Dinitrotoluene	100	%Rec	
	99990	4-Nitrotoluene	96	%Rec	
	618871	BENZENAMINE, 3,5-DINITRO-	77	%Rec	
	55630	Nitroglycerine	92	%Rec	
	479458	TETRYL	98	%Rec	

LCS0040D LCSD .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	OBS0040A3
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

ORG

Parameter : Explosives — Wet Weight — Container ID :
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	130	ug/kg	U
	99650	1,3-Dinitrobenzene	130	ug/kg	U
	118967	2,4,6-Trinitrotoluene	130	ug/kg	U
	121142	2,4-Dinitrotoluene	130	ug/kg	U
	606202	2,6-Dinitrotoluene	130	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	130	ug/kg	U
	88722	2-Nitrotoluene	130	ug/kg	U
	99081	3-Nitrotoluene	130	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	130	ug/kg	U
	99990	4-Nitrotoluene	130	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	130	ug/kg	U
	2691410	HMX	130	ug/kg	U
	98953	Nitrobenzene	130	ug/kg	U
	55630	Nitroglycerine	130	ug/kg	U
	78115	PETN	270	ug/kg	U
	121824	RDX	270	ug/kg	U
	479458	TETRYL	130	ug/kg	U
Surrogate(s :	528290	1,2-Dinitrobenzene	99	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	OBS0040A4
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

ORG

Parameter : Explosives — Wet Weight — Container ID :
Method : 8330 Explosives — Analysis Date : 3/9/2010
Prep Method : 8330 Explosives — Prep Date : 2/5/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	130	ug/kg	U
	99650	1,3-Dinitrobenzene	130	ug/kg	U
	118967	2,4,6-Trinitrotoluene	130	ug/kg	U
	121142	2,4-Dinitrotoluene	130	ug/kg	U
	606202	2,6-Dinitrotoluene	130	ug/kg	U
	35572782	2-amino, 4,6-Dinitrotoluene	130	ug/kg	U
	88722	2-Nitrotoluene	130	ug/kg	U
	99081	3-Nitrotoluene	130	ug/kg	U
	1946510	4-amino,2,6-Dinitrotoluene	130	ug/kg	U
	99990	4-Nitrotoluene	130	ug/kg	U
	618871	BENZENAMINE, 3,5-DINITRO-	130	ug/kg	U
	2691410	HMX	130	ug/kg	U
	98953	Nitrobenzene	130	ug/kg	U
	55630	Nitroglycerine	130	ug/kg	U
	78115	PETN	270	ug/kg	U
	121824	RDX	270	ug/kg	U
	479458	TETRYL	130	ug/kg	U
Surrogate(s :	528290	1,2-Dinitrobenzene	100	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	OBW0033A3
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

ORG

Parameter : Explosives — Container ID :
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.40	ug/L	U
	99650	1,3-Dinitrobenzene	0.40	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.40	ug/L	U
	121142	2,4-Dinitrotoluene	0.40	ug/L	U
	606202	2,6-Dinitrotoluene	0.40	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.40	ug/L	U
	88722	2-Nitrotoluene	0.40	ug/L	U
	99081	3-Nitrotoluene	0.40	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.40	ug/L	U
	99990	4-Nitrotoluene	0.40	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.40	ug/L	U
	2691410	HMX	0.40	ug/L	U
	98953	Nitrobenzene	0.40	ug/L	U
	55630	Nitroglycerine	0.40	ug/L	U
	78115	PETN	1.0	ug/L	U
	121824	RDX	1.0	ug/L	U
	479458	TETRYL	0.40	ug/L	U
Surrogate(s :	528290	1,2-Dinitrobenzene	103	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	OBW0033A4
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

ORG

Parameter : Explosives — Container ID :
Method : 8330 Explosives — Analysis Date : 3/8/2010
Prep Method : 8330 Explosives — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	99354	1,3,5-Trinitrobenzene	0.40	ug/L	U
	99650	1,3-Dinitrobenzene	0.40	ug/L	U
	118967	2,4,6-Trinitrotoluene	0.40	ug/L	U
	121142	2,4-Dinitrotoluene	0.40	ug/L	U
	606202	2,6-Dinitrotoluene	0.40	ug/L	U
	35572782	2-amino, 4,6-Dinitrotoluene	0.40	ug/L	U
	88722	2-Nitrotoluene	0.40	ug/L	U
	99081	3-Nitrotoluene	0.40	ug/L	U
	1946510	4-amino,2,6-Dinitrotoluene	0.40	ug/L	U
	99990	4-Nitrotoluene	0.40	ug/L	U
	618871	BENZENAMINE, 3,5-DINITRO-	0.40	ug/L	U
	2691410	HMX	0.40	ug/L	U
	98953	Nitrobenzene	0.40	ug/L	U
	55630	Nitroglycerine	0.40	ug/L	U
	78115	PETN	1.0	ug/L	U
	121824	RDX	1.0	ug/L	U
	479458	TETRYL	0.40	ug/L	U
Surrogate(s :	528290	1,2-Dinitrobenzene	105	%Rec	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Polybrominated Diphenyl Ether Analysis Results from the USEPA Region 10 Laboratory

PROJECT NAME: Warmhouse Beach Dump, Neah Bay, WA

PROJECT CODE: TEC-971A

FROM: Gerald Dodo, Chemistry Supervisor
Office of Environmental Assessment, USEPA Region 10 Laboratory

TO: Kathy Parker, OSC
Office of Environmental Cleanup, USEPA Region 10

CC: Amy Dahl, TechLaw, Inc.

I have authorized release of this data package. Attached you will find the polybrominated diphenyl ether (PBDE) results for the Warmhouse Beach Dump, Neah Bay, WA project for the soil samples collected 01/26/10 to 01/29/10. For further information regarding the attached data, contact Steve Reimer at 360-871-8718.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM
FOR ORGANIC CHEMICAL ANALYSES

DATE: April 1, 2010

TO: Kathy Parker, Project Manager
Office of Environmental Cleanup, Emergency Response Unit, US EPA Region 10

From: Steven Reimer, Chemist
Office of Environmental Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review of Warmhouse Beach Dump Project
Results for Poly-Brominated Diphenyl Ethers

Project Code: TEC-971A
Account Code: 10T10P302DD2C10HVLA00

CC: Amy Dahl, TechLaw, Inc.

The following is a quality assurance review of selected PBDE analysis of x soil tissue samples from the Warmhouse Beach Project. The analyses were performed by EPA chemists at the US EPA Region 10 Laboratory in Port Orchard, WA, following US EPA Laboratory guidelines.

This review covers the following samples:

10044204	10044205	10044206	10044207	10044208
10044209	10044210	10044211	10044212	10044213
10044214	10044215	10044216	10044217	10044218
10044219	10044220	10044221	10044222	

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). An SOP for this method has not been written Criteria for evaluation are based on the methods used.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "Laboratory/QAPP Criteria Not Met".

For those tests for which the USEPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met. The Region 10 Laboratory's Quality System has been accredited to the standards of the NELAC.

2. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would negatively affect data quality for this project.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. For this reason, holding time limits are applied for samples and extracts. However, as stated in EPA Method 1614, 08/2007, there are no demonstrated maximum holding times associated with PBDEs. This method does describe that samples may be stored up to one year frozen. The samples were thawed and extracted within one month of sampling. No qualifiers were applied based on the holding times. Extracts were analyzed within 40 days of preparation.

4. Sample Preparation

Samples were prepared by air drying followed by solvent extraction using a modified EPA SW846 Method 3570 procedure. No qualification of the data was required based on sample preparation. Extracts were analyzed using EPA SW846 Method 8270D in the selected ion mode (SIM).

5. Initial Calibration and Calibration Verification

An initial calibration was performed on March 1st. The calibration functions generated for the initial calibration met SOP criteria. A second source check resulted with 70-130% of the expected values.

Calibration verification checks met the frequency and recovery criteria for each day of analyses except for the following: In one instance BDE-209 failed criterion. Associated samples were reanalyzed in subsequent sequences.

6. Laboratory Control Samples

Data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and the laboratory performance. LCS samples were prepared and analyzed. Recoveries were within 50-150% and judged acceptable.

7. Blank Analysis

No PBDEs were detected in the method blank.

8. Surrogate Spikes

The criterion applied for surrogate recoveries was 50-150%. The recoveries were acceptable.

9. Internal Standards

All internal standards' responses were within -50 to +100% of the calibration standards with consistent retention times.

10. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed using samples 10044207 and 10044218 (S1/S2). The recovery criteria applied were 50-150% with RPDs <30. Most recoveries were not measurable due to the spike level being too low relative to the native concentrations. All measurable recoveries met the criteria.

11. Reference Sample - Laboratory Criteria Not Met

A sediment reference sample, NIST-1944, prepared and analyzed with the project samples. BDE#209 recovery was below the acceptance range described for this sample. Detected sample results for this compound was qualified "J" as estimated. All other PBDEs were within the acceptance ranges.

12. Laboratory Duplicate

Sample 10044216 was analyzed in duplicate. No target analytes were detected above the reporting limit for either sample or its duplicate.

13. Compound Quantitation

All results for analytes that are not detected are assigned the value of the reporting limit and the 'U' qualifier is attached. The results for analytes which are detected below the reporting limit are reported with a 'J' qualifier attached.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

14. Identification

The retention times for all detected target compounds were within acceptable limits of the initial or continuing calibration standards. Criteria were met for mass spectral ion matching and ion abundance matching or were judged acceptable.

15. Data Qualifiers

Below are the definitions for the codes used when qualifying data from these analyses. When more than one quality issue was involved, the most restrictive qualifier has been attached to the data.

U - The analyte was not detected at or above the reported value.

J - The identification of the analyte is acceptable; however the reported value is an estimate.

UJ - The analyte was not detected at or above the reported value. The reported value is an estimate.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Steven Reimer at the Region 10 Laboratory, phone number (360)871-8718.

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044204	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-14-SS			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.0	ug/Kg	U
	5436431	**BDE# 47**	**3.5**	**ug/Kg**	
	60348609	**BDE# 99**	**6.4**	**ug/Kg**	
	189084648	**BDE#100**	**1.4**	**ug/Kg**	
	68631492	**BDE#153**	**0.95**	**ug/Kg**	**J**
	207122154	**BDE#154**	**0.85**	**ug/Kg**	**J**
	207122165	BDE#183	1.0	ug/Kg	U
	1163195	**BDE#209**	**6.4**	**ug/Kg**	**J**
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	86	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044205	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-15-SS			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	**41318756**	**BDE# 28**	**0.36**	**ug/Kg**	**J**
	5436431	**BDE# 47**	**20**	**ug/Kg**	
	60348609	**BDE# 99**	**37**	**ug/Kg**	
	189084648	**BDE#100**	**7.8**	**ug/Kg**	
	68631492	**BDE#153**	**5.1**	**ug/Kg**	
	207122154	**BDE#154**	**4.5**	**ug/Kg**	
	207122165	**BDE#183**	**2.3**	**ug/Kg**	
	1163195	**BDE#209**	**12**	**ug/Kg**	**J**
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	90	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044206	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-16-SS			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5

Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010

Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	**41318756**	**BDE# 28**	**0.27**	**ug/Kg**	**J**
	5436431	**BDE# 47**	**14**	**ug/Kg**	
	60348609	**BDE# 99**	**37**	**ug/Kg**	
	189084648	**BDE#100**	**7.2**	**ug/Kg**	
	68631492	**BDE#153**	**4.7**	**ug/Kg**	
	207122154	**BDE#154**	**4.0**	**ug/Kg**	
	207122165	**BDE#183**	**0.60**	**ug/Kg**	**J**
	1163195	**BDE#209**	**18**	**ug/Kg**	**J**
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	88	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044207	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-17-SS			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5

Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010

Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	**41318756**	**BDE# 28**	**0.64**	**ug/Kg**	**J**
	5436431	**BDE# 47**	**29**	**ug/Kg**	
	60348609	**BDE# 99**	**58**	**ug/Kg**	
	189084648	**BDE#100**	**11**	**ug/Kg**	
	68631492	**BDE#153**	**6.8**	**ug/Kg**	
	207122154	**BDE#154**	**5.6**	**ug/Kg**	
	207122165	**BDE#183**	**1.1**	**ug/Kg**	
	1163195	**BDE#209**	**17**	**ug/Kg**	**J**
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	83	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044207
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/3/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	86	%Rec	
	41318756	BDE# 28	75	%Rec	
	5436431	BDE# 47	76	%Rec	
	60348609	BDE# 99	62	%Rec	
	189084648	BDE#100	85	%Rec	
	68631492	BDE#153	91	%Rec	
	207122154	BDE#154	93	%Rec	
	207122165	BDE#183	100	%Rec	
	1163195	BDE#209	130	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044207
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5

Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/3/2010

Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	84	%Rec	
	41318756	BDE# 28	70	%Rec	
	5436431	BDE# 47	69	%Rec	
	60348609	BDE# 99	160	%Rec	
	189084648	BDE#100	100	%Rec	
	68631492	BDE#153	110	%Rec	
	207122154	BDE#154	110	%Rec	
	207122165	BDE#183	100	%Rec	
	1163195	BDE#209	180	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044208	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-18-SS			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	**41318756**	**BDE# 28**	**0.73**	**ug/Kg**	**J**
	5436431	**BDE# 47**	**35**	**ug/Kg**	
	60348609	**BDE# 99**	**66**	**ug/Kg**	
	189084648	**BDE#100**	**13**	**ug/Kg**	
	68631492	**BDE#153**	**7.4**	**ug/Kg**	
	207122154	**BDE#154**	**6.0**	**ug/Kg**	
	207122165	**BDE#183**	**1.1**	**ug/Kg**	
	1163195	**BDE#209**	**24**	**ug/Kg**	**J**
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	84	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044209	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.1	ug/Kg	U
	5436431	BDE# 47	1.1	ug/Kg	U
	60348609	BDE# 99	1.1	ug/Kg	U
	189084648	BDE#100	1.1	ug/Kg	U
	68631492	BDE#153	1.1	ug/Kg	U
	207122154	BDE#154	1.1	ug/Kg	U
	207122165	BDE#183	1.1	ug/Kg	U
	1163195	BDE#209	11	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	88	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044210	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SS			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.4	ug/Kg	U
	5436431	BDE# 47	1.4	ug/Kg	U
	60348609	BDE# 99	1.4	ug/Kg	U
	189084648	BDE#100	1.4	ug/Kg	U
	68631492	BDE#153	1.4	ug/Kg	U
	207122154	BDE#154	1.4	ug/Kg	U
	207122165	BDE#183	1.4	ug/Kg	U
	1163195	BDE#209	14	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	87	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**15:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044211	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.2	ug/Kg	U
	5436431	BDE# 47	1.2	ug/Kg	U
	60348609	BDE# 99	1.2	ug/Kg	U
	189084648	BDE#100	1.2	ug/Kg	U
	68631492	BDE#153	1.2	ug/Kg	U
	207122154	BDE#154	1.2	ug/Kg	U
	207122165	BDE#183	1.2	ug/Kg	U
	1163195	BDE#209	12	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	86	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044212	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.2	ug/Kg	U
	5436431	**BDE# 47**	**0.59**	**ug/Kg**	**J**
	60348609	**BDE# 99**	**0.48**	**ug/Kg**	**J**
	189084648	BDE#100	1.2	ug/Kg	U
	68631492	BDE#153	1.2	ug/Kg	U
	207122154	BDE#154	1.2	ug/Kg	U
	207122165	BDE#183	1.2	ug/Kg	U
	1163195	BDE#209	12	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044213	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.1	ug/Kg	U
	5436431	**BDE# 47**	**0.74**	**ug/Kg**	**J**
	60348609	**BDE# 99**	**0.71**	**ug/Kg**	**J**
	189084648	BDE#100	1.1	ug/Kg	U
	68631492	BDE#153	1.1	ug/Kg	U
	207122154	BDE#154	1.1	ug/Kg	U
	207122165	BDE#183	1.1	ug/Kg	U
	1163195	BDE#209	11	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044214	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5

Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010

Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.1	ug/Kg	U
	5436431	**BDE# 47**	**0.59**	**ug/Kg**	**J**
	60348609	**BDE# 99**	**0.68**	**ug/Kg**	**J**
	189084648	BDE#100	1.1	ug/Kg	U
	68631492	BDE#153	1.1	ug/Kg	U
	207122154	BDE#154	1.1	ug/Kg	U
	207122165	BDE#183	1.1	ug/Kg	U
	1163195	BDE#209	11	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	88	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044215	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.3	ug/Kg	U
	5436431	**BDE# 47**	**2.9**	**ug/Kg**	
	60348609	**BDE# 99**	**2.1**	**ug/Kg**	
	189084648	**BDE#100**	**0.46**	**ug/Kg**	**J**
	68631492	BDE#153	1.3	ug/Kg	U
	207122154	BDE#154	1.3	ug/Kg	U
	207122165	BDE#183	1.3	ug/Kg	U
	1163195	BDE#209	13	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044216	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.00	ug/Kg	U
	5436431	**BDE# 47**	**0.90**	**ug/Kg**	**J**
	60348609	**BDE# 99**	**0.78**	**ug/Kg**	**J**
	189084648	**BDE#100**	**0.24**	**ug/Kg**	**J**
	68631492	BDE#153	1.0	ug/Kg	U
	207122154	BDE#154	1.0	ug/Kg	U
	207122165	BDE#183	1.0	ug/Kg	U
	1163195	BDE#209	10	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	88	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044216
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/3/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	0.95	ug/Kg	U
	5436431	**BDE# 47**	**0.77**	**ug/Kg**	**J**
	60348609	**BDE# 99**	**0.83**	**ug/Kg**	**J**
	189084648	BDE#100	0.95	ug/Kg	U
	68631492	BDE#153	0.95	ug/Kg	U
	207122154	BDE#154	0.95	ug/Kg	U
	207122165	BDE#183	0.95	ug/Kg	U
	1163195	BDE#209	10	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	84	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044217	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	**41318756**	**BDE# 28**	**1.1**	**ug/Kg**	**J**
	5436431	**BDE# 47**	**48**	**ug/Kg**	
	60348609	**BDE# 99**	**160**	**ug/Kg**	
	189084648	**BDE#100**	**33**	**ug/Kg**	
	68631492	**BDE#153**	**18**	**ug/Kg**	
	207122154	**BDE#154**	**16**	**ug/Kg**	
	207122165	**BDE#183**	**2.6**	**ug/Kg**	**J**
	1163195	**BDE#209**	**18**	**ug/Kg**	**J**
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	75	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**13:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044218	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	**41318756**	**BDE# 28**	**1.0**	**ug/Kg**	**J**
	5436431	**BDE# 47**	**36**	**ug/Kg**	
	60348609	**BDE# 99**	**100**	**ug/Kg**	
	189084648	**BDE#100**	**22**	**ug/Kg**	
	68631492	**BDE#153**	**12**	**ug/Kg**	
	207122154	**BDE#154**	**11**	**ug/Kg**	
	207122165	**BDE#183**	**1.7**	**ug/Kg**	**J**
	1163195	**BDE#209**	**15**	**ug/Kg**	**J**
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	86	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5

Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/3/2010

Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	84	%Rec	
	41318756	BDE# 28	62	%Rec	
	5436431	BDE# 47	63	%Rec	
	60348609	BDE# 99	66	%Rec	
	189084648	BDE#100	71	%Rec	
	68631492	BDE#153	77	%Rec	
	207122154	BDE#154	77	%Rec	
	207122165	BDE#183	87	%Rec	
	1163195	BDE#209	81	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/3/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	90	%Rec
	41318756	BDE# 28	76	%Rec
	5436431	BDE# 47	79	%Rec
	60348609	BDE# 99	89	%Rec
	189084648	BDE#100	91	%Rec
	68631492	BDE#153	94	%Rec
	207122154	BDE#154	98	%Rec
	207122165	BDE#183	100	%Rec
	1163195	BDE#209	96	%Rec

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044219	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.1	ug/Kg	U
	5436431	**BDE# 47**	**0.19**	**ug/Kg**	**J**
	60348609	**BDE# 99**	**0.38**	**ug/Kg**	**J**
	189084648	BDE#100	1.1	ug/Kg	U
	68631492	BDE#153	1.1	ug/Kg	U
	207122154	BDE#154	1.1	ug/Kg	U
	207122165	BDE#183	1.1	ug/Kg	U
	1163195	BDE#209	11	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	92	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**10:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044220	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.1	ug/Kg	U
	5436431	BDE# 47	1.1	ug/Kg	U
	60348609	BDE# 99	1.1	ug/Kg	U
	189084648	BDE#100	1.1	ug/Kg	U
	68631492	BDE#153	1.1	ug/Kg	U
	207122154	BDE#154	1.1	ug/Kg	U
	207122165	BDE#183	1.1	ug/Kg	U
	1163195	BDE#209	11	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	88	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:48:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044221	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.3	ug/Kg	U
	5436431	**BDE# 47**	**1.4**	**ug/Kg**	
	60348609	**BDE# 99**	**2.3**	**ug/Kg**	
	189084648	**BDE#100**	**0.67**	**ug/Kg**	**J**
	68631492	BDE#153	1.3	ug/Kg	U
	207122154	BDE#154	1.3	ug/Kg	U
	207122165	BDE#183	1.3	ug/Kg	U
	1163195	BDE#209	13	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044222	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SD			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N5
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/2/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.2	ug/Kg	U
	5436431	**BDE# 47**	**0.31**	**ug/Kg**	**J**
	60348609	**BDE# 99**	**0.31**	**ug/Kg**	**J**
	189084648	BDE#100	1.2	ug/Kg	U
	68631492	BDE#153	1.2	ug/Kg	U
	207122154	BDE#154	1.2	ug/Kg	U
	207122165	BDE#183	1.2	ug/Kg	U
	1163195	BDE#209	12	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	85	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	OBS0049A1
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N1
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

			Result	Units	Qlfr
Analytes(s):	41318756	BDE# 28	1.0	ug/Kg	U
	5436431	BDE# 47	1.0	ug/Kg	U
	60348609	BDE# 99	1.0	ug/Kg	U
	189084648	BDE#100	1.0	ug/Kg	U
	68631492	BDE#153	1.0	ug/Kg	U
	207122154	BDE#154	1.0	ug/Kg	U
	207122165	BDE#183	1.0	ug/Kg	U
	1163195	BDE#209	10	ug/Kg	U
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	OBS0049F1
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

			Result	Units	Qlfr
ORG					
Parameter	: Polybrominated Diphenyl Ether				Container ID : N1
Method	: 8270D	Semivolatiles by GC/MS			Analysis Date : 3/1/2010
Prep Method	: 3570	SW-846 Method 3570 Micro-extraction			Prep Date :
Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	90	%Rec	
	41318756	BDE# 28	84	%Rec	
	5436431	BDE# 47	84	%Rec	
	60348609	BDE# 99	86	%Rec	
	189084648	BDE#100	87	%Rec	
	68631492	BDE#153	85	%Rec	
	207122154	BDE#154	89	%Rec	
	207122165	BDE#183	91	%Rec	
	1163195	BDE#209	75	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	OBS0049F2
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Polybrominated Diphenyl Ether — Container ID : N1
Method : 8270D Semivolatiles by GC/MS — Analysis Date : 3/1/2010
Prep Method : 3570 SW-846 Method 3570 Micro-extraction — Prep Date :

Surrogate(s :	*201161	5,5'-Difluoro-PBDE-47	90	%Rec
	41318756	BDE# 28	81	%Rec
	5436431	BDE# 47	86	%Rec
	60348609	BDE# 99	87	%Rec
	189084648	BDE#100	86	%Rec
	68631492	BDE#153	83	%Rec
	207122154	BDE#154	89	%Rec
	207122165	BDE#183	94	%Rec
	1163195	BDE#209	84	%Rec

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Total Petroleum Hydrocarbon - Diesel Range Extended Analysis Results from the USEPA Region 10 Laboratory

PROJECT NAME: Warmhouse Beach Dump, Neah Bay, WA

PROJECT CODE: TEC-971A

FROM: Gerald Dodo, Chemistry Supervisor
Office of Environmental Assessment, USEPA Region 10 Laboratory

TO: Kathy Parker, OSC
Office of Environmental Cleanup, USEPA Region 10

CC: Amy Dahl, TechLaw, Inc.

I have authorized release of this data package. Attached you will find the Total Petroleum Hydrocarbon-Diesel Range Extended (TPH-Dx) results for the Warmhouse Beach Dump, Neah Bay, WA project for the soil and water samples collected 01/26/10 to 01/29/10. For further information regarding the attached data, contact Chris Pace at 360-871-8703.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR ORGANIC CHEMICAL ANALYSES

Date: March 4, 2010

To: Kathy Parker, OSC
Office of Environmental Cleanup, USEPA Region 10

From: Chris Pace, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review for the Total Petroleum Hydrocarbon - Diesel Range Extended Analysis of Samples from the Warmhouse Beach Dump, Neah Bay, WA Project

Project Code: TEC-971A
Account Code: 10T10P302DD2C10HVLA00

CC: Amy Dahl, TechLaw, Inc.

The following is a quality assurance review of the data for total petroleum hydrocarbon - diesel range extended (TPH-Dx) analysis samples from the above referenced site. The preparation and analyses were performed by the EPA Region 10 Laboratory ESAT contractor using modified EPA SW846 methods 3550, 3541 and Washington State Department of Ecology Method NWTPH-Dx.

This review was conducted for the following samples:

Soil

10044204	10044205	10044206	10044207	10044208	10044209
10044210	10044211	10044212	10044213	10044214	10044215
10044216	10044217	10044218	10044219	10044220	10044221
10044222					

Water

10044223	10044225	10044227	10044229	10044231	10044233
10044235	10044237	10044239	10044241	10044243	10044245
10044247	10044249				

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

All measures of quality control met Laboratory/QAPP criteria.

For those tests for which the EPA Region 10 Laboratory has been accredited by the National Environmental Laboratory Accreditation Conference (NELAC), all requirements of the current NELAC Standard have been met.

2. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied for the extraction of soil samples is 14 days from the time of collection. The holding time maximum criteria applied for the extraction of acidified water samples is 14 days from the time of collection. Extracts have a holding time maximum of 40 days from the time of preparation. All samples were extracted and analyzed within these criteria.

4. Sample Preparation

Samples were prepared according to the method.

5. Initial Calibration/Continuing Calibration Verification (CCV)

Initial calibration was performed on 1/27/10 for #2 diesel and motor oil. Percent relative standard deviations (RSDs) of the calibration factors met the criteria of ≤20% or the correlation coefficients met the criteria of ≥0.99.

The CCV for effluent samples met the criteria for frequency of analysis and relative retention time (RRT) windows. The percent accuracies met the criteria of 85-115%.

6. LCS/LCSD

Data for laboratory control sample/laboratory control sample duplicates (LCS/LCSD) are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the criteria of 50-150% with a relative percent difference (RPD) of ≤50.

7. Blank Analysis

Method blanks were prepared and analyzed with each sample extraction batch to evaluate the potential for laboratory contamination and effects on the sample results. Target analytes were not detected in the blanks.

8. Surrogate Spikes

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. The surrogate recoveries met the criteria of 50-150%.

9. Duplicate Sample Analysis

Duplicate sample analyses are performed to provide information on the precision, in the matrix of interest, of the analytical method. Duplicate analyses were performed using samples 10044218 and 10044220. All results which were

above 5 times the reporting limit met the relative percent difference (RPD) criteria of ≤20 except for the following.

10. Compound Identification/Quantitation

The initial calibration functions were used for calculations. Reported quantitation limits were based on the initial calibration standards and sample size used for the analysis.

Diesel range organics is a collective term for petroleum products that generally elute before motor oil but after gasoline from the gas chromatograph.

Motor oil range organics is a collective term for any petroleum product that chromatographically consists primarily of an unresolved envelope of compounds generally eluting after #2 diesel. Included in the definition are hydraulic fluids, motor oils, lubricating oils, cutting oils, mineral oils, transmission fluids, etc.

Sample 10044204 contained what appears to be kerosene in the diesel range organics window and the detected motor oil range organics matched our motor oil standard.

Samples 10044205, 10044206 and 10044208 detected motor oil range organics which matched our motor oil standard.

Sample 10044207 detected motor oil range organics which matched our motor oil standard. In addition a large single unknown organic peak was observed.

11. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Chris Pace at the Region 10 Laboratory, phone number (360) 871 - 8703.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. No value is reported with this qualification.
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. No value is reported with this qualification.

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044204	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-14-SS			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	***400009**	**TPH-GC/Diesel Range Organics**	**73**	**mg/kg**	
	***400010**	**TPH-GC/Motor Oil Range Organic s**	**48**	**mg/kg**	
Surrogate(s :	629992	Pentacosane	104	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044205	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-15-SS			

			Result	Units	Qlfr
ORG					
Parameter	: Tot Petroleum Hyd, Diesel extended				Container ID : N2
Method	: NWTPH-DX	Diesel range organics			Analysis Date : 2/18/2010
Prep Method	: 3541	Automated soxhlet extraction			Prep Date : 2/9/2010
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	3.8	mg/kg	U
	***400010**	**TPH-GC/Motor Oil Range Organic s**	**270**	**mg/kg**	
Surrogate(s :	629992	Pentacosane	108	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044206	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-16-SS			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/19/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	24	mg/kg	U
	***400010**	**TPH-GC/Motor Oil Range Organic s**	**520**	**mg/kg**	
Surrogate(s :	629992	Pentacosane	121	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044207	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-17-SS			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/19/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	26	mg/kg	U
	***400010**	**TPH-GC/Motor Oil Range Organic s**	**1300**	**mg/kg**	
Surrogate(s :	629992	Pentacosane	111	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044208	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-18-SS			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/19/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	19	mg/kg	U
	***400010**	**TPH-GC/Motor Oil Range Organic s**	**490**	**mg/kg**	
Surrogate(s :	629992	Pentacosane	128	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044209	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	7.8	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	16	mg/kg	U
Surrogate(s :	629992	Pentacosane	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044210	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SS			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	9	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	18	mg/kg	U
Surrogate(s :	629992	Pentacosane	103	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**15:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044211	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SD			

			Result	Units	Qlfr

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

Analytes(s):	*400009	TPH-GC/Diesel Range Organics	7.1	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	14	mg/kg	U
Surrogate(s :	629992	Pentacosane	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044212	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	6.0	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	12	mg/kg	U
Surrogate(s :	629992	Pentacosane	97	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044213	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	6.3	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	13	mg/kg	U
Surrogate(s :	629992	Pentacosane	101	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044214	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	3.6	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	7.2	mg/kg	U
Surrogate(s :	629992	Pentacosane	94	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044215	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	8.0	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	16	mg/kg	U
Surrogate(s :	629992	Pentacosane	122	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044216	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	5.1	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	10	mg/kg	U
Surrogate(s :	629992	Pentacosane	109	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044217	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	16	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	33	mg/kg	U
Surrogate(s :	629992	Pentacosane	109	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**13:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044218	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	16	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	32	mg/kg	U
Surrogate(s :	629992	Pentacosane	111	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	16	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	33	mg/kg	U
Surrogate(s :	629992	Pentacosane	96	%Rec	

10044218 Duplicate .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044219	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	5.1	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	10	mg/kg	U
Surrogate(s :	629992	Pentacosane	101	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**10:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044220	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	6.1	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	12	mg/kg	U
Surrogate(s :	629992	Pentacosane	91	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044220
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

			Result	Units	Qlfr
ORG					
Parameter	: Tot Petroleum Hyd, Diesel extended				Container ID : N2
Method	: NWTPH-DX	Diesel range organics			Analysis Date : 2/18/2010
Prep Method	: 3541	Automated soxhlet extraction			Prep Date : 2/9/2010
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	6.2	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	12	mg/kg	U
Surrogate(s :	629992	Pentacosane	94	%Rec	

10044220 Duplicate .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:48:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044221	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/19/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	8.3	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	17	mg/kg	U
Surrogate(s :	629992	Pentacosane	97	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044222	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SD			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : N2
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/19/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	5.2	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	10	mg/kg	U
Surrogate(s :	629992	Pentacosane	97	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044223	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A5
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	95	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**14:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044225	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	95	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044225
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

			Result	Units	Qlfr
ORG					
Parameter	: Tot Petroleum Hyd, Diesel extended				Container ID : A5
Method	: NWTPH-DX	Diesel range organics			Analysis Date : 2/5/2010
Prep Method	: 3535A	Solid Phase Extraction			Prep Date : 2/2/2010
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.096	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	95	%Rec	

10044225 Duplicate .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:35:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044227	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	98	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**11:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044229	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A5
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:31:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044231	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	92	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044233	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	94	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**11:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044235	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	96	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044237	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	91	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**12:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044239	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A10
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.098	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.20	mg/L	U
Surrogate(s :	629992	Pentacosane	95	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044239
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Duplicate
Station Description:			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A12
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.098	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.2	mg/L	U
Surrogate(s :	629992	Pentacosane	95	%Rec	

10044239 Duplicate .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044241	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	93	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**9:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044243	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A5
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.098	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.2	mg/L	U
Surrogate(s :	629992	Pentacosane	94	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044245	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A5
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.096	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	95	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044247	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SW			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	96	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/29/10	**9:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044249	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-19-RB			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID : A4
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.094	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.19	mg/L	U
Surrogate(s :	629992	Pentacosane	98	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0033A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID :
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/6/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

Surrogate(s :	629992	Pentacosane	99	%Rec	
	*400009	TPH-GC/Diesel Range Organics	102	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0033B
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID :
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/6/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

Surrogate(s :	629992	Pentacosane	99	%Rec	
	*400009	TPH-GC/Diesel Range Organics	99	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0040A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID :
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

Surrogate(s :	629992	Pentacosane	102	%Rec
	*400009	TPH-GC/Diesel Range Organics	107	%Rec

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	LCS0040B
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID :
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

Surrogate(s :	629992	Pentacosane	96	%Rec
	*400009	TPH-GC/Diesel Range Organics	105	%Rec

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	OBS0040A1
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID :
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/18/2010
Prep Method : 3541 Automated soxhlet extraction — Prep Date : 2/9/2010

			Result	Units	Qlfr
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	4.0	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	8.0	mg/kg	U
Surrogate(s :	629992	Pentacosane	86	%Rec	

OBS0040A1 Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	OBW0033A1
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr
ORG					
Parameter	: Tot Petroleum Hyd, Diesel extended				Container ID :
Method	: NWTPH-DX	Diesel range organics			Analysis Date : 2/5/2010
Prep Method	: 3535A	Solid Phase Extraction			Prep Date : 2/2/2010
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.10	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.20	mg/L	U
Surrogate(s :	629992	Pentacosane	95	%Rec	

OBW0033A1 Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	OBW0033A2
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Tot Petroleum Hyd, Diesel extended — Container ID :
Method : NWTPH-DX Diesel range organics — Analysis Date : 2/5/2010
Prep Method : 3535A Solid Phase Extraction — Prep Date : 2/2/2010

Analytes(s):	*400009	TPH-GC/Diesel Range Organics	0.10	mg/L	U
	*400010	TPH-GC/Motor Oil Range Organic s	0.20	mg/L	U
Surrogate(s :	629992	Pentacosane	92	%Rec	

OBW0033A2 Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	OBW0040A2
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr
ORG					
Parameter	: Tot Petroleum Hyd, Diesel extended				Container ID :
Method	: NWTPH-DX	Diesel range organics			Analysis Date : 2/18/2010
Prep Method	: 3541	Automated soxhlet extraction			Prep Date : 2/9/2010
Analytes(s):	*400009	TPH-GC/Diesel Range Organics	4.0	mg/kg	U
	*400010	TPH-GC/Motor Oil Range Organic s	8.0	mg/kg	U
Surrogate(s :	629992	Pentacosane	101	%Rec	

OBW0040A2 Blank .

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

MEMORANDUM

SUBJECT: Data Release for Total Petroleum Hydrocarbon - Gasoline Range Analysis Results from the USEPA Region 10 Laboratory

PROJECT NAME: Warmhouse Beach Dump, Neah Bay, WA

PROJECT CODE: TEC-971A

FROM: Gerald Dodo, Chemistry Supervisor
Office of Environmental Assessment, USEPA Region 10 Laboratory

TO: Kathy Parker, OSC
Office of Environmental Cleanup, USEPA Region 10

CC: Amy Dahl, TechLaw, Inc.

I have authorized release of this data package. Attached you will find the Total Petroleum Hydrocarbon-Gasoline Range (TPH-Gx) results for the Warmhouse Beach Dump, Neah Bay, WA project for the soil and water samples collected 01/26/10 to 01/29/10. For further information regarding the attached data, contact Chris Pace at 360-871-8703.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR ORGANIC CHEMICAL ANALYSES

Date: March 4, 2010

To: Kathy Parker, OSC
Office of Environmental Cleanup, USEPA Region 10

From: Chris Pace, Chemist
Office of Environmental Assessment, USEPA Region 10 Laboratory

Subject: Quality Assurance Review for the Total Petroleum Hydrocarbon-Gasoline Range Extended Analysis of Samples from the Warmhouse Beach Dump, Neah Bay, WA Project

Project Code: TEC-971A
Account Code: 10T10P302DD2C10HVLA00

CC: Amy Dahl, TechLaw, Inc.

The following is a quality assurance review of the data for total petroleum hydrocarbon - gasoline range extended (TPH-Gx) analysis of soil and water samples from the above referenced site. The analyses were performed by the EPA Region 10 Laboratory ESAT contractor using Washington State Department of Ecology Method NWTPH-Gx (GC/MS).

This review was conducted for the following samples:

Soil

10044204	10044205	10044206	10044207	10044208	10044209
10044210	10044211	10044212	10044213	10044214	10044215
10044216	10044217	10044218	10044219	10044220	10044221
10044222					

Water

10044223	10044225	10044227	10044229	10044231	10044233
10044235	10044237	10044239	10044241	10044243	10044245
10044247	10044249				

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

All measures of quality control met Laboratory/QAPP criteria.

The Region 10 Laboratory's Quality System has been accredited to the standards of the National Environmental Laboratory Accreditation Conference (NELAC).

2. Sample Transport and Receipt

Upon sample receipt, no conditions were noted that would impact data quality.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied for the analysis of soils and preserved water samples is 14 days from the time of collection. All samples were analyzed within these criteria.

4. Sample Preparation

Samples were prepared according to the method.

5. Initial Calibration/Continuing Calibration Verification (CCV)

Initial calibration was performed on 04/04/10 for TPH-Gx (unleaded gasoline composite) and the surrogate, 1,4-difluorobenzene. Percent relative standard deviations (%RSDs) of the RRFs met the criteria of ≤20%.

The CCVs met the criteria for frequency of analysis and the percent accuracies of 80-120% of the true value for TPH-Gx.

6. Blank Analysis

Method blanks were analyzed with each analytical sequence to evaluate the potential for laboratory contamination and effects on the sample results. TPH-Gx was not detected in the blanks.

7. Surrogate Spikes

Surrogate recoveries are used to help in the evaluation of laboratory performance on individual samples. All surrogate recoveries for the samples were within the criteria of 50-150%.

8. LCS/LCSD

Data for laboratory control sample/laboratory control sample duplicates (LCS/LCSD) are generated to provide information on the accuracy and precision of the analytical method and the laboratory performance. The LCS/LCSD recoveries were within the criteria of 50-150% with a relative percent difference (RPD) of ≤50.

9. Matrix Spike/Matrix Spike Duplicate Analysis (MS/MSD)

MS/MSD analyses are performed to provide information on the effects of sample matrices toward the analytical method. MS/MSD analyses was performed using samples 09454301(S1/S2). The recoveries of TPH-Gx met the criteria of 50-150% with a RPD of ≤50.

10. Compound Quantitation

The initial calibration functions were used for calculations. Reported quantitation limits were based on the initial calibration standards and sample size used for the analysis.

All manual integrations have been reviewed and found to comply with acceptable integration practices.

11. Identification

TPH-Gx range organics were detected in only two samples, 10044207 and 10044208, above the reporting limit. Both samples had chromatograms that were similar to the unleaded gasoline composite used for calibration. In addition both samples had unknown organic components present.

12. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data.

The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Chris Pace at the Region 10 Laboratory, phone number (360) 871 - 8703.

Qualifier	Definition
U	The analyte was not detected at or above the reported value.
J	The identification of the analyte is acceptable; the reported value is an estimate.
UJ	The analyte was not detected at or above the reported value. The reported value is an estimate.
R	The presence or absence of the analyte can not be determined from the data due to severe quality control problems. The data are rejected and considered unusable. No value is reported with this qualification.
NA	Not Applicable, the parameter was not analyzed for, or there is no analytical result for this parameter. No value is reported with this qualification.

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044204	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-14-SS			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	4.7	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	106	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044205	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-15-SS			

			Result	Units	Qlfr
ORG					
Parameter	: Total Petroleum Hyd, Gasoline			Container ID :	N1
Method	: NWTPH-G	Gasoline range organics		Analysis Date :	2/8/2010
Prep Method	: 5030	Purge and Trap		Prep Date :	
Analytes(s):	8006619	Unleaded gasoline composite	6.4	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	108	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044206	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-16-SS			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	6.6	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	115	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044207	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-17-SS			

			Result	**Units**	**Qlfr**

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Analytes(s):	**8006619**	**Unleaded gasoline composite**	**9.2**	**mg/kg**
Surrogate(s :	540363	Benzene, 1,4-difluoro-	114	%Rec

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**16:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044208	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-18-SS			

			Result	Units	Qlfr
ORG					
Parameter	: Total Petroleum Hyd, Gasoline			Container ID :	N1
Method	: NWTPH-G	Gasoline range organics		Analysis Date :	2/8/2010
Prep Method	: 5030	Purge and Trap		Prep Date :	
Analytes(s):	**8006619**	**Unleaded gasoline composite**	**7.4**	**mg/kg**	
Surrogate(s :	540363	Benzene, 1,4-difluoro-	119	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044209	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	7.0	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	124	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044210	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SS			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	10	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	121	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**15:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044211	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	9.1	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	121	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044212	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	6.8	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	123	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044213	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	4.6	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	127	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044214	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	4.2	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	126	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044215	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	9.1	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	116	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**12:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044216	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	5.1	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	126	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:30:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044217	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	18	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	118	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**13:05:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044218	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	20	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	127	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/9/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Surrogate(s :	540363	Benzene, 1,4-difluoro-	128	%Rec
	8006619	Unleaded gasoline composite	102	%Rec

10044218 Matrix Spike .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	10044218
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/9/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Surrogate(s :	540363	Benzene, 1,4-difluoro-	130	%Rec
	8006619	Unleaded gasoline composite	124	%Rec

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044219	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/9/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	5.4	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	127	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**10:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044220	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/9/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	6.4	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	125	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:48:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044221	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/9/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	7.7	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	119	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:15:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044222	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SD			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : N1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/9/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	5.2	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	125	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**16:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044223	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-06-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	98	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**14:38:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044225	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBB-13-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	97	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**13:35:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044227	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-08-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	96	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**11:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044229	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-09-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:31:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044231	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-10-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	89	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**10:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044233	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-11-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	88	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/27/10	**11:20:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044235	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBE-12-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	86	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**14:10:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044237	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-01-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	86	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**12:55:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044239	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-02-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	85	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044239
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike
Station Description:			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A2
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/6/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Surrogate(s :	540363	Benzene, 1,4-difluoro-	85	%Rec	
	8006619	Unleaded gasoline composite	80	%Rec	

10044239 Matrix Spike .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	10044239
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Matrix Spike Dupl
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A3
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/6/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Surrogate(s :	540363	Benzene, 1,4-difluoro-	85	%Rec	
	8006619	Unleaded gasoline composite	82	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044241	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-03-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	83	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**9:50:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044243	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-04-SW			

			Result	Units	Qlfr
ORG					
Parameter	: Total Petroleum Hyd, Gasoline				Container ID : A1
Method	: NWTPH-G	Gasoline range organics			Analysis Date : 2/5/2010
Prep Method	: 5030	Purge and Trap			Prep Date :
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	81	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**8:45:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044245	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-05-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	79	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/26/10	**11:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044247	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WBW-07-SW			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID : A1
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	78	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	1/29/10	**9:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid	
Project Officer:	KATHY PARKER	**Sample Number:**	10044249	
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Reg sample	
Station Description:	WB-19-RB			

			Result	Units	Qlfr
ORG					
Parameter	: Total Petroleum Hyd, Gasoline				Container ID : A1
Method	: NWTPH-G	Gasoline range organics			Analysis Date : 2/5/2010
Prep Method	: 5030	Purge and Trap			Prep Date :
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	103	%Rec	

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	JBW0036
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr
ORG					
Parameter	: Total Petroleum Hyd, Gasoline				Container ID :
Method	: NWTPH-G	Gasoline range organics			Analysis Date : 2/5/2010
Prep Method	: 5030	Purge and Trap			Prep Date :
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	105	%Rec	

JBW0036 Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	JBW0036A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID :
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

			Result	Units	Qlfr
Analytes(s):	8006619	Unleaded gasoline composite	50	mg/L	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	85	%Rec	

JBW0036A Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	JBW0039
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr
ORG					
Parameter	: Total Petroleum Hyd, Gasoline				Container ID :
Method	: NWTPH-G	Gasoline range organics			Analysis Date : 2/8/2010
Prep Method	: 5030	Purge and Trap			Prep Date :
Analytes(s):	8006619	Unleaded gasoline composite	5.0	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	83	%Rec	

JBW0039 Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	JBW0039A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	Blank
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID :
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Analytes(s):	8006619	Unleaded gasoline composite	5.0	mg/kg	U
Surrogate(s :	540363	Benzene, 1,4-difluoro-	108	%Rec	

JBW0039A Blank .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	TPH0036
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID :
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Surrogate(s :	540363	Benzene, 1,4-difluoro-	124	%Rec
	8006619	Unleaded gasoline composite	108	%Rec

TPH0036 LCS .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Liquid
Project Officer:	KATHY PARKER	**Sample Number:**	TPH0036A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID :
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/5/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Surrogate(s :	540363	Benzene, 1,4-difluoro-	92	%Rec
	8006619	Unleaded gasoline composite	83	%Rec

TPH0036A LCSD .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	TPH0039
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCS
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID :
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Surrogate(s :	540363	Benzene, 1,4-difluoro-	89	%Rec
	8006619	Unleaded gasoline composite	83	%Rec

TPH0039 LCS .

Manchester Environmental Laboratory
Report by Parameter for Project TEC-971A

Project Code:	TEC-971A	**Collected:**	**0:00:00**
Project Name:	WARMHOUSE BEACH DUMP	**Matrix:**	Solid
Project Officer:	KATHY PARKER	**Sample Number:**	TPH0039A
Account Code:	10T10P302DD2C10HVLA00	**Type:**	LCSD
Station Description:			

			Result	Units	Qlfr

ORG

Parameter : Total Petroleum Hyd, Gasoline — Container ID :
Method : NWTPH-G Gasoline range organics — Analysis Date : 2/8/2010
Prep Method : 5030 Purge and Trap — Prep Date :

Surrogate(s :	540363	Benzene, 1,4-difluoro-	123	%Rec
	8006619	Unleaded gasoline composite	111	%Rec

TPH0039A LCSD .

APPENDIX G
CLP QUALITY ASSURANCE REVIEWS AND ANALYTICAL DATA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

June 30, 2010

Reply to: OEA-095
Attn of: grepo-grove.gina@epa.gov

MEMORANDUM

Subject: Data Validation Report for the Polychlorinated Dibenzo-p-Dioxin and Polychlorinated Dibenfuran (PCDD/PCDF) Analyses of Soil and Water Samples Collected from Warm Springs Dump Site, Makah Reservation A Combined Removal and Assessment
Case Number: 39444 SDG: 10044212

From: Ginna Grepo-Grove, R10 QA Manager
Office of Environmental Assessment, USEPA

To: Kathy Parker, Project Manager
Brandon Perkins, Project Manager
Office of Environmental Clean-up, USEPA

CC: Amy Dahl, Project Manager, Techlaw, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of 8 soil samples collected from the above referenced site has been completed. These samples were analyzed for PCDD/PCDF in accordance with the Statement of Work for Multi-media, Multi-Concentration Dioxins and Furans Analysis, DLM2.0 and the Method 1613B, "Tetra through Octa-Chlorinated Dioxins and Furans by Isotope Dilution High resolution Gas Chromatograph (HRGC)/High Resolution Mass Spectrometer (HRMS)", October 1994 by Pace Analytical Services located in Minneapolis, MN.

The following samples were evaluated in this validation report:

10044204	10044205	10044206	10044207
10044212	10044213	10044217	10044218

DATA QUALIFICATIONS

All sample analyses were evaluated following the EPA's Stage 4 Electronic/Manual Data Validation Process (S4VEM). The analyses were evaluated and analytical results validated using the technical acceptance criteria and Quality Control Specifications outlined in the Sampling Quality Assurance Plan (SQAP) for the Alkali Lake Disposal Site, the Statement of Work for Multi-media, Multi-Concentration Dioxins and Furans Analysis, DLM2.0, Method 1613B, "Tetra through Octa-Chlorinated Dioxins and Furans by Isotope Dilution High

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resolution Gas Chromatograph (HRGC)/High Resolution Mass Spectrometer (HRMS)", October 1994, the Contract Laboratory Program's National Functional Guidelines for Chlorinated Dioxin/Furan Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified using the reviewer's professional judgment.

The conclusions presented herein are based on the information provided for the review.

Summary of Validation Qualifiers Applied:

Some of the PCDD/PCDF data points were qualified due to following reasons:

- The target compound was detected in both sample and the associated blank(s). Sample results <5x the value in the blank were qualified non-detects and results >5x were not qualified.
- Target compounds were detected at concentrations that were <Contract Required Quantitation Limits (CRQLs). Results were qualified estimated, JQ.
- Target compounds were detected at concentrations that were over the calibration range of the instrument and no dilution runs were analyzed. Affected results were qualified estimated with a low bias (JL).
- The dilution run for sample 10044205 is recommended for use for 2,3,7,8-TCF, 1,2,3,6,7,8-HxCDD, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,6,7,8 – HpCDF and OCDD.
- Peak was detected >2.5 signal-to-noise ratio and within the established retention time windows with mass-ion ratio criteria that were not met were qualified non-detects with reporting limits elevated to the level of detection due to chromatographic interferences.
- One or more peaks that did not meet the mass-ion abundance criteria were included in the calculation of total homologues. The reported result for the total homologue was qualified estimated with a high bias due to interferences (JH).
- Target compounds that were detected >2.5 signal-to noise ratio with mass ion ratios that did not meet the technical acceptance criteria were flagged non-detects, "U".
- OCDD and OCDF in sample 100442907 are associated with an internal standard that did not meet the recovery criteria indicating possible high bias in the associated results. OCDD and OCDF were qualified estimated with a high bias, JH.

Overall Data Assessment:

Samples were analyzed following the technical specifications of the analytical methods. The data, as qualified, are usable for all purposes.

Reasons for Validation Qualifiers (per EDD)

The reasons for applying a validation qualifier to a sample result is also listed in the validated electronic data deliverables (EDDs), under the column header "Reasons". Below is a list of reasons why a PCDD/PCDF data point may be qualified during data validation.

Reasons for Validation Qualifiers:	
<CRQL	The value reported is <Contract Required Quantitation Limits (CRQLs)
MB	Analyte was qualified as non-detect due to contamination in the associated blank. The value reported is <5x or <10x (if common lab contaminant) the value in the blank.
ND	The analyte was not detected in the sample, and is reported at the CRQL with the 'U' Qualifier.
COELN	Initial identification erroneous due to co-elution with other detected target analytes.
CAL	Calibration criteria not met
RESCHK	Instrument mass resolution and resolving power not met
IS	Internal Standard recovery no met
CCV	Continuing calibration criteria not met
RTs	Retention time criteria not met
OPR	On-going precision recovery check not met.
CLN-UP	Silica gel, alumina or sulfur clean-up criteria not met
LCS	LCS/LCSD criteria not met
HT	Holding time criteria not met
STORE	Sample Storage and preservation specified not met
TEMP	Cooler recommended temperature exceeded at the verified time of sample receipt at the lab (VTSR)
MZ	Mass/ion resolution ratio not met
EMPC	Results reported are estimated maximum potential concentrations (EMPCs). Mass ion-ratios were not met due to interferences. Result is false positive and qualified as non-detect reported at the level of detection
DPE	Peak detected is due to Polychlorinated diphenyl ether interferences. Result is a false positive. Elevate reporting limits at level of detection. Qualified as a non-detect qualifier.

Data Qualifiers

The following is a list of validation and bias qualifiers applied to the sample result(s) when needed to indicate an associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.
Bias Qualifiers	L	Low bias.
	H	High bias.
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).
	K	Unknown Bias

II. DATA REVIEW CHECKLIST

The analytical data were evaluated following the recommended baseline checks used in the four stages of laboratory analytical data verification and validation for Superfund use listed as follows (EPA-540-R08-005, 2009):

Stage 1 – Data Validation					
	VERIFIED		QUAL		
	YES	NO	YES	NO	
1	✓			✓	Documentation identifies the laboratory receiving and conducting analyses, and includes documentation for all samples submitted by the project or requester for analyses.
2	✓			✓	Requested analytical methods were performed and the analysis dates are present.
3	✓			✓	Requested target analyte results are reported along with the original laboratory data qualifiers and data qualifier definitions for each reported result
4	✓			✓	Requested target analyte result units are reported
5	✓			✓	Requested reporting limits for all samples are present and results at and below the requested (required) reporting limits are clearly identified (including sample detection limits if required).
6	✓			✓	Sampling dates (including times if needed), date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH and temperature) are documented.
7	✓			✓	Sample results are evaluated by comparing sample conditions upon receipt at the laboratory (e.g., preservation checks) and sample characteristics (e.g., percent moisture) to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract.

Stage 2A – Data Validation					
	VERIFIED		QUAL		QC Procedure or Check
	YES	NO	YES	NO	
8	✓			✓	Requested methods (handling, preparation, cleanup, and analytical) are performed.
9	✓			✓	Method dates (including dates, times and duration of analysis for radiation counting measurements and other methods, if needed) for handling (e.g., Toxicity Characteristic Leaching Procedure), preparation, cleanup and analysis are present, as appropriate.
10	✓			✓	Requested spike analytes or compounds (e.g., surrogate, DMCs, LCS spikes, post digestion spikes) have been added, as appropriate.
11	✓			✓	Sample holding times (from sampling date to preparation and preparation to analysis) are evaluated.
12	✓			✓	Frequency of QC samples is checked for appropriateness (e.g., one LCS per twenty samples in a preparation batch).
13	✓			✓	Sample results are evaluated by comparing holding times and sample-related QC data to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract

					Stage 2A – Data Validation QC Data
14	✓			✓	method blanks
15	✓			✓	surrogate recoveries/deuterated monitoring compounds (DMC) recoveries/clean-up recoveries
16	✓			✓	laboratory control sample (LCS)/Laboratory control sample duplicate (LCSD) recoveries
17		✓			matrix spike and matrix spike duplicate recoveries
18		✓			serial dilutions
19		✓			post digestion spikes
20		✓			standard reference materials
21		✓			equipment blanks
22		✓			trip blanks

Stage 2B – Data Validation

Stage 2B validation builds on the validation conducted in Stage 2A. Stage 2B validation of the laboratory analytical data package consists of the Stage 2A validation plus the verification and validation checks for the compliance of instrument-related QC.

	VERIFIED		QUAL		Calibration Procedure or Check
	YES	NO	YES	NO	
23	✓			✓	Initial calibration data (e.g., ICAL standards, ICV standards, ICBs) are provided for all requested analytes and linked to field samples reported. For each initial calibration, the calibration type used is present along with the initial calibration equation used including any weighting factor(s) applied and the associated correlation coefficients, as appropriate. Recalculations of the standard concentrations using the initial calibration curve are present, along with their associated percent recoveries, as appropriate (e.g., if required by the project, method, or contract). For the ICV standard, the associated percent recovery (or percent difference, as appropriate) is present.
24	✓			✓	Appropriate number and concentration of initial calibration standards are present.
25	✓			✓	Continuing calibration data (e.g. CCV standards and CCBs) are provided for all requested analytes and linked to field samples reported, as appropriate. For the CCV standard(s), the associated percent recoveries (or percent differences, as appropriate) are present.
26	✓			✓	Reported samples are bracketed by CCV standards and CCBs standards as appropriate.
27		✓			Method specific instrument performance checks are present as appropriate (e.g., tunes for mass spectrometry methods, DDT/Endrin breakdown checks for pesticides and aroclors, instrument blanks and interference checks for ICP methods).
28	✓			✓	Frequency of instrument QC samples is checked for appropriateness (e.g., gas chromatography-mass spectroscopy [GC-MS] tunes/mass resolutions, window defining mix, %valley have been run every 12 hours).

Stage 3 – Data Validation

Stage 3 validation builds on the validation conducted in Stage 2B. Stage 3 validation of the laboratory analytical data package consists of the Stage 2B validation plus the recalculation of instrument and sample results from the laboratory instrument responses, and comparison of recalculated results to laboratory reported results.

	VERIFIED		QUAL		QC Procedure or Check
	YES	NO	YES	NO	
29	✓			✓	Instrument response data (e.g., GC peak areas, ICP corrected intensities) are reported for requested analytes, surrogates, internal standards, and DMCs for all requested field samples, matrix spikes, matrix spike duplicates, LCS, and method blanks as well as calibration data and instrument QC checks (e.g., tunes, RT windows, resolutions, resolving power, and Florisil, alumina column checks).
30	✓			✓	Reported target analyte instrument responses are associated with appropriate internal standard analyte(s) for each (or selected) analyte(s) (for methods using internal standard for calibration).
31	✓			✓	Fit and appropriateness of the initial calibration curve used or required (e.g., mean calibration factor, regression analysis [linear or non-linear, with or without weighting factors, with or without forcing]) is checked with recalculation of the initial calibration curve for each (or selected) analyte(s) from the instrument response.
32	CCVs			✓	Comparison of instrument response to the minimum response requirements for each (or selected) analyte(s).
33	20%			✓	Recalculation of each (or selected) opening and closing CCV (and CCB) response from the peak data reported for each (or selected) analyte(s) from the instrument response, as appropriate.
34	20%			✓	Compliance check of recalculated opening and/or closing CCV (and CCB) response to recalculated initial calibration response for each (or selected) analyte(s).
35	Samples			✓	Recalculation of percent ratios for each (or selected) detected compound from the instrument response, as appropriate.
36	Samples			✓	Compliance check of recalculated percent ratio for each (or selected) detected target compound from the instrument response.
37	NA				Recalculation of each (or selected) instrument performance check (e.g., DDT/Endrin breakdown for pesticide analysis, instrument blanks, interference checks) from the instrument response.
38	Samples CCVs			✓	Recalculation and compliance check of retention time windows (for chromatographic methods) for each (or selected) analyte(s) from the laboratory reported retention times.
39	Samples			✓	Recalculation of reported results for each reported (or selected) target analyte(s) from the instrument response.
40	25% IS			✓	Recalculation of each (or selected) reported spike recovery (surrogate recoveries, DMC recoveries, LCS recoveries, duplicate analyses, matrix spike and matrix spike duplicate recoveries, serial dilutions, post digestion spikes, standard reference materials etc.) from the instrument response.
41	25%			✓	Each (or selected) sample result(s) and spike recovery(ies) are evaluated by comparing the recalculated numbers to the laboratory reported numbers according to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract

Note: Selection of analytes, spikes, and performance evaluation checks for the Stage 3 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including (but not limited to) the type of verification and validation being performed (manual or electronic), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Stage 4 – Data Validation

Stage 4 validation builds on the validation conducted in Stage 3. Stage 4 validation of the laboratory analytical data package consists of the Stage 3 validation plus the evaluation of instrument outputs.

	VERIFIED		QUAL		QC Procedure or Check
	YES	NO	YES	NO	
42	Samples			✓	All required instrument outputs (e.g., chromatograms, mass spectra, atomic emission spectra, instrument background corrections, and interference corrections) for evaluating sample and instrument performance are present.
43	✓		✓		Sample results are evaluated by checking each (or selected) instrument output (e.g., chromatograms, mass spectra, atomic emission spectra data, instrument background corrections, interference corrections) for correct identification and quantitation of analytes (e.g., peak integrations, use of appropriate internal standards for quantitation, elution order of analytes, and interferences).
44	Samples		✓		Each (or selected) instrument's output(s) is evaluated for confirmation of non-detected or tentatively identified analytes.

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1DFA - Form I-HR CDD-1
CDD/CDF SAMPLE DATA SUMMARY
HIGH RESOLUTION

SAMPLE No.
10044204

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917001
Sample wt/vol: 13.9 (g/ml)G Lab File ID: P100314B_05
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 82.5 Date Analyzed: 03/14/2010
GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO #	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322	27.15	0.72	0.345	J Q	
2378-TCDF	304/306	25.61	0.68	1.79		
12378-PeCDF	340/342	32.44	1.35	1.60	J Q	
12378-PeCDD	354/356	34.10	0.65	1.10	J	
23478-PeCDF	340/342	33.71	1.51	2.51	J	
123478-HxCDF	374/376	37.14	1.16	1.92	J	
123678-HxCDF	374/376	37.30	1.09	2.29	J	
123478-HxCDD	390/392	38.11	1.32	0.800	J	
123678-HxCDD	390/392	38.22	1.20	2.18	J	
123789-HxCDD	390/392	38.51	1.26	1.45	J	
234678-HxCDF	374/376	37.95	1.31	3.01	J	
123789-HxCDF	374/376	38.84	1.05	0.733	J	
1234678-HpCDF	408/410	40.39	1.06	11.9		
1234678-HpCDD	424/426	41.43	1.01	31.7	B	
1234789-HpCDF	408/410	41.90	1.45 *		U	0.980
OCDD	458/460	44.12	0.89	230	B	
OCDF	442/444	44.27	0.84	15.4		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO #	ION RATIO LIMITS	% REC #	RECOVERY LIMITS
13C-2378-TCDD	332/334	27.10	0.80	0.65-0.89	88	25-164
13C-12378-PeCDD	368/370	34.08	1.61	1.32-1.78	104	25-181
13C-123478-HxCDD	402/404	38.11	1.27	1.05-1.43	82	32-141
13C-123678-HxCDD	402/404	38.21	1.28	1.05-1.43	87	28-130
13C-1234678-HpCDD	436/438	41.41	1.07	0.88-1.20	83	23-140
13C-OCDD	470/472	44.11	0.88	0.76-1.02	59	17-157
13C-2378-TCDF	316/318	25.60	0.79	0.65-0.89	80	24-169
13C-12378-PeCDF	352/354	32.41	1.58	1.32-1.78	88	24-185
13C-23478-PeCDF	352/354	33.69	1.59	1.32-1.78	98	21-178
13C-123478-HxCDF	384/386	37.15	0.54	0.43-0.59	79	26-152
13C-123678-HxCDF	384/386	37.28	0.51	0.43-0.59	79	26-123
13C-123789-HxCDF	384/386	38.81	0.52	0.43-0.59	96	29-147
13C-234678-HxCDF	384/386	37.93	0.52	0.43-0.59	79	28-136
13C-1234678-HpCDF	418/420	40.37	0.45	0.37-0.51	74	28-143
13C-1234789-HpCDF	418/420	41.88	0.45	0.37-0.51	75	26-138
37Cl-2378-TCDD	328/NA	27.12	NA	NA	84	35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

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1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044204

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917001

Sample wt/vol: 13.9 (g/ml)G Lab File ID: P100314B_05

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 82.5 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	0.345	x 1	=	0.345
2378-TCDF	1.79	x 0.1	=	0.179
12378-PeCDF	1.60	x 0.03	=	0.0480
12378-PeCDD	1.10	x 1	=	1.10
23478-PeCDF	2.51	x 0.3	=	0.753
123478-HxCDF	1.92	x 0.1	=	0.192
123678-HxCDF	2.29	x 0.1	=	0.229
123478-HxCDD	0.800	x 0.1	=	0.0800
123678-HxCDD	2.18	x 0.1	=	0.218
123789-HxCDD	1.45	x 0.1	=	0.145
234678-HxCDF	3.01	x 0.1	=	0.301
123789-HxCDF	0.733	x 0.1	=	0.0733
1234678-HpCDF	11.9	x 0.01	=	0.119
1234678-HpCDD	31.7	x 0.01	=	0.317
1234789-HpCDF	ND	x 0.01	=	0.000
OCDD	230	x 0.0003	=	0.0690
OCDF	15.4	x 0.0003	=	0.00462
		Total	=	4.17 J

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM01.4 (1/02)

USEPA

1DFC - Form I-HR CDD-3
CDF SECOND COLUMN CONFIRMATION
HIGH RESOLUTION

SAMPLE No.
10044204

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917001
Sample wt/vol: 13.9 (g/ml)G Lab File ID: U100318A_03
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 82.5 Date Analyzed: 03/18/2010
GC Column: DB-225 ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDF	304/306	25.09	0.89		0.976		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDF	316/318	25.06	0.77		0.65-0.89	79		24-169
37Cl-2378-TCDD	328/NA	22.60	NA		NA	79		35-197

Column to be used to flag values outside QC limits.

DLM02.0 (5/05)

USEPA

2DF - Form II HR CDD

CDD/CDF TOTAL HOMOLOGUE CONCENTRATION SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044204

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917001

Sample wt/vol: 13.9 (g/ml)G Lab File ID: P100314B_05

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 82.5 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

HOMOLOGUE	PEAKS	CONCENTRATION	Q	EMPC/EDL
DIOXINS				
Total TCDD	12		JH	24.3
Total PeCDD	10		JH	21.4
Total HxCDD	7	32.9		0.188
Total HpCDD	2	64.2		0.381
FURANS				
Total TCDF	22		JH	60.2
Total PeCDF	15		J	36.1
Total HxCDF	13		J	27.8
Total HpCDF	5		JH	25.5

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids). The total homologue concentrations do not affect the TEF (Toxic Equivalent Factor) calculations.

DLM02.0 (5/05)

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1DFA - Form I-HR CDD-1

CDD/CDF SAMPLE DATA SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044205

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917002

Sample wt/vol: 15.8 (g/ml)G Lab File ID: P100314B_11

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 69.8 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO #	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322	27.32	0.79	150		
2378-TCDF	304/306	25.80	0.74	386	~~E~~ JL	
12378-PeCDF	340/342	32.58	1.56		U	574
12378-PeCDD	354/356	34.20	0.58	763		
23478-PeCDF	340/342	33.86	1.56	1180		
123478-HxCDF	374/376	37.31	1.25		U	1050
123678-HxCDF	374/376	37.41	1.27	790		
123478-HxCDD	390/392	38.25	1.26	963		
123678-HxCDD	390/392	38.35	1.25	2160	~~E~~ JL	
123789-HxCDD	390/392	38.63	1.24	1530		
234678-HxCDF	374/376	38.06	1.24	1450		
123789-HxCDF	374/376	38.96	1.24	191		
1234678-HpCDF	408/410	40.57	1.05	4990	~~E~~ JL	
1234678-HpCDD	424/426	41.82	1.04	10700	~~EB~~ JL	
1234789-HpCDF	408/410	42.17	1.08	167		
OCDD	458/460	44.27	0.89	17100	~~EB~~ JL	
OCDF	442/444	44.42	0.90	1100		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO #	ION RATIO LIMITS	% REC #	RECOVERY LIMITS
13C-2378-TCDD	332/334	27.27	0.80	0.65-0.89	78	25-164
13C-12378-PeCDD	368/370	34.20	1.61	1.32-1.78	81	25-181
13C-123478-HxCDD	402/404	38.24	1.31	1.05-1.43	86	32-141
13C-123678-HxCDD	402/404	38.34	1.43	1.05-1.43	75	28-130
13C-1234678-HpCDD	436/438	41.80	1.19	0.88-1.20	52	23-140
13C-OCDD	470/472	44.26	0.88	0.76-1.02	26	17-157
13C-2378-TCDF	316/318	25.80	0.79	0.65-0.89	71	24-169
13C-12378-PeCDF	352/354	32.55	1.52	1.32-1.78	75	24-185
13C-23478-PeCDF	352/354	33.84	1.56	1.32-1.78	68	21-178
13C-123478-HxCDF	384/386	37.28	0.52	0.43-0.59	80	26-152
13C-123678-HxCDF	384/386	37.41	0.52	0.43-0.59	67	26-123
13C-123789-HxCDF	384/386	38.93	0.53	0.43-0.59	69	29-147
13C-234678-HxCDF	384/386	38.05	0.54	0.43-0.59	75	28-136
13C-1234678-HpCDF	418/420	40.56	0.45	0.37-0.51	48	28-143
13C-1234789-HpCDF	418/420	42.15	0.46	0.37-0.51	30	26-138
37Cl-2378-TCDD	328/NA	27.33	NA	NA	80	35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

USEPA

1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044205

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917002

Sample wt/vol: 15.8 (g/ml)G Lab File ID: P100314B_11

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 69.8 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	150	x 1	=	150
2378-TCDF	386	x 0.1	=	38.6
12378-PeCDF	~~ND~~ 584	x 0.03	=	0.000
12378-PeCDD	763	x 1	=	763
23478-PeCDF	1180	x 0.3	=	354
123478-HxCDF	ND 1050	x 0.1	=	0.000
123678-HxCDF	790	x 0.1	=	79.0
123478-HxCDD	963	x 0.1	=	96.3
123678-HxCDD	2160	x 0.1	=	216
123789-HxCDD	1530	x 0.1	=	153
234678-HxCDF	1450	x 0.1	=	145
123789-HxCDF	191	x 0.1	=	19.1
1234678-HpCDF	4990	x 0.01	=	49.9
1234678-HpCDD	10700	x 0.01	=	107
1234789-HpCDF	167	x 0.01	=	1.67
OCDD	17100	x 0.0003	=	5.13
OCDF	1100	x 0.0003	=	0.330
		Total	=	~~2180~~ 2300.25

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM021.4 (1/02)

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1DFC - Form I-HR CDD-3
CDF SECOND COLUMN CONFIRMATION
HIGH RESOLUTION

SAMPLE No.
10044205

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917002
Sample wt/vol: 15.8 (g/ml)G Lab File ID: U100318A_12
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 69.8 Date Analyzed: 03/18/2010
GC Column: DB-225 ID: 0.25 (mm) Dilution Factor: 10.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDF	304/306	25.17	0.79		342	D	

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDF	316/318	25.12	0.77		0.65-0.89	103		24-169
37Cl-2378-TCDD	328/NA	22.69	NA		NA	94		35-197

Column to be used to flag values outside QC limits.

DLM02.0 (5/05)

USEPA

1DFA - Form I-HR CDD-1

CDD/CDF SAMPLE DATA SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044205

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917002

Sample wt/vol: 15.8 (g/ml)G Lab File ID: P100321B_06

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 69.8 Date Analyzed: 03/22/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 10.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322	26.92	0.76		80.9	D	
2378-TCDF	304/306	25.38	0.71		258	D	
12378-PeCDF	340/342	32.29	1.43		255	D	
12378-PeCDD	354/356	33.98	0.61		577	D	
23478-PeCDF	340/342	33.59	1.51		846	D	
123478-HxCDF	374/376	37.07	1.25		537	D	
123678-HxCDF	374/376	37.22	1.26		611	D	
123478-HxCDD	390/392	38.03	1.25		651	D	
123678-HxCDD	390/392	38.13	1.26		1530	D	
123789-HxCDD	390/392	38.42	1.34		995	D	
234678-HxCDF	374/376	37.86	1.23		975	D	
123789-HxCDF	374/376	38.77	1.29		130	D	
1234678-HpCDF	408/410	40.33	1.05		3090	D	
1234678-HpCDD	424/426	41.40	1.04		7620	D	
1234789-HpCDF	408/410	41.90	1.11		118	D	
OCDD	458/460	44.08	0.91		10800	D	
OCDF	442/444	44.22	0.89		645	D	

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDD	332/334	26.87	0.79		0.65-0.89	130		25-164
13C-12378-PeCDD	368/370	33.97	1.60		1.32-1.78	137		25-181
13C-123478-HxCDD	402/404	38.02	1.28		1.05-1.43	109		32-141
13C-123678-HxCDD	402/404	38.12	1.38		1.05-1.43	106		28-130
13C-1234678-HpCDD	436/438	41.40	1.06		0.88-1.20	76		23-140
13C-OCDD	470/472	44.06	0.90		0.76-1.02	46		17-157
13C-2378-TCDF	316/318	25.35	0.80		0.65-0.89	122		24-169
13C-12378-PeCDF	352/354	32.29	1.62		1.32-1.78	128		24-185
13C-23478-PeCDF	352/354	33.58	1.62		1.32-1.78	134		21-178
13C-123478-HxCDF	384/386	37.07	0.51		0.43-0.59	142		26-152
13C-123678-HxCDF	384/386	37.20	0.52		0.43-0.59	117		26-123
13C-123789-HxCDF	384/386	38.72	0.53		0.43-0.59	105		29-147
13C-234678-HxCDF	384/386	37.84	0.53		0.43-0.59	113		28-136
13C-1234678-HpCDF	418/420	40.31	0.45		0.37-0.51	85		28-143
13C-1234789-HpCDF	418/420	41.89	0.43		0.37-0.51	67		26-138
37Cl-2378-TCDD	328/NA	26.91	NA		NA	103		35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

USEPA

1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044205

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917002

Sample wt/vol: 15.8 (g/ml)G Lab File ID: P100321B_06

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 69.8 Date Analyzed: 03/22/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 10.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	80.9	x 1	=	80.9
2378-TCDF	258	x 0.1	=	25.8
12378-PeCDF	255	x 0.03	=	7.66
12378-PeCDD	577	x 1	=	577
23478-PeCDF	846	x 0.3	=	254
123478-HxCDF	537	x 0.1	=	53.7
123678-HxCDF	611	x 0.1	=	61.1
123478-HxCDD	651	x 0.1	=	65.1
123678-HxCDD	1530	x 0.1	=	153
123789-HxCDD	995	x 0.1	=	99.5
234678-HxCDF	975	x 0.1	=	97.5
123789-HxCDF	130	x 0.1	=	13.0
1234678-HpCDF	3090	x 0.01	=	30.9
1234678-HpCDD	7620	x 0.01	=	76.2
1234789-HpCDF	118	x 0.01	=	1.18
OCDD	10800	x 0.0003	=	3.23
OCDF	645	x 0.0003	=	0.194
		Total	=	1600

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM01.4 (1/02)

USEPA

2DF - Form II HR CDD

CDD/CDF TOTAL HOMOLOGUE CONCENTRATION SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044205

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917002

Sample wt/vol: 15.8 (g/ml)G Lab File ID: P100314B_11

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 69.8 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

HOMOLOGUE	PEAKS	CONCENTRATION	Q	EMPC/EDL
DIOXINS				
Total TCDD	19	52600	JL	0.302
Total PeCDD	10	59400		0.387
Total HxCDD	7	67700		4.80
Total HpCDD	2	23400	~~B~~	3.31
FURANS				
Total TCDF	32		JL	28500
Total PeCDF	27		J	19600
Total HxCDF	17		J	12800
Total HpCDF	4		J	6450

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids). The total homologue concentrations do not affect the TEF (Toxic Equivalent Factor) calculations.

DLM02.0 (5/05)

USEPA

2DF - Form II HR CDD

CDD/CDF TOTAL HOMOLOGUE CONCENTRATION SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044205

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917002

Sample wt/vol: 15.8 (g/ml)G Lab File ID: P100321B_06

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 69.8 Date Analyzed: 03/22/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 10.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

HOMOLOGUE	PEAKS	CONCENTRATION	Q	EMPC/EDL
DIOXINS				
Total TCDD	17	36400		3.09
Total PeCDD	10	41900		5.42
Total HxCDD	9	58300		11.2
Total HpCDD	2	19100		17.2
FURANS				
Total TCDF	30		JH	20500
Total PeCDF	25			12700
Total HxCDF	15			7810
Total HpCDF	5			3860

dilution run

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids). The total homologue concentrations do not affect the TEF (Toxic Equivalent Factor) calculations.

DLM02.0 (5/05)

USEPA

1DFA - Form I-HR CDD-1

CDD/CDF SAMPLE DATA SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044206

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917003

Sample wt/vol: 14.9 (g/ml)G Lab File ID: P100314B_10

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 73.7 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322					U	0.318
2378-TCDF	304/306	25.80	0.89		1.60		
12378-PeCDF	340/342	32.55	1.71		1.11	J Q	
12378-PeCDD	354/356	34.31	0.65		1.33	J Q	
23478-PeCDF	340/342	33.86	1.72				1.37
123478-HxCDF	374/376	37.37	1.29		2.20	J Q	
123678-HxCDF	374/376	37.51	1.27		2.34	J	
123478-HxCDD	390/392	38.29	1.16		1.18	J	
123678-HxCDD	390/392	38.41	1.24		4.60		
123789-HxCDD	390/392	38.70	1.23		2.45	J Q	
234678-HxCDF	374/376	38.13	1.40		3.36	J	
123789-HxCDF	374/376	39.01	0.85	*			0.840
1234678-HpCDF	408/410	40.62	1.01		21.3		
1234678-HpCDD	424/426	41.64	0.99		82.7	B	
1234789-HpCDF	408/410	42.14	6.92	*			7.89
OCDD	458/460	44.36	0.89		800	B	
OCDF	442/444	44.50	0.87		54.4		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDD	332/334	27.22	0.79		0.65-0.89	85		25-164
13C-12378-PeCDD	368/370	34.23	1.60		1.32-1.78	84		25-181
13C-123478-HxCDD	402/404	38.29	1.29		1.05-1.43	90		32-141
13C-123678-HxCDD	402/404	38.41	1.29		1.05-1.43	69		28-130
13C-1234678-HpCDD	436/438	41.63	1.09		0.88-1.20	41		23-140
13C-OCDD	470/472	44.34	0.90		0.76-1.02	19		17-157
13C-2378-TCDF	316/318	25.73	0.78		0.65-0.89	77		24-169
13C-12378-PeCDF	352/354	32.56	1.59		1.32-1.78	80		24-185
13C-23478-PeCDF	352/354	33.84	1.57		1.32-1.78	76		21-178
13C-123478-HxCDF	384/386	37.36	0.52		0.43-0.59	95		26-152
13C-123678-HxCDF	384/386	37.48	0.53		0.43-0.59	73		26-123
13C-123789-HxCDF	384/386	38.98	0.53		0.43-0.59	73		29-147
13C-234678-HxCDF	384/386	38.13	0.53		0.43-0.59	78		28-136
13C-1234678-HpCDF	418/420	40.60	0.45		0.37-0.51	32		28-143
13C-1234789-HpCDF	418/420	42.08	0.43		0.37-0.51	33		26-138
37Cl-2378-TCDD	328/NA	27.29	NA		NA	92		35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

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1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044206

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917003

Sample wt/vol: 14.9 (g/ml)G Lab File ID: P100314B_10

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 73.7 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	ND	x 1	=	0.000
2378-TCDF	1.60	x 0.1	=	0.160
12378-PeCDF	1.11	x 0.03	=	0.0333
12378-PeCDD	1.33	x 1	=	1.33
23478-PeCDF	ND	x 0.3	=	0.000
123478-HxCDF	2.20	x 0.1	=	0.220
123678-HxCDF	2.34	x 0.1	=	0.234
123478-HxCDD	1.18	x 0.1	=	0.118
123678-HxCDD	4.60	x 0.1	=	0.460
123789-HxCDD	2.45	x 0.1	=	0.245
234678-HxCDF	3.36	x 0.1	=	0.336
123789-HxCDF	ND	x 0.1	=	0.000
1234678-HpCDF	21.3	x 0.01	=	0.213
1234678-HpCDD	82.7	x 0.01	=	0.827
1234789-HpCDF	ND	x 0.01	=	0.000
OCDD	800	x 0.0003	=	0.240
OCDF	54.4	x 0.0003	=	0.0163
		Total	=	4.43

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM01.4 (1/02)

USEPA

1DFC - Form I-HR CDD-3
CDF SECOND COLUMN CONFIRMATION
HIGH RESOLUTION

SAMPLE No.
10044206

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917003
Sample wt/vol: 14.9 (g/ml)G Lab File ID: U100318A_08
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 73.7 Date Analyzed: 03/18/2010
GC Column: DB-225 ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDF	304/306	25.24	0.87		1.06		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDF	316/318	25.23	0.77		0.65-0.89	83		24-169
37Cl-2378-TCDD	328/NA	22.76	NA		NA	77		35-197

Column to be used to flag values outside QC limits.

DLM02.0 (5/05)

USEPA

2DF - Form II HR CDD

CDD/CDF TOTAL HOMOLOGUE CONCENTRATION SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044206

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917003

Sample wt/vol: 14.9 (g/ml)G Lab File ID: P100314B_10

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 73.7 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

HOMOLOGUE	PEAKS	CONCENTRATION	Q	EMPC/EDL
DIOXINS				
Total TCDD	6		JH	12.5
Total PeCDD	9			15.6
Total HxCDD	7			41.2
Total HpCDD	2	149		1.13
FURANS				
Total TCDF	17		JH	35.4
Total PeCDF	11			29.6
Total HxCDF	10			60.0
Total HpCDF	4			180

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids). The total homologue concentrations do not affect the TEF (Toxic Equivalent Factor) calculations.

DLM02.0 (5/05)

USEPA

1DFC - Form I-HR CDD-3
CDF SECOND COLUMN CONFIRMATION
HIGH RESOLUTION

SAMPLE No.
10044207

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917004
Sample wt/vol: 16.4 (g/ml)G Lab File ID: U100318A_10
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 68.2 Date Analyzed: 03/18/2010
GC Column: DB-225 ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDF	304/306	25.36	0.81		16.0		

ok

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDF	316/318	25.36	0.78		0.65-0.89	85		24-169
37Cl-2378-TCDD	328/NA	22.90	NA		NA	75		35-197

Column to be used to flag values outside QC limits.

DLM02.0 (5/05)

USEPA

1DFA - Form I-HR CDD-1

CDD/CDF SAMPLE DATA SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044207

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917004

Sample wt/vol: 16.4 (g/ml)G Lab File ID: P100321B_05

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 68.2 Date Analyzed: 03/22/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322	27.10	0.84		2.56		
2378-TCDF	304/306	25.58	0.72		19.0 ✓		
12378-PeCDF	340/342	32.51	1.44		16.9		
12378-PeCDD	354/356	34.21	0.65		12.3		
23478-PeCDF	340/342	33.77	1.61		29.9		
123478-HxCDF	374/376	37.33	1.23		32.8		
123678-HxCDF	374/376	37.46	1.22		30.3		
123478-HxCDD	390/392	38.26	1.24		9.07		
123678-HxCDD	390/392	38.37	1.22		30.5		
123789-HxCDD	390/392	38.65	1.32		16.5		
234678-HxCDF	374/376	38.12	1.22		35.4		
123789-HxCDF	374/376	38.97	1.11		8.41		
1234678-HpCDF	408/410	40.59	1.13		183		
1234678-HpCDD	424/426	41.62	1.04		702		
1234789-HpCDF	408/410	42.05	1.25	*		U	18.6
OCDD	458/460	44.34	0.91		7480	JH	
OCDF	442/444	44.47	0.91		340	JH	

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDD	332/334	27.07	0.82		0.65-0.89	87		25-164
13C-12378-PeCDD	368/370	34.15	1.59		1.32-1.78	75		25-181
13C-123478-HxCDD	402/404	38.25	1.25		1.05-1.43	89		32-141
13C-123678-HxCDD	402/404	38.35	1.24		1.05-1.43	77		28-130
13C-1234678-HpCDD	436/438	41.60	1.08		0.88-1.20	40		23-140
13C-OCDD	470/472	44.33	0.93		0.76-1.02	16	*	17-157
13C-2378-TCDF	316/318	25.57	0.79		0.65-0.89	83		24-169
13C-12378-PeCDF	352/354	32.47	1.62		1.32-1.78	70		24-185
13C-23478-PeCDF	352/354	33.75	1.62		1.32-1.78	76		21-178
13C-123478-HxCDF	384/386	37.31	0.52		0.43-0.59	103		26-152
13C-123678-HxCDF	384/386	37.44	0.52		0.43-0.59	74		26-123
13C-123789-HxCDF	384/386	38.94	0.53		0.43-0.59	98		29-147
13C-234678-HxCDF	384/386	38.09	0.53		0.43-0.59	92		28-136
13C-1234678-HpCDF	418/420	40.57	0.45		0.37-0.51	41		28-143
13C-1234789-HpCDF	418/420	42.05	0.44		0.37-0.51	30		26-138
37Cl-2378-TCDD	328/NA	27.10	NA		NA	84		35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

USEPA

1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044207

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917004

Sample wt/vol: 16.4 (g/ml)G Lab File ID: P100321B_05

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 68.2 Date Analyzed: 03/22/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	2.56	x 1	=	2.56
2378-TCDF	19.0	x 0.1	=	1.90
12378-PeCDF	16.9	x 0.03	=	0.508
12378-PeCDD	12.3	x 1	=	12.3
23478-PeCDF	29.9	x 0.3	=	8.98
123478-HxCDF	32.8	x 0.1	=	3.28
123678-HxCDF	30.3	x 0.1	=	3.03
123478-HxCDD	9.07	x 0.1	=	0.907
123678-HxCDD	30.5	x 0.1	=	3.05
123789-HxCDD	16.5	x 0.1	=	1.65
234678-HxCDF	35.4	x 0.1	=	3.54
123789-HxCDF	8.41	x 0.1	=	0.841
1234678-HpCDF	183	x 0.01	=	1.83
1234678-HpCDD	702	x 0.01	=	7.02
1234789-HpCDF	ND	x 0.01	=	0.000
OCDD	7480	x 0.0003	=	2.24
OCDF	340	x 0.0003	=	0.102
		Total	=	53.7

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM01.4 (1/02)

USEPA

2DF - Form II HR CDD

CDD/CDF TOTAL HOMOLOGUE CONCENTRATION SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044207

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917004

Sample wt/vol: 16.4 (g/ml)G Lab File ID: P100321B_05

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 68.2 Date Analyzed: 03/22/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

HOMOLOGUE	PEAKS	CONCENTRATION	Q	EMPC/EDL
DIOXINS				
Total TCDD	14		JH	142
Total PeCDD	8		↓	181
Total HxCDD	8	323		1.05
Total HpCDD	2	1510		1.80
FURANS				
Total TCDF	26		JL	537
Total PeCDF	17		JA	408
Total HxCDF	15		↓	421
Total HpCDF	4			442

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids). The total homologue concentrations do not affect the TEF (Toxic Equivalent Factor) calculations.

DLM02.0 (5/05)

USEPA

1DFA - Form I-HR CDD-1

CDD/CDF SAMPLE DATA SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044212

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917005

Sample wt/vol: 18.8 (g/ml)G Lab File ID: P100314B_06

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 54.0 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO #	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322				U	0.249
2378-TCDF	304/306	25.64	0.87	1.95		
12378-PeCDF	340/342	32.44	1.21 *		U	1.08
12378-PeCDD	354/356	34.16	0.53	0.556	J Q	
23478-PeCDF	340/342	33.72	1.33	1.03	J	
123478-HxCDF	374/376	37.15	1.42	0.767	J	
123678-HxCDF	374/376	37.28	1.37	0.553	J	
123478-HxCDD	390/392	38.11	1.40	0.358	J	
123678-HxCDD	390/392	38.21	1.29	0.597	J	
123789-HxCDD	390/392	38.50	1.42	0.403	J	
234678-HxCDF	374/376	37.92	1.29	0.784	J	
123789-HxCDF	374/376	38.81	0.88 *		U	0.211
1234678-HpCDF	408/410	40.37	1.01	2.13	J Q	
1234678-HpCDD	424/426	41.41	1.14	6.05		
1234789-HpCDF	408/410				U	0.306
OCDD	458/460	44.10	0.92	43.9		
OCDF	442/444	44.24	0.92	2.64	J Q	

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO #	ION RATIO LIMITS	% REC #	RECOVERY LIMITS
13C-2378-TCDD	332/334	27.09	0.80	0.65-0.89	79	25-164
13C-12378-PeCDD	368/370	34.06	1.63	1.32-1.78	105	25-181
13C-123478-HxCDD	402/404	38.09	1.26	1.05-1.43	84	32-141
13C-123678-HxCDD	402/404	38.19	1.29	1.05-1.43	89	28-130
13C-1234678-HpCDD	436/438	41.40	1.07	0.88-1.20	87	23-140
13C-OCDD	470/472	44.08	0.90	0.76-1.02	62	17-157
13C-2378-TCDF	316/318	25.60	0.80	0.65-0.89	77	24-169
13C-12378-PeCDF	352/354	32.41	1.57	1.32-1.78	88	24-185
13C-23478-PeCDF	352/354	33.68	1.59	1.32-1.78	96	21-178
13C-123478-HxCDF	384/386	37.14	0.52	0.43-0.59	84	26-152
13C-123678-HxCDF	384/386	37.27	0.52	0.43-0.59	82	26-123
13C-123789-HxCDF	384/386	38.80	0.52	0.43-0.59	85	29-147
13C-234678-HxCDF	384/386	37.92	0.52	0.43-0.59	84	28-136
13C-1234678-HpCDF	418/420	40.36	0.45	0.37-0.51	74	28-143
13C-1234789-HpCDF	418/420	41.86	0.45	0.37-0.51	73	26-138
37Cl-2378-TCDD	328/NA	27.12	NA	NA	77	35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

USEPA

1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044212

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917005

Sample wt/vol: 18.8 (g/ml)G Lab File ID: P100314B_06

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 54.0 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	ND	x 1	=	0.000
2378-TCDF	1.95	x 0.1	=	0.195
12378-PeCDF	ND	x 0.03	=	0.000
12378-PeCDD	0.556	x 1	=	0.556
23478-PeCDF	1.03	x 0.3	=	0.309
123478-HxCDF	0.767	x 0.1	=	0.0767
123678-HxCDF	0.553	x 0.1	=	0.0553
123478-HxCDD	0.358	x 0.1	=	0.0358
123678-HxCDD	0.597	x 0.1	=	0.0597
123789-HxCDD	0.403	x 0.1	=	0.0403
234678-HxCDF	0.784	x 0.1	=	0.0784
123789-HxCDF	ND	x 0.1	=	0.000
1234678-HpCDF	2.13	x 0.01	=	0.0213
1234678-HpCDD	6.05	x 0.01	=	0.0605
1234789-HpCDF	ND	x 0.01	=	0.000
OCDD	43.9	x 0.0003	=	0.0132
OCDF	2.64	x 0.0003	=	0.000792
		Total	=	1.50

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM01.4 (1/02)

USEPA

1DFC - Form I-HR CDD-3
CDF SECOND COLUMN CONFIRMATION
HIGH RESOLUTION

SAMPLE No.
10044212

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917005
Sample wt/vol: 18.8 (g/ml)G Lab File ID: U100318A_04
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 54.0 Date Analyzed: 03/18/2010
GC Column: DB-225 ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDF	304/306	25.06	0.88		1.68		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDF	316/318	25.05	0.78		0.65-0.89	75		24-169
37Cl-2378-TCDD	328/NA	22.60	NA		NA	77		35-197

Column to be used to flag values outside QC limits.

DLM02.0 (5/05)

USEPA

2DF - Form II HR CDD

CDD/CDF TOTAL HOMOLOGUE CONCENTRATION SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044212

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917005

Sample wt/vol: 18.8 (g/ml) G Lab File ID: P100314B_06

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 54.0 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

HOMOLOGUE	PEAKS	CONCENTRATION	Q	EMPC/EDL
DIOXINS				
Total TCDD	9	34.0		0.249
Total PeCDD	9		JH	18.2
Total HxCDD	8		JH	14.8
Total HpCDD	2	14.3	~~B~~	0.336
FURANS				
Total TCDF	20		JH	53.5
Total PeCDF	12			16.6
Total HxCDF	11			7.77
Total HpCDF	3	4.14	JQ	0.251

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids). The total homologue concentrations do not affect the TEF (Toxic Equivalent Factor) calculations.

DLM02.0 (5/05)

USEPA

1DFA - Form I-HR CDD-1

CDD/CDF SAMPLE DATA SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044213

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917006

Sample wt/vol: 22.6 (g/ml)G Lab File ID: P100314B_07

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 46.5 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322					U	0.404
2378-TCDF	304/306	25.64	0.65		2.18		
12378-PeCDF	340/342	32.42	1.73		0.752	J Q	
12378-PeCDD	354/356	34.12	0.71	*		W	0.850
23478-PeCDF	340/342	33.69	1.35		1.19	J Q	
123478-HxCDF	374/376	37.15	1.35		0.610	J	
123678-HxCDF	374/376	37.30	1.37		0.467	J	
123478-HxCDD	390/392	38.11	1.28		0.268	J	
123678-HxCDD	390/392	38.22	1.38		0.580	J	
123789-HxCDD	390/392	38.48	1.17		0.481	J	
234678-HxCDF	374/376	37.93	1.21		0.599	J	
123789-HxCDF	374/376					U	0.137
1234678-HpCDF	408/410	40.38	1.06		2.06	J Q	
1234678-HpCDD	424/426	41.41	1.06		5.28		
1234789-HpCDF	408/410					U	0.279
OCDD	458/460	44.09	0.90		33.6		
OCDF	442/444	44.24	0.99		2.35	J Q	

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDD	332/334	27.10	0.79		0.65-0.89	76		25-164
13C-12378-PeCDD	368/370	34.06	1.62		1.32-1.78	98		25-181
13C-123478-HxCDD	402/404	38.09	1.28		1.05-1.43	86		32-141
13C-123678-HxCDD	402/404	38.19	1.30		1.05-1.43	83		28-130
13C-1234678-HpCDD	436/438	41.40	1.09		0.88-1.20	81		23-140
13C-OCDD	470/472	44.08	0.89		0.76-1.02	57		17-157
13C-2378-TCDF	316/318	25.60	0.80		0.65-0.89	71		24-169
13C-12378-PeCDF	352/354	32.41	1.62		1.32-1.78	85		24-185
13C-23478-PeCDF	352/354	33.68	1.57		1.32-1.78	90		21-178
13C-123478-HxCDF	384/386	37.14	0.51		0.43-0.59	79		26-152
13C-123678-HxCDF	384/386	37.28	0.52		0.43-0.59	80		26-123
13C-123789-HxCDF	384/386	38.80	0.52		0.43-0.59	84		29-147
13C-234678-HxCDF	384/386	37.92	0.52		0.43-0.59	82		28-136
13C-1234678-HpCDF	418/420	40.37	0.44		0.37-0.51	74		28-143
13C-1234789-HpCDF	418/420	41.87	0.43		0.37-0.51	69		26-138
37Cl-2378-TCDD	328/NA	27.10	NA		NA	74		35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

USEPA

1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044213

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917006

Sample wt/vol: 22.6 (g/ml)G Lab File ID: P100314B_07

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 46.5 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	ND	x 1	=	0.000
2378-TCDF	2.18	x 0.1	=	0.218
12378-PeCDF	0.752	x 0.03	=	0.0226
12378-PeCDD	ND	x 1	=	0.000
23478-PeCDF	1.19	x 0.3	=	0.357
123478-HxCDF	0.610	x 0.1	=	0.0610
123678-HxCDF	0.467	x 0.1	=	0.0467
123478-HxCDD	0.268	x 0.1	=	0.0268
123678-HxCDD	0.580	x 0.1	=	0.0580
123789-HxCDD	0.481	x 0.1	=	0.0481
234678-HxCDF	0.599	x 0.1	=	0.0599
123789-HxCDF	ND	x 0.1	=	0.000
1234678-HpCDF	2.06	x 0.01	=	0.0206
1234678-HpCDD	5.28	x 0.01	=	0.0528
1234789-HpCDF	ND	x 0.01	=	0.000
OCDD	33.6	x 0.0003	=	0.0101
OCDF	2.35	x 0.0003	=	0.000705
		Total	=	0.982

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM01.4 (1/02)

USEPA

1DFC - Form I-HR CDD-3
CDF SECOND COLUMN CONFIRMATION
HIGH RESOLUTION

SAMPLE No.
10044213

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917006
Sample wt/vol: 22.6 (g/ml)G Lab File ID: U100318A_05
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 46.5 Date Analyzed: 03/18/2010
GC Column: DB-225 ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDF	304/306	25.09	0.76		1.56		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDF	316/318	25.03	0.76		0.65-0.89	74		24-169
37Cl-2378-TCDD	328/NA	22.58	NA		NA	78		35-197

Column to be used to flag values outside QC limits.

DLM02.0 (5/05)

USEPA

2DF - Form II HR CDD

CDD/CDF TOTAL HOMOLOGUE CONCENTRATION SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044213

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917006

Sample wt/vol: 22.6 (g/ml)G Lab File ID: P100314B_07

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 46.5 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

HOMOLOGUE	PEAKS	CONCENTRATION	Q	EMPC/EDL
DIOXINS				
Total TCDD	10	55.6 ✓		0.404
Total PeCDD	8		JH	24.2
Total HxCDD	8		JH	14.6
Total HpCDD	2	11.6	B	0.375
FURANS				
Total TCDF	19		JH	65.9
Total PeCDF	11		JH	20.6
Total HxCDF	9		JH	6.38
Total HpCDF	2		JH	3.51

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids). The total homologue concentrations do not affect the TEF (Toxic Equivalent Factor) calculations.

DLM02.0 (5/05)

USEPA

1DFA - Form I-HR CDD-1
CDD/CDF SAMPLE DATA SUMMARY
HIGH RESOLUTION

SAMPLE No.
10044217

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917007
Sample wt/vol: 49.0 (g/ml)G Lab File ID: P100314B_08
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 21.3 Date Analyzed: 03/14/2010
GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322	27.12	0.74		2.24		
2378-TCDF	304/306	25.67	0.70		8.32		
12378-PeCDF	340/342	32.41	1.51		5.61		
12378-PeCDD	354/356	34.12	0.65		4.30	J Q	
23478-PeCDF	340/342	33.69	1.51		7.29		
123478-HxCDF	374/376	37.15	1.20		4.30	J Q	
123678-HxCDF	374/376	37.28	1.22		7.38		
123478-HxCDD	390/392	38.12	1.24		2.75	J Q	
123678-HxCDD	390/392	38.24	1.18		8.62		
123789-HxCDD	390/392	38.52	1.29		5.28		
234678-HxCDF	374/376	37.96	1.17		5.70		
123789-HxCDF	374/376	38.86	0.89	*		U	1.56
1234678-HpCDF	408/410	40.39	1.05		24.0		
1234678-HpCDD	424/426	41.44	1.06		183	~~B~~	
1234789-HpCDF	408/410	41.93	1.31	*		~~B~~ U	2.00
OCDD	458/460	44.12	0.90		1900	~~B~~	
OCDF	442/444	44.27	0.90		31.8		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDD	332/334	27.12	0.80		0.65-0.89	86		25-164
13C-12378-PeCDD	368/370	34.09	1.61		1.32-1.78	103		25-181
13C-123478-HxCDD	402/404	38.12	1.30		1.05-1.43	79		32-141
13C-123678-HxCDD	402/404	38.22	1.28		1.05-1.43	87		28-130
13C-1234678-HpCDD	436/438	41.43	1.07		0.88-1.20	65		23-140
13C-OCDD	470/472	44.11	0.91		0.76-1.02	54		17-157
13C-2378-TCDF	316/318	25.66	0.79		0.65-0.89	83		24-169
13C-12378-PeCDF	352/354	32.42	1.58		1.32-1.78	84		24-185
13C-23478-PeCDF	352/354	33.71	1.57		1.32-1.78	92		21-178
13C-123478-HxCDF	384/386	37.17	0.54		0.43-0.59	79		26-152
13C-123678-HxCDF	384/386	37.30	0.51		0.43-0.59	76		26-123
13C-123789-HxCDF	384/386	38.83	0.52		0.43-0.59	80		29-147
13C-234678-HxCDF	384/386	37.93	0.51		0.43-0.59	78		28-136
13C-1234678-HpCDF	418/420	40.39	0.45		0.37-0.51	68		28-143
13C-1234789-HpCDF	418/420	41.90	0.44		0.37-0.51	67		26-138
37Cl-2378-TCDD	328/NA	27.15	NA		NA	84		35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

USEPA

1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044217

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917007

Sample wt/vol: 49.0 (g/ml)G Lab File ID: P100314B_08

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 21.3 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	2.24	x 1	=	2.24
2378-TCDF	8.32	x 0.1	=	0.832
12378-PeCDF	5.61	x 0.03	=	0.168
12378-PeCDD	4.30	x 1	=	4.30
23478-PeCDF	7.29	x 0.3	=	2.19
123478-HxCDF	4.30	x 0.1	=	0.430
123678-HxCDF	7.38	x 0.1	=	0.738
123478-HxCDD	2.75	x 0.1	=	0.275
123678-HxCDD	8.62	x 0.1	=	0.862
123789-HxCDD	5.28	x 0.1	=	0.528
234678-HxCDF	5.70	x 0.1	=	0.570
123789-HxCDF	ND	x 0.1	=	0.000
1234678-HpCDF	24.0	x 0.01	=	0.240
1234678-HpCDD	183	x 0.01	=	1.83
1234789-HpCDF	ND	x 0.01	=	0.000
OCDD	1900	x 0.0003	=	0.570
OCDF	31.8	x 0.0003	=	0.00954
		Total	=	15.8

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM01.4 (1/02)

USEPA

1DFC - Form I-HR CDD-3
CDF SECOND COLUMN CONFIRMATION
HIGH RESOLUTION

SAMPLE No.
10044217

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917007
Sample wt/vol: 49.0 (g/ml)G Lab File ID: U100318A_06
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 21.3 Date Analyzed: 03/18/2010
GC Column: DB-225 ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDF	304/306	25.15	0.79		10.3		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDF	316/318	25.14	0.74		0.65-0.89	82		24-169
37Cl-2378-TCDD	328/NA	22.70	NA		NA	76		35-197

Column to be used to flag values outside QC limits.

DLM02.0 (5/05)

USEPA

1DFA - Form I-HR CDD-1

CDD/CDF SAMPLE DATA SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044218

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917008

Sample wt/vol: 56.9 (g/ml)G Lab File ID: P100314B_09

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 19.3 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDD	320/322	27.16	0.85		4.04		
2378-TCDF	304/306	25.69	0.75		20.1		
12378-PeCDF	340/342	32.45	1.48		11.5		
12378-PeCDD	354/356	34.15	0.61		8.10		
23478-PeCDF	340/342	33.75	1.49		16.8		
123478-HxCDF	374/376	37.18	1.22		11.6		
123678-HxCDF	374/376	37.33	1.21		11.2		
123478-HxCDD	390/392	38.13	1.29		4.89		
123678-HxCDD	390/392	38.24	1.27		16.0		
123789-HxCDD	390/392	38.54	1.27		9.53		
234678-HxCDF	374/376	37.96	1.19		11.1		
123789-HxCDF	374/376	38.86	0.96	*		U	2.75
1234678-HpCDF	408/410	40.40	1.06		41.5		
1234678-HpCDD	424/426	41.44	1.04		296	~~B~~	
1234789-HpCDF	408/410	41.92	1.01		3.47	J Q	
OCDD	458/460	44.14	0.90		2990	~~B~~	
OCDF	442/444	44.28	0.95		48.0		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDD	332/334	27.12	0.80		0.65-0.89	81		25-164
13C-12378-PeCDD	368/370	34.12	1.60		1.32-1.78	109		25-181
13C-123478-HxCDD	402/404	38.12	1.27		1.05-1.43	83		32-141
13C-123678-HxCDD	402/404	38.22	1.28		1.05-1.43	84		28-130
13C-1234678-HpCDD	436/438	41.43	1.10		0.88-1.20	63		23-140
13C-OCDD	470/472	44.12	0.90		0.76-1.02	51		17-157
13C-2378-TCDF	316/318	25.63	0.79		0.65-0.89	79		24-169
13C-12378-PeCDF	352/354	32.44	1.58		1.32-1.78	90		24-185
13C-23478-PeCDF	352/354	33.72	1.58		1.32-1.78	97		21-178
13C-123478-HxCDF	384/386	37.17	0.53		0.43-0.59	80		26-152
13C-123678-HxCDF	384/386	37.31	0.54		0.43-0.59	77		26-123
13C-123789-HxCDF	384/386	38.83	0.52		0.43-0.59	78		29-147
13C-234678-HxCDF	384/386	37.95	0.52		0.43-0.59	78		28-136
13C-1234678-HpCDF	418/420	40.39	0.45		0.37-0.51	61		28-143
13C-1234789-HpCDF	418/420	41.90	0.45		0.37-0.51	61		26-138
37Cl-2378-TCDD	328/NA	27.16	NA		NA	81		35-197

DLM02.0 (5/05) # Column to be used to flag values outside QC limits.

USEPA

1DFB - Form I-HR CDD-2

CDD/CDF TOXICITY EQUIVALENCE SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044218

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917008

Sample wt/vol: 56.9 (g/ml)G Lab File ID: P100314B_09

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 19.3 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	CONCENTRATION	TEF*		TEF-ADJUSTED CONCENTRATION
2378-TCDD	4.04	x 1	=	4.04
2378-TCDF	20.1	x 0.1	=	2.01
12378-PeCDF	11.5	x 0.03	=	0.345
12378-PeCDD	8.10	x 1	=	8.10
23478-PeCDF	16.8	x 0.3	=	5.04
123478-HxCDF	11.6	x 0.1	=	1.16
123678-HxCDF	11.2	x 0.1	=	1.12
123478-HxCDD	4.89	x 0.1	=	0.489
123678-HxCDD	16.0	x 0.1	=	1.60
123789-HxCDD	9.53	x 0.1	=	0.953
234678-HxCDF	11.1	x 0.1	=	1.11
123789-HxCDF	ND	x 0.1	=	0.000
1234678-HpCDF	41.5	x 0.01	=	0.415
1234678-HpCDD	296	x 0.01	=	2.96
1234789-HpCDF	3.47	x 0.01	=	0.0347
OCDD	2990	x 0.0003	=	0.897
OCDF	48.0	x 0.0003	=	0.0144
		Total	=	30.3

* TEF - Toxicity Equivalent Factors from World Health Organization.

DLM01.4 (1/02)

USEPA

1DFC - Form I-HR CDD-3
CDF SECOND COLUMN CONFIRMATION
HIGH RESOLUTION

SAMPLE No.
10044218

Lab Name: PACE ANALYTICAL Contract: EP05W001656
Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204
Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917008
Sample wt/vol: 56.9 (g/ml)G Lab File ID: U100318A_07
Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010
Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010
Injection Volume: 1.0 (uL) %Solid/Lipids: 19.3 Date Analyzed: 03/18/2010
GC Column: DB-225 ID: 0.25 (mm) Dilution Factor: 1.0
CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

TARGET ANALYTE	SELECTED IONS	PEAK RT	ION RATIO	#	CONCENTRATION	Q	EMPC/EDL
2378-TCDF	304/306	25.17	0.79		19.7		

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids).

LABELED COMPOUNDS	SELECTED IONS	PEAK RT	ION RATIO	#	ION RATIO LIMITS	% REC	#	RECOVERY LIMITS
13C-2378-TCDF	316/318	25.14	0.76		0.65-0.89	84		24-169
37Cl-2378-TCDD	328/NA	22.69	NA		NA	73		35-197

Column to be used to flag values outside QC limits.

DLM02.0 (5/05)

USEPA

2DF - Form II HR CDD

CDD/CDF TOTAL HOMOLOGUE CONCENTRATION SUMMARY

HIGH RESOLUTION

SAMPLE No.

10044218

Lab Name: PACE ANALYTICAL Contract: EP05W001656

Lab Code: PASI Case No.: 39444 TO No.: SDG No.: 10044204

Matrix: (SOIL/WATER/ASH/TISSUE/OIL) SOIL Lab Sample ID: 10122917008

Sample wt/vol: 56.9 (g/ml)G Lab File ID: P100314B_09

Water Sample Prep: (SEPF/SPE) Date Received: 02/23/2010

Concentrated Extract Volume: 20.0 (uL) Date Extracted: 03/08/2010

Injection Volume: 1.0 (uL) %Solid/Lipids: 19.3 Date Analyzed: 03/14/2010

GC Column: DB-5MS ID: 0.25 (mm) Dilution Factor: 1.0

CONCENTRATION UNITS: (pg/L or ng/Kg) ng/kg

HOMOLOGUE	PEAKS	CONCENTRATION	Q	EMPC/EDL
DIOXINS				
Total TCDD	17	678	JL	0.354
Total PeCDD	10	336		0.622
Total HxCDD	8		JH	241
Total HpCDD	2	544		1.67
FURANS				
Total TCDF	29		JL	1100
Total PeCDF	19		JH	424
Total HxCDF	17			222
Total HpCDF	5			124

NOTE: Concentrations, Estimated Maximum Possible Concentrations (EMPCs), and Estimated Detection Levels (EDLs) for solid samples are calculated on a dry weight basis (except tissues, which are reported on a wet weight basis with % Lipids). The total homologue concentrations do not affect the TEF (Toxic Equivalent Factor) calculations.

DLM02.0 (5/05)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

March 26, 2010

MEMORANDUM

SUBJECT: Data validation report for the Volatile Organic (VOC), Semi-Volatile Organic (SVOC / SIM), Organochlorine Pesticide (Pest) and Polychlorinated Biphenyl (PCB) analyses of samples from the Makah Warmhouse Beach Dump Site Case: 39444 SDG: JC651

FROM: Raymond Wu, QA Chemist
Office of Environmental Assessment 3/29/10

TO: Kathy Parker, On-Scene Coordinator, ECL-116
Office of Environmental Cleanup

CC: Amy Dahl, Data Manager
TechLaw, Inc.

The quality assurance (QA) review of 19 soil samples collected from the above referenced site has been completed. The samples were analyzed for VOC, SVOC / SIM, Pesticide, and PCB in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Concentration Organic Analysis (SOM01.2) by Shealy Environmental Services, Inc., Cayce, South Carolina. The following samples were evaluated in this validation report:

SDG: JC651

JC651	JC652	JC653	JC655	JC656	JC657	JC658
JC659	JC660	JC662	JC663	JC665	JC666	JC667
JC668	JC669	JC670	JC671	JC672		

DATA QUALIFICATIONS

The following comments refer to the laboratory performance specification outlined in the Site Specific Sampling Plan (for Warmhouse Beach Open Dump site @ Neah Bay, WA) dated January 11, 2010, USEPA CLP SOW for Organic Analysis (SOM01.2, 05/2008), and applicable criteria set forth in the USEPA CLP National Functional Guidelines for Organic Data Review (07/2007). Note that some of the analytical data reported may be qualified based on the professional judgment of the data reviewer.

The conclusions presented herein were based on the information provided for the review.

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Holding Time

All of the samples met the Validated Time of Sample Receipt (VTSR), extraction, and analytical holding time criteria for VOC, SVOC, Pesticide and PCB analyses. The samples were collected on 1/26/10 – 1/27/10, received by the laboratory on 2/2/10, preserved on ice, analyzed for VOC within 14 days of sample collection & extracted within 14 days of sample collection for the SVOC, 5 days of VTSR for Pesticide and PCB. The samples were analyzed for SVOC, Pesticide and PCB within 40 days of sample collection. The cooler temperatures, upon the verified time of sample receipt (VTSR), were at 3 °C - 4°C. That was within the acceptable limits of 2-10 °C. None of the data was qualified on this basis. The only exception was JC668 (SIM). It was extracted out of holding time. As the result, all the PAHs for that sample were qualified J/UJ.

Instrument Performance Checks - Acceptable

Three GC/MS & two GC systems were used for the sample analyses which met the performance checks, ion abundance criteria and retention time stability checks. All of the samples were analyzed within acceptable 12-hour QC periods. The instruments used remained stable throughout the course of analyses. None of the data was qualified on this basis.

Initial Calibrations (ICAL)

Volatile - Acceptable

One Volatile ICAL was evaluated in this report. It met the technical acceptance criteria set forth by the SOW for the percent relative standard deviation (%RSDs), chromatographic resolutions, retention times, and the minimum relative response factors (RRFs) for all target compounds and surrogates. None was qualified on this basis.

Semivolatile (SVOC) / SIM

Four Semivolatile ICALs (3 SVOC & 1 SIM) were evaluated in this report. The first two SVOC ICALs and the SIM ICAL met the technical acceptance criteria set forth by the SOW for the percent relative standard deviation (%RSD), chromatographic resolutions, retention times, and the minimum relative response factors (RRFs) for all target compounds and surrogates and none was qualified on this basis. However, the last SVOC ICAL ran on 3/4/10 @ 14:55 had the %RSD of Benzaldehyde (40%) exceeded the control limit of 30%. Recalculation of the %RSD indicated that Benzaldehyde was not linear at the low end of the curve. This compound was qualified J/UJ for the associated samples.

Pesticide / PCBs - Acceptable

- The frequency of analysis of ICALs for pesticides and PCBs were met. All of the ICALs met the technical acceptance criteria, i.e. the percent relative standard deviation (%RSD), minimum relative response factors (RRFs), retention time windows, chromatographic resolutions, percent endrin and 4,4'-DDT breakdown (Pesticide only) for all target compounds and surrogates. None of the results was qualified on the basis of ICAL analyses.

Continuing Calibration Verification (CCV)

The frequency of analysis of CCV checks, chromatographic resolution, percent differences (%Ds) between the mean and daily response (calibration) factors, minimum response factors, retention time shifts and percent DDT and endrin breakdowns (pesticide analyses) were met by all target compounds and surrogates. The recoveries of the pesticide standard mixtures were within the control limits. The only exceptions were:

SVOCs

Date/Time of Analysis/ Inst.	Compound	%D	Qualifier Detect/Non-detect	Associated Samples
3/3/10 00:34 (opening ccv, MSD4)	Hexachlorocyclopentadiene	-39.6	J/UJ	JC667 -> JC672
3/3/10 13:45 (opening ccv, MSD4)	2,4,5-Trichlorophenol	33.7	J/None	JC651, JC652 JC656
3/5/10 13:45 (opening ccv, MSD4).	Benzaldehyde	35.5	J/None	JC651, JC652 JC656

PEST

Date/Time of Analysis/ Inst.	Compound	%D (primary/secondary)	Qualifier Detect/Non-detect	Associated Samples
2/24/10 19:34 (closing ccv, MSD4)	4,4'-DDT	24% / 22%	J/None	JC651 -> JC653 JC655 -> JC660 JC662 -> JC663 JC665 -> JC672

Quantitation Limits - Acceptable

The sample results were adjusted for the amount extracted. All of the sample runs met the contract required quantitation limits (CRQLs). The CRQLs were based on the lowest standard concentration analyzed in the initial calibration. Target compounds that were detected at concentrations less than the CRQLs were qualified as estimated, "J". When applicable, all of the "B", "J", "P", "D" and "A" qualifiers applied by the laboratory were crossed out by the reviewer.

Blanks

The frequency of analysis of blank and surrogate recovery criteria were met by all of the blanks analyzed with exceptions of the volatile method blanks, storage blank and the method blank for the pesticide analyses. There were trace amount of Chloroform and 2-Hexanone detected in the first volatile method blank. In addition, there were trace amount of Chloroform, Acetone, 2-Hexanone, 1,2,4-Trichlorobenzene and 1,2,3-Trichlorobenzene in the second volatile method blank. Furthermore, there were trace amount of Acetone, Chloroform and 2-Hexanone found in the storage blank. Also, there were trace amount of Beta-BHC, Heptachlor, 4,4'-DDT, Methoxychlor and

Endrin Aldehyde found in the pesticide method blank. When detected in samples, concentrations less than 10x the blank values, were qualified as non-detects, "U", at the level of detection, or reported "U" at the CRQL. (Note: SBLK 22 in SIM was not used by the reviewer in the evaluation of the data in this SDG)

Analytical Sequence - Acceptable

All of the standards, blanks, samples, and QC samples were analyzed in accordance with the SOW specified analytical sequence. The retention times as monitored by the internal standards (VOC, SVOC) and surrogates (VOC, SVOC, Pesticide, PCB) were within the specified RT windows. All of the sample analyses were within an acceptable 12 hour QC period and were bracketed by technically acceptable CCV check standards. None of the data was qualified on this basis.

Surrogates/Deuterated Monitoring Compound (DMC) Recoveries

Fourteen deuterated VOCs were spiked in all the samples and QCs to evaluate laboratory performance. The 14 DMCs and their corresponding recovery acceptance limits are:

"Volatile Soil"

DMCs	Recovery Limits (%)	DMCs	Recovery Limits (%)
Vinyl chloride -d3 (VCL)	68-122	1,2- Dichloropropane-d6 (DPA)	74-124
Chloroethane-d5 (CLA)	61-130	Toluene-d8 (TOL)	78–121
1,1- Dichloroethene-d2 (DCE)	45-132	trans-1,3-dichloropropene-d4 (TDP)	72-130
2-Butanone-d5 (BUT)	20-182	2-Hexanone-d5 (HEX)	17-184
Chloroform-d (CLF)	72-123	1,4-Dioxane (DXE)	50-150
1,2-Dichloroethane-d4 (DCA)	79-122	1,1,2,2-Tetrachloroethane-d2 (TCA)	56 –161
Benzene-d6 (BEN)	80-121	1,2-dichlorobenzene-d4 (DCZ)	70 –131

All of the soil volatile surrogate recoveries met the applicable recovery criteria with exceptions of the following:

Sample	DMC	%Recovery	Qualification Detects/Non-detects	Associated VOCs
JC652	BEN	128	J/None	Benzene
	DPA	127	J/None	Cyclohexane, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane
	DCZ	64	J/UJ	Chlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene
JC660	TDP	66	J/UJ	Cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane

JC665	TDP	61	J/UJ	Cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane
	DCZ	51	J/UJ	Chlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene
	DXE	279	J/None	1,4-Dioxane
JC666	TDP	62	J/UJ	Cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane
	DCZ	48	J/UJ	Chlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene
JC667	TDP	57	J/UJ	Cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane
	HEX	13	J/UJ	4-Methyl-2-pentanone, 2-Hexanone
	DCZ	52	J/UJ	Chlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene
JC668	BEN	127	J/None	Benzene

Surrogates or deuterated monitoring compounds (DMCs) are known concentrations of isotope-labeled acid and base/neutral or polynuclear hydrocarbon compounds added to the field and QC samples prior to extraction for SVOC analyses to monitor the laboratory's performance and efficiency, and efficiency during sample processing, extraction and analysis. The following is the list of DMCs/surrogates added to all field and QC samples prior to sample extraction:

"SVOC Soil"

DMCs	Recovery Limits (%)	DMCs	Recovery Limits (%)
Phenol-d5 (PHL)	17-103	Dimethylphthalate-d6 (DMP)	43-111
Bis(2-chloroethyl)ether-d8 (BCE)	12-98	Acenapthylene-d8 (ACY)	20-97
2-Chlorophenol-d4 (2CP)	13-101	4-Nitrophenol-d4 (4NP)	16-166
4-Methylphenol-d8 (4MP)	8-100	Fluorene-d10 (FLR)	40-108
Nitrobenzene-d4 (NBZ)	16-103	4,6-Dinitro-2-methylphenol-d2 (NMP)	1-121
2-Nitrophenol-d4 (2NP)	16-104	Anthracene-d10 (ANC)	22-98
2,4-Dichlorophenol-d3 (DCP)	23-104	Pyrene-d10 (PYR)	51-120
4-Chloroaniline-d4 (4CA)	1-145	Benzo(a)pyrene-d12 (BAP)	43-111
Fluoranthene-d10 (SIM)	50-150	2-Methylnaphthalene-d10 (SIM)	50-150

All of the soil semivolatile surrogate recoveries met the applicable recovery criteria with exceptions of the following:

Sample	DMC	%Recovery	Qualification Detects/Non-detects	Associated SVOCs
JC666	PHL	15	J/UJ	Benzaldehyde, Phenol

All of the soil SIM surrogate recoveries met the applicable recovery criteria with exceptions of the following:

Sample	DMC	%Recovery	Qualification Detects/Non-detects	Associated SIM SVOCs
JC666	2MN	43	J/UJ	Naphthalene, 2-Methylnapthalene, Acenapthylene, Acenaphthene, Fluorene, Pentachlorophenol, Phenanthrene, Anthracene

"Pesticide/PCB Soil"

Pesticide/PCB Surrogate (Soil)	Recovery Limits (%)
Tetrachloro-m-xylene (TCX)	30-150
Decachlorobiphenyl (DCB)	30-150

The recoveries of TCX and DCB were calculated and reported from two GCs & four columns used for both pesticide and PCB analyses. The TCX and DCB recoveries were within acceptable control limits in at least one of the two columns on either instrument. None of the data was qualified on this basis.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) - Acceptable

Sample JC668 was designated for MS/MSD analyses. The frequency of analysis and percent recovery (%R) passed for each of the spiking analytes. None of the data was qualified by the reviewer on this basis.

Internal Standards

The acceptance criteria for internal standards (IS) was within +/- 30 seconds for retention time (RT) shifts and 50% to 200% of the IS area as compared to the IS RT and area of the daily continuing verification standard. All of the analyses met the IS area & RT criteria with exceptions of the following:

(Note: For volatiles, JC652, JC655RE, JC656RE, JC659RE were selected to report by the reviewer. Please disregard JC652RE, JC655, JC656, JC659; For SIM, JC666 and JC668 were selected to report by the reviewer. Please disregard JC666RX and JC668RX. Also see form 1s and table at the end of the report for reference.)

Volatiles

Samples	Int Std / Out +/-	Qualifier	Associated Target Compounds
JC652	IS3 / -	J/UJ	Bromoform, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-Chloropropane, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene
JC655RE	IS3 / -	J/UJ	"
JC656RE	IS3 / -	J/UJ	"
JC659RE	IS3 / -	J/UJ	"
JC652RE	IS3 / -	J/UJ	"
JC655	IS3 / -	J/UJ	"
JC656	IS3 / -	J/UJ	"
JC659	IS3 / -	J/UJ	"
JC668	IS3 / -	J/UJ	"

SIM

Samples	Int Std / Out +/-	Qualifier	Associated Target Compounds
JC665	IS2 -> IS6 / +	J/None	2-Methylnaphthalene, Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Pentachlorophenol, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)Fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene
JC666	IS2, IS3, IS5, IS6 / +	J/None	2-Methylnaphthalene, Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)Fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene
JC669	IS2, IS5 / -	J/UJ	2-Methylnaphthalene, Naphthalene, Pyrene, Benzo(a)anthracene, Chrysene

JC670	IS2 -> IS6	J/UJ	2-Methylnaphthalene, Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Pentachlorophenol, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)Fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene
JC671	IS2 -> IS6	J/UJ	2-Methylnaphthalene, Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Pentachlorophenol, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)Fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene

Compound Identification - Acceptable

All of the detected target compounds were within the retention time windows, met the USEPA spectral matching criteria and were judged to be acceptable. None of the data was qualified on this basis.

Tentatively Identified Compounds

Chromatographic peaks in the samples with areas > 10% of the nearest Internal Standard, but not part of the target compound list, were identified as tentatively identified compounds (TICs) at estimated concentrations, "JN"

Laboratory Contact

The lab was contacted by e-mail during this review regarding the omissions of superimposed aroclor chromatograms.

Overall Assessment

The total number of data points evaluated was 2831. As the result of the data validation, data results were qualified as follows: 10.2% of the total data points were qualified as non-detects, "U"; 0.5% of them were qualified due to calibration; 1.4% of them were qualified due to failing surrogates; 2.8% of them were qualified due to failing internal standards.

The data, as qualified, are acceptable and can be used for all purposes.

Compound	JC651	JC652	JC653	JC655	JC656	JC657	JC658	JC659	JC660	JC662
Naphthalene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
2-Methylnaphthalene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Acenaphthylene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Acenaphthene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Fluorene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Phenanthrene	SIM	SIM	SIM	SIM+	SIM+	SIM	SIM	SIM	SIM	SIM
Anthracene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Fluoranthene	SIM	SIM	SIM	SIM+	SIM+	SIM	SIM	SIM	SIM	SIM
Pyrene	SIM+	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Benzo(a)anthracene	SIM	SIM	SIM	SIM+	SIM+	SIM	SIM	SIM	SIM	SIM
Chrysene	SIM	SIM	SIM	SIM+	SIM+	SIM	SIM	SIM	SIM	SIM
Benzo(b)fluoranthene	SIM	SIM	SIM	SIM+	SIM+	SIM	SIM	SIM	SIM	SIM
Benzo(k)fluoranthene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM

Benzo(a)pyrene	SIM	SIM	SIM	SIM+	SIM+	SIM	SIM	SIM	SIM	SIM
Indeno(1,2,3-cd)pyrene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Dibenzo(a,h)anthracene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Benzo(g,h,i)perylene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM

Compound	**JC663**	**JC665**	**JC666**	**JC667**	**JC668**	**JC669**	**JC670**	**JC671**	**JC672**
Naphthalene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
2-Methylnaphthalene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Acenaphthylene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Acenaphthene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Fluorene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Phenanthrene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Anthracene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Fluoranthene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Pyrene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Benzo(a)anthracene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Chrysene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Benzo(b)fluoranthene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Benzo(k)fluoranthene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Benzo(a)pyrene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Indeno(1,2,3-cd)pyrene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Dibenzo(a,h)anthracene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM
Benzo(g,h,i)perylene	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM	SIM

The rest of the SVOC data was obtained through full scan runs.
(Note: + indicates the results reported from "**SIM Dilution Runs**")

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.
	L	Low Bias
	H	High Bias
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs)
	K	Unknown Bias

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 5.5 (g/mL) g Lab File ID: 50203a09

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 15 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	5.3	U
74-87-3	Chloromethane	5.3	U
75-01-4	Vinyl chloride	5.3	U
74-83-9	Bromomethane	5.3	U
75-00-3	Chloroethane	5.3	U
75-69-4	Trichlorofluoromethane	5.3	U
75-35-4	1,1-Dichloroethene	0.76	J Q
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.3	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5.3	U
79-20-9	Methyl acetate	5.3	U
75-09-2	Methylene chloride	5.3	U
156-60-5	trans-1,2-Dichloroethene	5.3	U
1634-04-4	Methyl tert-butyl ether	5.3	U
75-34-3	1,1-Dichloroethane	5.3	U
156-59-2	cis-1,2-Dichloroethene	5.3	U
78-93-3	2-Butanone	11	U
74-97-5	Bromochloromethane	5.3	U
67-66-3	Chloroform	5.3 ~~0.74~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	5.3	U
110-82-7	Cyclohexane	5.3	U
56-23-5	Carbon tetrachloride	5.3	U
71-43-2	Benzene	5.3	U
107-06-2	1,2-Dichloroethane	5.3	U
123-91-1	1,4-Dioxane	110	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/15/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 5.5 (g/mL) g Lab File ID: 50203a09

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 15 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	5.3	U
108-87-2	Methylcyclohexane	5.3	U
78-87-5	1,2-Dichloropropane	5.3	U
75-27-4	Bromodichloromethane	5.3	U
10061-01-5	cis-1,3-Dichloropropene	5.3	U
108-10-1	4-Methyl-2-pentanone	11	U
108-88-3	Toluene	5.3	U
10061-02-6	trans-1,3-Dichloropropene	5.3	U
79-00-5	1,1,2-Trichloroethane	5.3	U
127-18-4	Tetrachloroethene	5.3	U
591-78-6	2-Hexanone	11	~~B~~ U
124-48-1	Dibromochloromethane	5.3	U
106-93-4	1,2-Dibromoethane	5.3	U
108-90-7	Chlorobenzene	5.3	U
100-41-4	Ethylbenzene	5.3	U
95-47-6	o-Xylene	5.3	U
179601-23-1	m,p-Xylene	5.3	U
100-42-5	Styrene	5.3	U
75-25-2	Bromoform	5.3	U
98-82-8	Isopropylbenzene	5.3	U
79-34-5	1,1,2,2-Tetrachloroethane	5.3	U
541-73-1	1,3-Dichlorobenzene	5.3	U
106-46-7	1,4-Dichlorobenzene	5.3	U
95-50-1	1,2-Dichlorobenzene	5.3	U
96-12-8	1,2-Dibromo-3-chloropropane	5.3	U
120-82-1	1,2,4-Trichlorobenzene	5.3	U
87-61-6	1,2,3-Trichlorobenzene	5.3	U

3/15/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 5.5 (g/mL) g Lab File ID: 50203a09

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 15 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	13.570	9.5	JBN
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

3/15/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
REPORT

EPA SAMPLE NO.
JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 4.93 (g/mL) g Lab File ID: 50203a10

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 35 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	7.8	U
74-87-3	Chloromethane	7.8	U
75-01-4	Vinyl chloride	7.8	U
74-83-9	Bromomethane	7.8	U
75-00-3	Chloroethane	7.8	U
75-69-4	Trichlorofluoromethane	7.8	U
75-35-4	1,1-Dichloroethene	1.1	JQ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.8	U
67-64-1	Acetone	32	U
75-15-0	Carbon Disulfide	7.8	U
79-20-9	Methyl acetate	7.8	U
75-09-2	Methylene chloride	7.8	U
156-60-5	trans-1,2-Dichloroethene	7.8	U
1634-04-4	Methyl tert-butyl ether	7.8	U
75-34-3	1,1-Dichloroethane	7.8	U
156-59-2	cis-1,2-Dichloroethene	7.8	U
78-93-3	2-Butanone	24	
74-97-5	Bromochloromethane	7.8	U
67-66-3	Chloroform	~~1.1~~ 7.8	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	7.8	U
110-82-7	Cyclohexane	7.8	U
56-23-5	Carbon tetrachloride	7.8	U
71-43-2	Benzene	4.0	JQ
107-06-2	1,2-Dichloroethane	7.8	U
123-91-1	1,4-Dioxane	160	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/15/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 4.93 (g/mL) g Lab File ID: 50203a10

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 35 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	7.8	U
108-87-2	Methylcyclohexane	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	7.8	U
108-10-1	4-Methyl-2-pentanone	16	U
108-88-3	Toluene	5.1	JQ
10061-02-6	trans-1,3-Dichloropropene	7.8	U
79-00-5	1,1,2-Trichloroethane	7.8	U
127-18-4	Tetrachloroethene	7.8	U
591-78-6	2-Hexanone	25	~~J~~U
124-48-1	Dibromochloromethane	7.8	U
106-93-4	1,2-Dibromoethane	7.8	U
108-90-7	Chlorobenzene	7.8	UJK
100-41-4	Ethylbenzene	0.85	JQ
95-47-6	o-Xylene	7.8	U
179601-23-1	m,p-Xylene	0.99	JQ
100-42-5	Styrene	7.8	U
75-25-2	Bromoform	7.8	UJK
98-82-8	Isopropylbenzene	7.8	U
79-34-5	1,1,2,2-Tetrachloroethane	7.8	U
541-73-1	1,3-Dichlorobenzene	7.8	UJK
106-46-7	1,4-Dichlorobenzene	7.8	U
95-50-1	1,2-Dichlorobenzene	7.8	U
96-12-8	1,2-Dibromo-3-chloropropane	7.8	U
120-82-1	1,2,4-Trichlorobenzene	7.8	U
87-61-6	1,2,3-Trichlorobenzene	7.8	U

3/15/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 4.93 (g/mL) g Lab File ID: 50203a10

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 35 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.850	8.0	JN
02	75-18-3	Dimethyl sulfide	3.420	19	NJ
03		Unknown-02	12.390	27	JN
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/15/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
DO NOT REPORT

EPA SAMPLE NO.
JC652RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 4.17 (g/mL) g Lab File ID: 50203B07

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 35 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	9.2	U
74-87-3	Chloromethane	9.2	U
75-01-4	Vinyl chloride	9.2	U
74-83-9	Bromomethane	9.2	U
75-00-3	Chloroethane	9.2	U
75-69-4	Trichlorofluoromethane	9.2	U
75-35-4	1,1-Dichloroethene	9.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.2	U
67-64-1	Acetone	66	~~B~~ U
75-15-0	Carbon Disulfide	9.2	U
79-20-9	Methyl acetate	9.2	U
75-09-2	Methylene chloride	9.2	U
156-60-5	trans-1,2-Dichloroethene	9.2	U
1634-04-4	Methyl tert-butyl ether	9.2	U
75-34-3	1,1-Dichloroethane	9.2	U
156-59-2	cis-1,2-Dichloroethene	9.2	U
78-93-3	2-Butanone	35	
74-97-5	Bromochloromethane	9.2	U
67-66-3	Chloroform	9.2 ~~1.3~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	9.2	U
110-82-7	Cyclohexane	9.2	U
56-23-5	Carbon tetrachloride	9.2	U
71-43-2	Benzene	9.2	U
107-06-2	1,2-Dichloroethane	9.2	U
123-91-1	1,4-Dioxane	180	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/15/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC652RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 4.17 (g/mL) g Lab File ID: 50203B07

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 35 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	9.2	U
108-87-2	Methylcyclohexane	9.2	U
78-87-5	1,2-Dichloropropane	9.2	U
75-27-4	Bromodichloromethane	9.2	U
10061-01-5	cis-1,3-Dichloropropene	9.2	U
108-10-1	4-Methyl-2-pentanone	18	U
108-88-3	Toluene	9.8	
10061-02-6	trans-1,3-Dichloropropene	9.2	U
79-00-5	1,1,2-Trichloroethane	9.2	U
127-18-4	Tetrachloroethene	9.2	U
591-78-6	2-Hexanone	21	~~J~~U
124-48-1	Dibromochloromethane	9.2	U
106-93-4	1,2-Dibromoethane	9.2	U
108-90-7	Chlorobenzene	9.2	U
100-41-4	Ethylbenzene	9.2	U
95-47-6	o-Xylene	9.2	U
179601-23-1	m,p-Xylene	1.2	JQ
100-42-5	Styrene	9.2	U
75-25-2	Bromoform	9.2	U
98-82-8	Isopropylbenzene	9.2	U
79-34-5	1,1,2,2-Tetrachloroethane	9.2	U
541-73-1	1,3-Dichlorobenzene	9.2	U
106-46-7	1,4-Dichlorobenzene	9.2	U
95-50-1	1,2-Dichlorobenzene	9.2	U
96-12-8	1,2-Dibromo-3-chloropropane	9.2	U
120-82-1	1,2,4-Trichlorobenzene	9.2	U
87-61-6	1,2,3-Trichlorobenzene	9.2	U

3/15/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC652RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 4.17 (g/mL) g Lab File ID: 50203B07

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 35 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	75-18-3	Dimethyl sulfide	3.420	22	NJ
02		Unknown-01	12.390	25	JN
03		Unknown-02	13.570	17	JN
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/15/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 4.78 (g/mL) g Lab File ID: 50203a11

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 24 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	6.9	U
74-87-3	Chloromethane	6.9	U
75-01-4	Vinyl chloride	6.9	U
74-83-9	Bromomethane	6.9	U
75-00-3	Chloroethane	6.9	U
75-69-4	Trichlorofluoromethane	6.9	U
75-35-4	1,1-Dichloroethene	1.2	JQ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.9	U
67-64-1	Acetone	14 ~~13~~	~~J~~ U
75-15-0	Carbon Disulfide	6.9	U
79-20-9	Methyl acetate	6.9	U
75-09-2	Methylene chloride	6.9	U
156-60-5	trans-1,2-Dichloroethene	6.9	U
1634-04-4	Methyl tert-butyl ether	6.9	U
75-34-3	1,1-Dichloroethane	6.9	U
156-59-2	cis-1,2-Dichloroethene	6.9	U
78-93-3	2-Butanone	14	U
74-97-5	Bromochloromethane	6.9	U
67-66-3	Chloroform	6.9 ~~0.86~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	6.9	U
110-82-7	Cyclohexane	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
123-91-1	1,4-Dioxane	140	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/15/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 4.78 (g/mL) g Lab File ID: 50203a11

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 24 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	6.9	U
108-87-2	Methylcyclohexane	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	6.9	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	6.9	U
10061-02-6	trans-1,3-Dichloropropene	6.9	U
79-00-5	1,1,2-Trichloroethane	6.9	U
127-18-4	Tetrachloroethene	6.9	U
591-78-6	2-Hexanone	14 ~~13~~	~~JB~~U
124-48-1	Dibromochloromethane	6.9	U
106-93-4	1,2-Dibromoethane	6.9	U
108-90-7	Chlorobenzene	6.9	U
100-41-4	Ethylbenzene	6.9	U
95-47-6	o-Xylene	6.9	U
179601-23-1	m,p-Xylene	6.9	U
100-42-5	Styrene	0.82	JQ
75-25-2	Bromoform	6.9	U
98-82-8	Isopropylbenzene	6.9	U
79-34-5	1,1,2,2-Tetrachloroethane	6.9	U
541-73-1	1,3-Dichlorobenzene	6.9	U
106-46-7	1,4-Dichlorobenzene	6.9	U
95-50-1	1,2-Dichlorobenzene	6.9	U
96-12-8	1,2-Dibromo-3-chloropropane	6.9	U
120-82-1	1,2,4-Trichlorobenzene	6.9	U
87-61-6	1,2,3-Trichlorobenzene	6.9	U

3/15/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 4.78 (g/mL) g Lab File ID: 50203a11

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 24 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/15/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Do NOT REPORT

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 4.97 (g/mL) g Lab File ID: 50203B08

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 30 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	7.2	U
74-87-3	Chloromethane	7.2	U
75-01-4	Vinyl chloride	7.2	U
74-83-9	Bromomethane	7.2	U
75-00-3	Chloroethane	7.2	U
75-69-4	Trichlorofluoromethane	7.2	U
75-35-4	1,1-Dichloroethene	7.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.2	U
67-64-1	Acetone	44	~~B~~ U
75-15-0	Carbon Disulfide	7.2	U
79-20-9	Methyl acetate	7.2	U
75-09-2	Methylene chloride	7.2	U
156-60-5	trans-1,2-Dichloroethene	7.2	U
1634-04-4	Methyl tert-butyl ether	7.2	U
75-34-3	1,1-Dichloroethane	7.2	U
156-59-2	cis-1,2-Dichloroethene	7.2	U
78-93-3	2-Butanone	24	
74-97-5	Bromochloromethane	7.2	U
67-66-3	Chloroform	7.2 ~~0.96~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	7.2	U
110-82-7	Cyclohexane	3.8	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
123-91-1	1,4-Dioxane	140	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/15/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 4.97 (g/mL) g Lab File ID: 50203B08

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 30 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	7.2	U
108-87-2	Methylcyclohexane	7.7	
78-87-5	1,2-Dichloropropane	7.2	U
75-27-4	Bromodichloromethane	7.2	U
10061-01-5	cis-1,3-Dichloropropene	7.2	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	2.4	JQ
10061-02-6	trans-1,3-Dichloropropene	7.2	U
79-00-5	1,1,2-Trichloroethane	7.2	U
127-18-4	Tetrachloroethene	7.2	U
591-78-6	2-Hexanone	14 ~~12~~	~~JB~~ U
124-48-1	Dibromochloromethane	7.2	U
106-93-4	1,2-Dibromoethane	7.2	U
108-90-7	Chlorobenzene	7.2	U
100-41-4	Ethylbenzene	1.9	JQ
95-47-6	o-Xylene	3.2	JQ
179601-23-1	m,p-Xylene	6.2	JQ
100-42-5	Styrene	7.2	U
75-25-2	Bromoform	7.2	U
98-82-8	Isopropylbenzene	7.2	U
79-34-5	1,1,2,2-Tetrachloroethane	7.2	U
541-73-1	1,3-Dichlorobenzene	7.2	U
106-46-7	1,4-Dichlorobenzene	7.2	U
95-50-1	1,2-Dichlorobenzene	7.2	U
96-12-8	1,2-Dibromo-3-chloropropane	7.2	U
120-82-1	1,2,4-Trichlorobenzene	7.2	U
87-61-6	1,2,3-Trichlorobenzene	7.2	U

3/15/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 4.97 (g/mL) g Lab File ID: 50203B08

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 30 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	1.650	2800	JN
02		Unknown-02	11.240	18	J
03		Unknown-03	11.440	10	J
04		Unknown-04	11.730	9.4	J
05		Unknown-05	11.910	8.0	J
06		Unknown-06	12.390	10	JBN
07		Unknown-07	13.570	13	JN
08		Unknown-08	13.660	7.8	J
09		Unknown-09	13.860	18	J
10		Unknown-10	14.020	8.6	J
11		Unknown-11	14.090	7.7	J
12		Unknown-12	14.150	10	J
13		Unknown-13	14.240	12	J
14		Unknown-14	14.280	8.5	J
15		Unknown-15	14.330	7.5	J
16		Unknown-16	14.390	12	J
17		Unknown-17	14.500	7.8	J
18		Unknown-18	14.590	11	J
19		Unknown-19	14.710	18	J
20		Unknown-20	14.780	7.3	J
21		Unknown-21	14.840	7.6	J
22		Unknown-22	14.910	9.8	J
23		Unknown-23	15.000	12	J
24		Unknown-24	15.130	8.2	J
25		Unknown-25	15.350	9.0	J
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/15/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

REPORT

EPA SAMPLE NO.

JC655RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 5.25 (g/mL) g Lab File ID: 50203a12

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 30 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	6.8	U
74-87-3	Chloromethane	6.8	U
75-01-4	Vinyl chloride	6.8	U
74-83-9	Bromomethane	6.8	U
75-00-3	Chloroethane	6.8	U
75-69-4	Trichlorofluoromethane	6.8	U
75-35-4	1,1-Dichloroethene	6.8	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.8	U
67-64-1	Acetone	50	U
75-15-0	Carbon Disulfide	6.8	U
79-20-9	Methyl acetate	6.8	U
75-09-2	Methylene chloride	6.8	U
156-60-5	trans-1,2-Dichloroethene	6.8	U
1634-04-4	Methyl tert-butyl ether	6.8	U
75-34-3	1,1-Dichloroethane	6.8	U
156-59-2	cis-1,2-Dichloroethene	6.8	U
78-93-3	2-Butanone	25	
74-97-5	Bromochloromethane	6.8	U
67-66-3	Chloroform	6.8 ~~0.86~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	6.8	U
110-82-7	Cyclohexane	6.2	JQ
56-23-5	Carbon tetrachloride	6.8	U
71-43-2	Benzene	6.8	U
107-06-2	1,2-Dichloroethane	6.8	U
123-91-1	1,4-Dioxane	140	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/15/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC655RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 5.25 (g/mL) g Lab File ID: 50203a12

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 30 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	6.8	U
108-87-2	Methylcyclohexane	11	
78-87-5	1,2-Dichloropropane	6.8	U
75-27-4	Bromodichloromethane	6.8	U
10061-01-5	cis-1,3-Dichloropropene	6.8	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	2.3	JQ
10061-02-6	trans-1,3-Dichloropropene	6.8	U
79-00-5	1,1,2-Trichloroethane	6.8	U
127-18-4	Tetrachloroethene	6.8	U
591-78-6	2-Hexanone	17	~~B~~ U
124-48-1	Dibromochloromethane	6.8	U
106-93-4	1,2-Dibromoethane	6.8	U
108-90-7	Chlorobenzene	6.8	U
100-41-4	Ethylbenzene	0.84	JQ
95-47-6	o-Xylene	1.1	JQ
179601-23-1	m,p-Xylene	2.2	JQ
100-42-5	Styrene	6.8	U
75-25-2	Bromoform	6.8	UJK
98-82-8	Isopropylbenzene	6.8	U
79-34-5	1,1,2,2-Tetrachloroethane	6.8	U
541-73-1	1,3-Dichlorobenzene	6.8	UJK
106-46-7	1,4-Dichlorobenzene	6.8	U
95-50-1	1,2-Dichlorobenzene	6.8	U
96-12-8	1,2-Dibromo-3-chloropropane	6.8	U
120-82-1	1,2,4-Trichlorobenzene	6.8	U
87-61-6	1,2,3-Trichlorobenzene	6.8	U

3/15/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC655RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 5.25 (g/mL) g Lab File ID: 50203a12

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 30 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	11.240	12	JN
02		Unknown-02	11.730	8.2	JN
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/15/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

DO NOT REPORT

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 5.31 (g/mL) g Lab File ID: 50203B09

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 25 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	6.3	U
74-87-3	Chloromethane	6.3	U
75-01-4	Vinyl chloride	6.3	U
74-83-9	Bromomethane	6.3	U
75-00-3	Chloroethane	6.3	U
75-69-4	Trichlorofluoromethane	6.3	U
75-35-4	1,1-Dichloroethene	6.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.3	U
67-64-1	Acetone	54	~~B~~ U
75-15-0	Carbon Disulfide	6.3	U
79-20-9	Methyl acetate	6.3	U
75-09-2	Methylene chloride	6.3	U
156-60-5	trans-1,2-Dichloroethene	6.3	U
1634-04-4	Methyl tert-butyl ether	6.3	U
75-34-3	1,1-Dichloroethane	6.3	U
156-59-2	cis-1,2-Dichloroethene	6.3	U
78-93-3	2-Butanone	25	
74-97-5	Bromochloromethane	6.3	U
67-66-3	Chloroform	6.3 ~~0.80~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	6.3	U
110-82-7	Cyclohexane	7.1	
56-23-5	Carbon tetrachloride	6.3	U
71-43-2	Benzene	6.3	U
107-06-2	1,2-Dichloroethane	6.3	U
123-91-1	1,4-Dioxane	130	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

Do NOT REPORT

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 5.31 (g/mL) g Lab File ID: 50203B09

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 25 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	6.3	U
108-87-2	Methylcyclohexane	12	
78-87-5	1,2-Dichloropropane	6.3	U
75-27-4	Bromodichloromethane	6.3	U
10061-01-5	cis-1,3-Dichloropropene	6.3	U
108-10-1	4-Methyl-2-pentanone	13	U
108-88-3	Toluene	2.9	JQ
10061-02-6	trans-1,3-Dichloropropene	6.3	U
79-00-5	1,1,2-Trichloroethane	6.3	U
127-18-4	Tetrachloroethene	6.3	U
591-78-6	2-Hexanone	13 ~~12~~	~~JB~~ U
124-48-1	Dibromochloromethane	6.3	U
106-93-4	1,2-Dibromoethane	6.3	U
108-90-7	Chlorobenzene	6.3	U
100-41-4	Ethylbenzene	1.0	JQ
95-47-6	o-Xylene	1.8	JQ
179601-23-1	m,p-Xylene	3.5	JQ
100-42-5	Styrene	6.3	U
75-25-2	Bromoform	6.3	U
98-82-8	Isopropylbenzene	6.3	U
79-34-5	1,1,2,2-Tetrachloroethane	6.3	U
541-73-1	1,3-Dichlorobenzene	6.3	U
106-46-7	1,4-Dichlorobenzene	6.3	U
95-50-1	1,2-Dichlorobenzene	6.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.3	U
120-82-1	1,2,4-Trichlorobenzene	6.3	U
87-61-6	1,2,3-Trichlorobenzene	6.3	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 5.31 (g/mL) g Lab File ID: 50203B09

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 25 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	11.240	11	JN
02	138-86-3	Limonene	11.730	6.9	NJ
03		Unknown-02	13.560	8.7	JN
04		Unknown-03	13.710	7.3	J
05		Unknown-04	13.920	7.1	J
06		Unknown-05	14.020	6.9	J
07		Unknown-06	14.240	7.7	J
08		Unknown-07	14.280	9.7	J
09		Unknown-08	14.580	8.2	J
10		Unknown-09	14.720	7.9	J
11		Unknown-10	14.840	7.5	J
12		Unknown-11	14.920	9.6	J
13		Unknown-12	15.050	7.4	J
14		Unknown-13	15.300	8.0	J
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

REPORT

EPA SAMPLE NO.
JC656RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 3.46 (g/mL) g Lab File ID: 50203a13

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 25 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	9.6	U
74-87-3	Chloromethane	9.6	U
75-01-4	Vinyl chloride	9.6	U
74-83-9	Bromomethane	9.6	U
75-00-3	Chloroethane	9.6	U
75-69-4	Trichlorofluoromethane	9.6	U
75-35-4	1,1-Dichloroethene	9.6	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.6	U
67-64-1	Acetone	52	U
75-15-0	Carbon Disulfide	9.6	U
79-20-9	Methyl acetate	9.6	U
75-09-2	Methylene chloride	9.6	U
156-60-5	trans-1,2-Dichloroethene	9.6	U
1634-04-4	Methyl tert-butyl ether	9.6	U
75-34-3	1,1-Dichloroethane	9.6	U
156-59-2	cis-1,2-Dichloroethene	9.6	U
78-93-3	2-Butanone	27	
74-97-5	Bromochloromethane	9.6	U
67-66-3	Chloroform	9.6 ~~1.3~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	9.6	U
110-82-7	Cyclohexane	9.6	U
56-23-5	Carbon tetrachloride	9.6	U
71-43-2	Benzene	9.6	U
107-06-2	1,2-Dichloroethane	9.6	U
123-91-1	1,4-Dioxane	190	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC656RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 3.46 (g/mL) g Lab File ID: 50203a13

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 25 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	9.6	U
108-87-2	Methylcyclohexane	9.6	U
78-87-5	1,2-Dichloropropane	9.6	U
75-27-4	Bromodichloromethane	9.6	U
10061-01-5	cis-1,3-Dichloropropene	9.6	U
108-10-1	4-Methyl-2-pentanone	19	U
108-88-3	Toluene	3.3	JQ
10061-02-6	trans-1,3-Dichloropropene	9.6	U
79-00-5	1,1,2-Trichloroethane	9.6	U
127-18-4	Tetrachloroethene	9.6	U
591-78-6	2-Hexanone	19	~~JB~~ U
124-48-1	Dibromochloromethane	9.6	U
106-93-4	1,2-Dibromoethane	9.6	U
108-90-7	Chlorobenzene	9.6	U
100-41-4	Ethylbenzene	0.98	JQ
95-47-6	o-Xylene	1.4	JQ
179601-23-1	m,p-Xylene	2.9	JQ
100-42-5	Styrene	9.6	U
75-25-2	Bromoform	9.6	UJK
98-82-8	Isopropylbenzene	9.6	U
79-34-5	1,1,2,2-Tetrachloroethane	9.6	U
541-73-1	1,3-Dichlorobenzene	9.6	UJK
106-46-7	1,4-Dichlorobenzene	9.6	U
95-50-1	1,2-Dichlorobenzene	9.6	U
96-12-8	1,2-Dibromo-3-chloropropane	9.6	U
120-82-1	1,2,4-Trichlorobenzene	9.6	U
87-61-6	1,2,3-Trichlorobenzene	9.6	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC656RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 3.46 (g/mL) g Lab File ID: 50203a13

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 25 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 2.74 (g/mL) g Lab File ID: 50203a14

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 51 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	19	U
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
75-69-4	Trichlorofluoromethane	19	U
75-35-4	1,1-Dichloroethene	2.6	JQ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	19	U
67-64-1	Acetone	39	U
75-15-0	Carbon Disulfide	19	U
79-20-9	Methyl acetate	19	U
75-09-2	Methylene chloride	19	U
156-60-5	trans-1,2-Dichloroethene	19	U
1634-04-4	Methyl tert-butyl ether	19	U
75-34-3	1,1-Dichloroethane	19	U
156-59-2	cis-1,2-Dichloroethene	19	U
78-93-3	2-Butanone	37	U
74-97-5	Bromochloromethane	19	U
67-66-3	Chloroform	19 ~~2.5~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	19	U
110-82-7	Cyclohexane	19	U
56-23-5	Carbon tetrachloride	19	U
71-43-2	Benzene	19	U
107-06-2	1,2-Dichloroethane	19	U
123-91-1	1,4-Dioxane	370	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 2.74 (g/mL) g Lab File ID: 50203a14

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 51 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	19	U
108-87-2	Methylcyclohexane	19	U
78-87-5	1,2-Dichloropropane	19	U
75-27-4	Bromodichloromethane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
108-10-1	4-Methyl-2-pentanone	37	U
108-88-3	Toluene	2.3	JQ
10061-02-6	trans-1,3-Dichloropropene	19	U
79-00-5	1,1,2-Trichloroethane	19	U
127-18-4	Tetrachloroethene	19	U
591-78-6	2-Hexanone	37 ~~32~~	~~JB~~ U
124-48-1	Dibromochloromethane	19	U
106-93-4	1,2-Dibromoethane	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
95-47-6	o-Xylene	19	U
179601-23-1	m,p-Xylene	19	U
100-42-5	Styrene	19	U
75-25-2	Bromoform	19	U
98-82-8	Isopropylbenzene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
541-73-1	1,3-Dichlorobenzene	19	U
106-46-7	1,4-Dichlorobenzene	19	U
95-50-1	1,2-Dichlorobenzene	19	U
96-12-8	1,2-Dibromo-3-chloropropane	19	U
120-82-1	1,2,4-Trichlorobenzene	19	U
87-61-6	1,2,3-Trichlorobenzene	19	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 2.74 (g/mL) g Lab File ID: 50203a14

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 51 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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15					
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17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 3.32 (g/mL) g Lab File ID: 50203a15

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 64 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	21	U
74-87-3	Chloromethane	21	U
75-01-4	Vinyl chloride	21	U
74-83-9	Bromomethane	21	U
75-00-3	Chloroethane	21	U
75-69-4	Trichlorofluoromethane	21	U
75-35-4	1,1-Dichloroethene	2.7	J Q
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	21	U
67-64-1	Acetone	220	U
75-15-0	Carbon Disulfide	21	U
79-20-9	Methyl acetate	21	U
75-09-2	Methylene chloride	21	U
156-60-5	trans-1,2-Dichloroethene	21	U
1634-04-4	Methyl tert-butyl ether	21	U
75-34-3	1,1-Dichloroethane	21	U
156-59-2	cis-1,2-Dichloroethene	21	U
78-93-3	2-Butanone	27	J Q
74-97-5	Bromochloromethane	21	U
67-66-3	Chloroform	21 ~~2.7~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	21	U
110-82-7	Cyclohexane	21	U
56-23-5	Carbon tetrachloride	21	U
71-43-2	Benzene	21	U
107-06-2	1,2-Dichloroethane	21	U
123-91-1	1,4-Dioxane	420	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 3.32 (g/mL) g Lab File ID: 50203a15

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 64 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	21	U
108-87-2	Methylcyclohexane	21	U
78-87-5	1,2-Dichloropropane	21	U
75-27-4	Bromodichloromethane	21	U
10061-01-5	cis-1,3-Dichloropropene	21	U
108-10-1	4-Methyl-2-pentanone	42	U
108-88-3	Toluene	21	U
10061-02-6	trans-1,3-Dichloropropene	21	U
79-00-5	1,1,2-Trichloroethane	21	U
127-18-4	Tetrachloroethene	21	U
591-78-6	2-Hexanone	~~42~~ 26	~~JB~~U
124-48-1	Dibromochloromethane	21	U
106-93-4	1,2-Dibromoethane	21	U
108-90-7	Chlorobenzene	21	U
100-41-4	Ethylbenzene	21	U
95-47-6	o-Xylene	21	U
179601-23-1	m,p-Xylene	21	U
100-42-5	Styrene	21	U
75-25-2	Bromoform	21	U
98-82-8	Isopropylbenzene	21	U
79-34-5	1,1,2,2-Tetrachloroethane	21	U
541-73-1	1,3-Dichlorobenzene	21	U
106-46-7	1,4-Dichlorobenzene	21	U
95-50-1	1,2-Dichlorobenzene	21	U
96-12-8	1,2-Dibromo-3-chloropropane	21	U
120-82-1	1,2,4-Trichlorobenzene	21	U
87-61-6	1,2,3-Trichlorobenzene	21	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 3.32 (g/mL) g Lab File ID: 50203a15

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 64 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Do NOT REPORT

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 3.69 (g/mL) g Lab File ID: 50203B10

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 66 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	20	U
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
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20	U
67-64-1	Acetone	150	~~B~~U
75-15-0	Carbon Disulfide	20	U
79-20-9	Methyl acetate	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	20	U
156-59-2	cis-1,2-Dichloroethene	20	U
78-93-3	2-Butanone	40	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20 ~~2.6~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	20	U
110-82-7	Cyclohexane	20	U
56-23-5	Carbon tetrachloride	20	U
71-43-2	Benzene	3.4	JQ
107-06-2	1,2-Dichloroethane	20	U
123-91-1	1,4-Dioxane	400	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 3.69 (g/mL) g Lab File ID: 50203B10

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 66 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	20	U
108-87-2	Methylcyclohexane	20	U
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	40	U
108-88-3	Toluene	2.7	JQ
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
127-18-4	Tetrachloroethene	20	U
591-78-6	2-Hexanone	54	~~B~~ U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
95-47-6	o-Xylene	20	U
179601-23-1	m,p-Xylene	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 3.69 (g/mL) g Lab File ID: 50203B10

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 66 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	123-35-3	.beta.-Myrcene	11.280	160	NJ
02	99-83-2	.alpha.-Phellandrene	11.520	140	NJ
03	3779-61-1	1,3,6-Octatriene, 3,7-dimeth	11.690	140	NJ
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

REPORT

EPA SAMPLE NO.
JC659RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 3.75 (g/mL) g Lab File ID: 50203a16

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 66 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	20	U
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
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	2.9	JQ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20	U
67-64-1	Acetone	170	U
75-15-0	Carbon Disulfide	20	U
79-20-9	Methyl acetate	20	U
75-09-2	Methylene chloride	20	U
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	20	U
156-59-2	cis-1,2-Dichloroethene	20	U
78-93-3	2-Butanone	39	U
74-97-5	Bromochloromethane	20	U
67-66-3	Chloroform	20 ~~2.6~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	20	U
110-82-7	Cyclohexane	20	U
56-23-5	Carbon tetrachloride	20	U
71-43-2	Benzene	20	U
107-06-2	1,2-Dichloroethane	20	U
123-91-1	1,4-Dioxane	390	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC659RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 3.75 (g/mL) g Lab File ID: 50203a16

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 66 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	20	U
108-87-2	Methylcyclohexane	20	U
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-pentanone	39	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
127-18-4	Tetrachloroethene	20	U
591-78-6	2-Hexanone	39 ~~38~~	~~JB~~ U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
95-47-6	o-Xylene	20	U
179601-23-1	m,p-Xylene	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	UJK
98-82-8	Isopropylbenzene	2.7	JQ
79-34-5	1,1,2,2-Tetrachloroethane	20	U
541-73-1	1,3-Dichlorobenzene	20	UJK
106-46-7	1,4-Dichlorobenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U
87-61-6	1,2,3-Trichlorobenzene	20	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC659RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 3.75 (g/mL) g Lab File ID: 50203a16

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 66 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	7785-70-8	1R-.alpha.-Pinene	11.310	20	NJ
02		Unknown-01	13.570	25	JBN
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 4.72 (g/mL) g Lab File ID: 50203a17

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 46 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	9.8	U
74-87-3	Chloromethane	9.8	U
75-01-4	Vinyl chloride	9.8	U
74-83-9	Bromomethane	9.8	U
75-00-3	Chloroethane	9.8	U
75-69-4	Trichlorofluoromethane	9.8	U
75-35-4	1,1-Dichloroethene	1.0	JQ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.8	U
67-64-1	Acetone	340	
75-15-0	Carbon Disulfide	9.8	U
79-20-9	Methyl acetate	9.8	U
75-09-2	Methylene chloride	9.8	U
156-60-5	trans-1,2-Dichloroethene	9.8	U
1634-04-4	Methyl tert-butyl ether	9.8	U
75-34-3	1,1-Dichloroethane	9.8	U
156-59-2	cis-1,2-Dichloroethene	9.8	U
78-93-3	2-Butanone	33	
74-97-5	Bromochloromethane	9.8	U
67-66-3	Chloroform	9.8 ~~1.2~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	9.8	U
110-82-7	Cyclohexane	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
123-91-1	1,4-Dioxane	200	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 4.72 (g/mL) g Lab File ID: 50203a17

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 46 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	9.8	U
108-87-2	Methylcyclohexane	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	9.8	UJK
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	1.1	JQ
10061-02-6	trans-1,3-Dichloropropene	9.8	UJK
79-00-5	1,1,2-Trichloroethane	9.8	UJK
127-18-4	Tetrachloroethene	9.8	U
591-78-6	2-Hexanone	20 ~~12~~	~~JB~~U
124-48-1	Dibromochloromethane	9.8	U
106-93-4	1,2-Dibromoethane	9.8	U
108-90-7	Chlorobenzene	9.8	U
100-41-4	Ethylbenzene	9.8	U
95-47-6	o-Xylene	9.8	U
179601-23-1	m,p-Xylene	9.8	U
100-42-5	Styrene	9.8	U
75-25-2	Bromoform	9.8	U
98-82-8	Isopropylbenzene	9.8	U
79-34-5	1,1,2,2-Tetrachloroethane	9.8	U
541-73-1	1,3-Dichlorobenzene	9.8	U
106-46-7	1,4-Dichlorobenzene	9.8	U
95-50-1	1,2-Dichlorobenzene	9.8	U
96-12-8	1,2-Dibromo-3-chloropropane	9.8	U
120-82-1	1,2,4-Trichlorobenzene	9.8	U
87-61-6	1,2,3-Trichlorobenzene	9.8	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 4.72 (g/mL) g Lab File ID: 50203a17

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 46 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 5.55 (g/mL) g Lab File ID: 50203a18

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 34 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	6.8	U
74-87-3	Chloromethane	6.8	U
75-01-4	Vinyl chloride	6.8	U
74-83-9	Bromomethane	6.8	U
75-00-3	Chloroethane	6.8	U
75-69-4	Trichlorofluoromethane	6.8	U
75-35-4	1,1-Dichloroethene	6.8	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	6.8	U
67-64-1	Acetone	37	U
75-15-0	Carbon Disulfide	6.8	U
79-20-9	Methyl acetate	6.8	U
75-09-2	Methylene chloride	6.8	U
156-60-5	trans-1,2-Dichloroethene	6.8	U
1634-04-4	Methyl tert-butyl ether	6.8	U
75-34-3	1,1-Dichloroethane	6.8	U
156-59-2	cis-1,2-Dichloroethene	6.8	U
78-93-3	2-Butanone	14	U
74-97-5	Bromochloromethane	6.8	U
67-66-3	Chloroform	6.8 ~~0.90~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	6.8	U
110-82-7	Cyclohexane	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
123-91-1	1,4-Dioxane	140	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 5.55 (g/mL) g Lab File ID: 50203a18

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 34 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	6.8	U
108-87-2	Methylcyclohexane	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	6.8	U
108-10-1	4-Methyl-2-pentanone	14	U
108-88-3	Toluene	0.89	JQ
10061-02-6	trans-1,3-Dichloropropene	6.8	U
79-00-5	1,1,2-Trichloroethane	6.8	U
127-18-4	Tetrachloroethene	6.8	U
591-78-6	2-Hexanone	14 ~~12~~	~~JB~~ U
124-48-1	Dibromochloromethane	6.8	U
106-93-4	1,2-Dibromoethane	6.8	U
108-90-7	Chlorobenzene	6.8	U
100-41-4	Ethylbenzene	6.8	U
95-47-6	o-Xylene	6.8	U
179601-23-1	m,p-Xylene	6.8	U
100-42-5	Styrene	6.8	U
75-25-2	Bromoform	6.8	U
98-82-8	Isopropylbenzene	6.8	U
79-34-5	1,1,2,2-Tetrachloroethane	6.8	U
541-73-1	1,3-Dichlorobenzene	6.8	U
106-46-7	1,4-Dichlorobenzene	6.8	U
95-50-1	1,2-Dichlorobenzene	6.8	U
96-12-8	1,2-Dibromo-3-chloropropane	6.8	U
120-82-1	1,2,4-Trichlorobenzene	6.8	U
87-61-6	1,2,3-Trichlorobenzene	6.8	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 5.55 (g/mL) g Lab File ID: 50203a18

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 34 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 3.71 (g/mL) g Lab File ID: 50203a19

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 15 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	7.9	U
74-87-3	Chloromethane	7.9	U
75-01-4	Vinyl chloride	7.9	U
74-83-9	Bromomethane	7.9	U
75-00-3	Chloroethane	7.9	U
75-69-4	Trichlorofluoromethane	7.9	U
75-35-4	1,1-Dichloroethene	1.0	JQ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.9	U
67-64-1	Acetone	59	U
75-15-0	Carbon Disulfide	7.9	U
79-20-9	Methyl acetate	7.9	U
75-09-2	Methylene chloride	7.9	U
156-60-5	trans-1,2-Dichloroethene	7.9	U
1634-04-4	Methyl tert-butyl ether	7.9	U
75-34-3	1,1-Dichloroethane	7.9	U
156-59-2	cis-1,2-Dichloroethene	7.9	U
78-93-3	2-Butanone	21	
74-97-5	Bromochloromethane	7.9	U
67-66-3	Chloroform	~~791.0~~	~~JB~~U
71-55-6	1,1,1-Trichloroethane	7.9	U
110-82-7	Cyclohexane	7.9	U
56-23-5	Carbon tetrachloride	7.9	U
71-43-2	Benzene	7.9	U
107-06-2	1,2-Dichloroethane	7.9	U
123-91-1	1,4-Dioxane	160	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 3.71 (g/mL) g Lab File ID: 50203a19

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 15 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	7.9	U
108-87-2	Methylcyclohexane	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	7.9	U
108-10-1	4-Methyl-2-pentanone	16	U
108-88-3	Toluene	0.91	JQ
10061-02-6	trans-1,3-Dichloropropene	7.9	U
79-00-5	1,1,2-Trichloroethane	7.9	U
127-18-4	Tetrachloroethene	7.9	U
591-78-6	2-Hexanone	16 ~~15~~	~~JB~~ U
124-48-1	Dibromochloromethane	7.9	U
106-93-4	1,2-Dibromoethane	7.9	U
108-90-7	Chlorobenzene	7.9	U
100-41-4	Ethylbenzene	7.9	U
95-47-6	o-Xylene	7.9	U
179601-23-1	m,p-Xylene	7.9	U
100-42-5	Styrene	7.9	U
75-25-2	Bromoform	7.9	U
98-82-8	Isopropylbenzene	7.9	U
79-34-5	1,1,2,2-Tetrachloroethane	7.9	U
541-73-1	1,3-Dichlorobenzene	7.9	U
106-46-7	1,4-Dichlorobenzene	7.9	U
95-50-1	1,2-Dichlorobenzene	7.9	U
96-12-8	1,2-Dibromo-3-chloropropane	7.9	U
120-82-1	1,2,4-Trichlorobenzene	7.9	U
87-61-6	1,2,3-Trichlorobenzene	7.9	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 3.71 (g/mL) g Lab File ID: 50203a19

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 15 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

SOM01.2 (10/2006)

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 3.93 (g/mL) g Lab File ID: 50203a20

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 46 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	12	U
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
75-69-4	Trichlorofluoromethane	12	U
75-35-4	1,1-Dichloroethene	12	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12	U
67-64-1	Acetone	220	
75-15-0	Carbon Disulfide	12	U
79-20-9	Methyl acetate	12	U
75-09-2	Methylene chloride	12	U
156-60-5	trans-1,2-Dichloroethene	12	U
1634-04-4	Methyl tert-butyl ether	12	U
75-34-3	1,1-Dichloroethane	12	U
156-59-2	cis-1,2-Dichloroethene	12	U
78-93-3	2-Butanone	37	
74-97-5	Bromochloromethane	12	U
67-66-3	Chloroform	12 ~~1.5~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	12	U
56-23-5	Carbon tetrachloride	12	U
71-43-2	Benzene	12	U
107-06-2	1,2-Dichloroethane	12	U
123-91-1	1,4-Dioxane	240	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 3.93 (g/mL) g Lab File ID: 50203a20

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 46 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	12	U
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	UJK
108-10-1	4-Methyl-2-pentanone	24	U
108-88-3	Toluene	1.3	JQ
10061-02-6	trans-1,3-Dichloropropene	12	UJK
79-00-5	1,1,2-Trichloroethane	12	UJK
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	26	~~B~~ U
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	UJK
100-41-4	Ethylbenzene	12	U
95-47-6	o-Xylene	12	U
179601-23-1	m,p-Xylene	12	U
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	UJK
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-chloropropane	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U
87-61-6	1,2,3-Trichlorobenzene	12	U

Rs 3/16/10

JK

Note: 1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
1,2,3-Trichlorobenzene
should be "UJK"
1,2-Dibromo-3-chloropropane should be "U"

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 3.93 (g/mL) g Lab File ID: 50203a20

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 46 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	1632-76-4	3-Methylpyridazine	7.710	38	NJ
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 2.7 (g/mL) g Lab File ID: 50203a21

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 39 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	15	U
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
75-69-4	Trichlorofluoromethane	15	U
75-35-4	1,1-Dichloroethene	15	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	15	U
67-64-1	Acetone	130	U
75-15-0	Carbon Disulfide	15	U
79-20-9	Methyl acetate	15	U
75-09-2	Methylene chloride	15	U
156-60-5	trans-1,2-Dichloroethene	15	U
1634-04-4	Methyl tert-butyl ether	15	U
75-34-3	1,1-Dichloroethane	15	U
156-59-2	cis-1,2-Dichloroethene	15	U
78-93-3	2-Butanone	60	
74-97-5	Bromochloromethane	15	U
67-66-3	Chloroform	15 ~~1.8~~	~~JB~~U
71-55-6	1,1,1-Trichloroethane	15	U
110-82-7	Cyclohexane	15	U
56-23-5	Carbon tetrachloride	15	U
71-43-2	Benzene	15	U
107-06-2	1,2-Dichloroethane	15	U
123-91-1	1,4-Dioxane	310	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 2.7 (g/mL) g Lab File ID: 50203a21

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 39 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	15	U
108-87-2	Methylcyclohexane	15	U
78-87-5	1,2-Dichloropropane	15	U
75-27-4	Bromodichloromethane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	UJK
108-10-1	4-Methyl-2-pentanone	31	U
108-88-3	Toluene	1.8	JQ
10061-02-6	trans-1,3-Dichloropropene	15	UJK
79-00-5	1,1,2-Trichloroethane	15	UJK
127-18-4	Tetrachloroethene	15	U
591-78-6	2-Hexanone	44	BU
124-48-1	Dibromochloromethane	15	U
106-93-4	1,2-Dibromoethane	15	U
108-90-7	Chlorobenzene	15	UJK
100-41-4	Ethylbenzene	15	U
95-47-6	o-Xylene	15	U
179601-23-1	m,p-Xylene	15	U
100-42-5	Styrene	15	U
75-25-2	Bromoform	15	U
98-82-8	Isopropylbenzene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
541-73-1	1,3-Dichlorobenzene	15	UJK
106-46-7	1,4-Dichlorobenzene	15	UJK
95-50-1	1,2-Dichlorobenzene	15	UJK
96-12-8	1,2-Dibromo-3-chloropropane	15	U ~~X~~ RS 3/16/10
120-82-1	1,2,4-Trichlorobenzene	15	UJK
87-61-6	1,2,3-Trichlorobenzene	15	UJK

RS 3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 2.7 (g/mL) g Lab File ID: 50203a21

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 39 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 2.9 (g/mL) g Lab File ID: 50203a22

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 84 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	53	U
74-87-3	Chloromethane	53	U
75-01-4	Vinyl chloride	53	U
74-83-9	Bromomethane	53	U
75-00-3	Chloroethane	53	U
75-69-4	Trichlorofluoromethane	53	U
75-35-4	1,1-Dichloroethene	53	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	53	U
67-64-1	Acetone	340	U
75-15-0	Carbon Disulfide	53	U
79-20-9	Methyl acetate	53	U
75-09-2	Methylene chloride	53	U
156-60-5	trans-1,2-Dichloroethene	53	U
1634-04-4	Methyl tert-butyl ether	53	U
75-34-3	1,1-Dichloroethane	53	U
156-59-2	cis-1,2-Dichloroethene	53	U
78-93-3	2-Butanone	380	
74-97-5	Bromochloromethane	53	U
67-66-3	Chloroform	53 ~~7.5~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	53	U
110-82-7	Cyclohexane	53	U
56-23-5	Carbon tetrachloride	53	U
71-43-2	Benzene	53	U
107-06-2	1,2-Dichloroethane	53	U
123-91-1	1,4-Dioxane	1100	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 2.9 (g/mL) g Lab File ID: 50203a22

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 84 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	53	U
108-87-2	Methylcyclohexane	53	U
78-87-5	1,2-Dichloropropane	53	U
75-27-4	Bromodichloromethane	53	U
10061-01-5	cis-1,3-Dichloropropene	53	UJK
108-10-1	4-Methyl-2-pentanone	110	UJK
108-88-3	Toluene	8.3	JQ
10061-02-6	trans-1,3-Dichloropropene	53	UJK
79-00-5	1,1,2-Trichloroethane	53	UJK
127-18-4	Tetrachloroethene	53	U
591-78-6	2-Hexanone	300	~~J~~U
124-48-1	Dibromochloromethane	53	U
106-93-4	1,2-Dibromoethane	53	U
108-90-7	Chlorobenzene	53	UJK
100-41-4	Ethylbenzene	53	U
95-47-6	o-Xylene	53	U
179601-23-1	m,p-Xylene	53	U
100-42-5	Styrene	8.4	JQ
75-25-2	Bromoform	53	U
98-82-8	Isopropylbenzene	850	
79-34-5	1,1,2,2-Tetrachloroethane	53	U
541-73-1	1,3-Dichlorobenzene	53	UJK
106-46-7	1,4-Dichlorobenzene	53	U
95-50-1	1,2-Dichlorobenzene	53	U
96-12-8	1,2-Dibromo-3-chloropropane	53	U
120-82-1	1,2,4-Trichlorobenzene	53	UJK
87-61-6	1,2,3-Trichlorobenzene	53	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 2.9 (g/mL) g Lab File ID: 50203a22

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 84 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	123-35-3	.beta.-Myrcene	11.280	980	NJ
02	99-83-2	.alpha.-Phellandrene	11.520	190	NJ
03	99-86-5	1,3-Cyclohexadiene, 1-methyl	11.640	110	NJ
04	138-86-3	Limonene	11.750	130	NJ
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 2.86 (g/mL) g Lab File ID: 50203B17

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 80 Date Analyzed: 02/04/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	43	U
74-87-3	Chloromethane	43	U
75-01-4	Vinyl chloride	43	U
74-83-9	Bromomethane	43	U
75-00-3	Chloroethane	43	U
75-69-4	Trichlorofluoromethane	43	U
75-35-4	1,1-Dichloroethene	43	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	43	U
67-64-1	Acetone	91	~~B~~ U
75-15-0	Carbon Disulfide	43	U
79-20-9	Methyl acetate	43	U
75-09-2	Methylene chloride	43	U
156-60-5	trans-1,2-Dichloroethene	43	U
1634-04-4	Methyl tert-butyl ether	43	U
75-34-3	1,1-Dichloroethane	43	U
156-59-2	cis-1,2-Dichloroethene	43	U
78-93-3	2-Butanone	86	U
74-97-5	Bromochloromethane	43	U
67-66-3	Chloroform	~~6.3~~ 43	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	43	U
110-82-7	Cyclohexane	43	U
56-23-5	Carbon tetrachloride	43	U
71-43-2	Benzene	43	U
107-06-2	1,2-Dichloroethane	43	U
123-91-1	1,4-Dioxane	860	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 2.86 (g/mL) g Lab File ID: 50203B17

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 80 Date Analyzed: 02/04/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	43	U
108-87-2	Methylcyclohexane	43	U
78-87-5	1,2-Dichloropropane	43	U
75-27-4	Bromodichloromethane	43	U
10061-01-5	cis-1,3-Dichloropropene	43	U
108-10-1	4-Methyl-2-pentanone	86	U
108-88-3	Toluene	43	U
10061-02-6	trans-1,3-Dichloropropene	43	U
79-00-5	1,1,2-Trichloroethane	43	U
127-18-4	Tetrachloroethene	43	U
591-78-6	2-Hexanone	86 ~~64~~	~~JB~~ U
124-48-1	Dibromochloromethane	43	U
106-93-4	1,2-Dibromoethane	43	U
108-90-7	Chlorobenzene	43	U
100-41-4	Ethylbenzene	43	U
95-47-6	o-Xylene	43	U
179601-23-1	m,p-Xylene	43	U
100-42-5	Styrene	43	U
75-25-2	Bromoform	43	UJK
98-82-8	Isopropylbenzene	43	U
79-34-5	1,1,2,2-Tetrachloroethane	43	U
541-73-1	1,3-Dichlorobenzene	43	UJK
106-46-7	1,4-Dichlorobenzene	43	U
95-50-1	1,2-Dichlorobenzene	43	U
96-12-8	1,2-Dibromo-3-chloropropane	43	U
120-82-1	1,2,4-Trichlorobenzene	43	U
87-61-6	1,2,3-Trichlorobenzene	43	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 2.86 (g/mL) g Lab File ID: 50203B17

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 80 Date Analyzed: 02/04/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	12.390	45	JBN
02		Unknown-02	13.570	110	JN
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

SOM01.2 (10/2006)

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 4.62 (g/mL) g Lab File ID: 50203B11

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 44 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	9.7	U
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
75-69-4	Trichlorofluoromethane	9.7	U
75-35-4	1,1-Dichloroethene	9.7	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.7	U
67-64-1	Acetone	19 ~~18~~	~~JB~~ U
75-15-0	Carbon Disulfide	9.7	U
79-20-9	Methyl acetate	9.7	U
75-09-2	Methylene chloride	9.7	U
156-60-5	trans-1,2-Dichloroethene	9.7	U
1634-04-4	Methyl tert-butyl ether	9.7	U
75-34-3	1,1-Dichloroethane	9.7	U
156-59-2	cis-1,2-Dichloroethene	9.7	U
78-93-3	2-Butanone	19	U
74-97-5	Bromochloromethane	9.7	U
67-66-3	Chloroform	9.7 ~~1.2~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	9.7	U
110-82-7	Cyclohexane	9.7	U
56-23-5	Carbon tetrachloride	9.7	U
71-43-2	Benzene	9.7	U
107-06-2	1,2-Dichloroethane	9.7	U
123-91-1	1,4-Dioxane	190	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 4.62 (g/mL) g Lab File ID: 50203B11

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 44 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	9.7	U
108-87-2	Methylcyclohexane	9.7	U
78-87-5	1,2-Dichloropropane	9.7	U
75-27-4	Bromodichloromethane	9.7	U
10061-01-5	cis-1,3-Dichloropropene	9.7	U
108-10-1	4-Methyl-2-pentanone	19	U
108-88-3	Toluene	1.3	JQ
10061-02-6	trans-1,3-Dichloropropene	9.7	U
79-00-5	1,1,2-Trichloroethane	9.7	U
127-18-4	Tetrachloroethene	9.7	U
591-78-6	2-Hexanone	19 ~~14~~	~~JB~~ U
124-48-1	Dibromochloromethane	9.7	U
106-93-4	1,2-Dibromoethane	9.7	U
108-90-7	Chlorobenzene	9.7	U
100-41-4	Ethylbenzene	9.7	U
95-47-6	o-Xylene	9.7	U
179601-23-1	m,p-Xylene	9.7	U
100-42-5	Styrene	9.7	U
75-25-2	Bromoform	9.7	U
98-82-8	Isopropylbenzene	9.7	U
79-34-5	1,1,2,2-Tetrachloroethane	9.7	U
541-73-1	1,3-Dichlorobenzene	9.7	U
106-46-7	1,4-Dichlorobenzene	9.7	U
95-50-1	1,2-Dichlorobenzene	9.7	U
96-12-8	1,2-Dibromo-3-chloropropane	9.7	U
120-82-1	1,2,4-Trichlorobenzene	9.7	U
87-61-6	1,2,3-Trichlorobenzene	9.7	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 4.62 (g/mL) g Lab File ID: 50203B11

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 44 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	13.830	11	JN
02		Unknown-02	13.990	11	J
03		Unknown-03	14.150	9.8	J
04		Unknown-04	14.530	15	J
05		Unknown-05	14.720	15	J
06		Unknown-06	14.830	9.9	J
07					
08					
09					
10					
11					
12					
13					
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22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 3.95 (g/mL) g Lab File ID: 50203B04

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 42 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	11	U
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
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	22 ~~17~~	~~JB~~ U
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl acetate	11	U
75-09-2	Methylene chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	22	U
74-97-5	Bromochloromethane	11	U
67-66-3	Chloroform	11 ~~1.4~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U
123-91-1	1,4-Dioxane	220	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 3.95 (g/mL) g Lab File ID: 50203B04

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 42 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-pentanone	22	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	22 ~~15~~	~~JB~~ U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
95-47-6	o-Xylene	11	U
179601-23-1	m,p-Xylene	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
87-61-6	1,2,3-Trichlorobenzene	11	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 3.95 (g/mL) g Lab File ID: 50203B04

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 42 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

SOM01.2 (10/2006)

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 2.53 (g/mL) g Lab File ID: 50203B12

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 44 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	18	U
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
75-69-4	Trichlorofluoromethane	18	U
75-35-4	1,1-Dichloroethene	18	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18	U
67-64-1	Acetone	43	~~B~~ U
75-15-0	Carbon Disulfide	18	U
79-20-9	Methyl acetate	18	U
75-09-2	Methylene chloride	18	U
156-60-5	trans-1,2-Dichloroethene	18	U
1634-04-4	Methyl tert-butyl ether	18	U
75-34-3	1,1-Dichloroethane	18	U
156-59-2	cis-1,2-Dichloroethene	18	U
78-93-3	2-Butanone	35	U
74-97-5	Bromochloromethane	18	U
67-66-3	Chloroform	18 ~~2.9~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	18	U
110-82-7	Cyclohexane	18	U
56-23-5	Carbon tetrachloride	18	U
71-43-2	Benzene	18	U
107-06-2	1,2-Dichloroethane	18	U
123-91-1	1,4-Dioxane	350	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 2.53 (g/mL) g Lab File ID: 50203B12

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 44 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	18	U
108-87-2	Methylcyclohexane	18	U
78-87-5	1,2-Dichloropropane	18	U
75-27-4	Bromodichloromethane	18	U
10061-01-5	cis-1,3-Dichloropropene	18	U
108-10-1	4-Methyl-2-pentanone	35	U
108-88-3	Toluene	2.5	J Q
10061-02-6	trans-1,3-Dichloropropene	18	U
79-00-5	1,1,2-Trichloroethane	18	U
127-18-4	Tetrachloroethene	18	U
591-78-6	2-Hexanone	56	~~B~~ U
124-48-1	Dibromochloromethane	18	U
106-93-4	1,2-Dibromoethane	18	U
108-90-7	Chlorobenzene	18	U
100-41-4	Ethylbenzene	18	U
95-47-6	o-Xylene	18	U
179601-23-1	m,p-Xylene	18	U
100-42-5	Styrene	18	U
75-25-2	Bromoform	18	U
98-82-8	Isopropylbenzene	18	U
79-34-5	1,1,2,2-Tetrachloroethane	18	U
541-73-1	1,3-Dichlorobenzene	18	U
106-46-7	1,4-Dichlorobenzene	18	U
95-50-1	1,2-Dichlorobenzene	18	U
96-12-8	1,2-Dibromo-3-chloropropane	18	U
120-82-1	1,2,4-Trichlorobenzene	18	U
87-61-6	1,2,3-Trichlorobenzene	18	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 2.53 (g/mL) g Lab File ID: 50203B12

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 44 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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17					
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19					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

SOM01.2 (10/2006)

3/16/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 5.3 (g/mL) g Lab File ID: 50203B06

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 57 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
75-71-8	Dichlorodifluoromethane	11	U
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
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	30	~~B~~ U
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl acetate	11	U
75-09-2	Methylene chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	22	U
74-97-5	Bromochloromethane	11	U
67-66-3	Chloroform	11 ~~1.5~~	~~JB~~ U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U
123-91-1	1,4-Dioxane	220	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

3/16/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 5.3 (g/mL) g Lab File ID: 50203B06

Level: (TRACE/LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 57 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-pentanone	22	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	23	~~B~~U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
95-47-6	o-Xylene	11	U
179601-23-1	m,p-Xylene	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
87-61-6	1,2,3-Trichlorobenzene	11	U

3/16/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 5.3 (g/mL) g Lab File ID: 50203B06

Level: (TRACE or LOW/MED) LOW Date Received: 02/02/2010

% Moisture: not dec. 57 Date Analyzed: 02/03/2010

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

SOM01.2 (10/2006)

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 030306

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	200	U
108-95-2	Phenol	200	U
111-44-4	Bis(2-Chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	2,2'-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	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
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-Chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	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~~ 3/29/10
88-06-2	2,4,6-Trichlorophenol	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1'-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	390	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	200	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 030306

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	390	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine [1]	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	390	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	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
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
117-81-7	Bis(2-ethylhexyl)phthalate	63	JQ
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	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 030306

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.570	1100	JN
02	5989-54-8	Cyclohexene, 1-methyl-4-(1-	6.400	190	NJ
03	541-02-6	Cyclopentasiloxane,	7.060	110	NJ
04		Unknown-02	8.580	150	JBN
05	57-10-3	n-Hexadecanoic acid	12.480	140	NJ
06	7098-22-8	Tetratetracontane	14.940	110	NJ
07		Unknown-03	15.360	80	JN
08	74685-33-9	3-Eicosene, (E)-	15.800	100	NJ
09	593-45-3	Octadecane	16.290	84	NJ
10		Unknown-04	21.200	8900	JN
11	1000194-64-2	4,4,6a,6b,8a,11,12,14b-	21.400	1900	NJ
12		Unknown-05	21.850	2600	JN
13	22611-26-3	D:C-Friedoolean-8-en-3-one	22.110	24000	NJ
14	300574-36-1	5-Bromo-4-oxo-4,5,6,7-	22.130	12000	NJ
15		Unknown-06	22.660	15000	JN
16		Unknown-07	22.720	1000	J
17		Unknown-08	22.930	150	J
18		Unknown-09	23.250	140	J
19		Unknown-10	23.400	430	J
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

SMK 03/08/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 030307

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 35 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	260	U
108-95-2	Phenol	260	U
111-44-4	Bis(2-Chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	2,2'-Oxybis(1-chloropropane)	260	U
98-86-2	Acetophenone	47	JQ
106-44-5	4-Methylphenol	260	U
621-64-7	N-Nitroso-di-n-propylamine	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
105-67-9	2,4-Dimethylphenol	260	U
111-91-1	Bis(2-Chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	260	U
87-68-3	Hexachlorobutadiene	260	U
105-60-2	Caprolactam	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	260	U
95-95-4	2,4,5-Trichlorophenol	260	U
92-52-4	1,1'-Biphenyl	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	500	U
131-11-3	Dimethylphthalate	260	U
606-20-2	2,6-Dinitrotoluene	260	U
208-96-8	Acenaphthylene	260	U
99-09-2	3-Nitroaniline	500	U
83-32-9	Acenaphthene	260	U

3/29/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 030307

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 35 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	500	U
100-02-7	4-Nitrophenol	500	U
132-64-9	Dibenzofuran	260	U
121-14-2	2,4-Dinitrotoluene	260	U
84-66-2	Diethylphthalate	260	U
86-73-7	Fluorene	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	500	U
534-52-1	4,6-Dinitro-2-methylphenol	500	U
86-30-6	N-Nitrosodiphenylamine [1]	260	U
95-94-3	1,2,4,5-Tetrachlorobenzene	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	260	U
1912-24-9	Atrazine	260	U
87-86-5	Pentachlorophenol	500	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
86-74-8	Carbazole	260	U
84-74-2	Di-n-butylphthalate	58	JQ
206-44-0	Fluoranthene	260	U
129-00-0	Pyrene	260	U
85-68-7	Butylbenzylphthalate	260	U
91-94-1	3,3'-Dichlorobenzidine	260	U
56-55-3	Benzo(a)anthracene	260	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	260	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	260	U
191-24-2	Benzo(g,h,i)perylene	260	U
58-90-2	2,3,4,6-Tetrachlorophenol	260	U

[1] Cannot be separated from Diphenylamine

2/6/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 030307

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 35 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown Aldol Condensate	4.570	1200	A J~~B~~N
02		Unknown-01	7.060	680	JN
03	544-63-8	Tetradecanoic acid	11.390	460	NJ
04	1000130-90-8	Z-7-Hexadecenoic acid	12.400	360	NJ
05	112-80-1	Oleic Acid	13.400	2800	NJ
06	57-11-4	Octadecanoic acid	13.490	1800	NJ
07		Unknown-02	13.910	190	JN
08	6533-00-2	Norgestrel	14.960	400	NJ
09	55282-13-8	Octadecane, 5,14-dibutyl-	15.370	170	NJ
10		Unknown-03	15.400	230	JN
11		Unknown-04	15.620	150	J
12		Unknown-05	15.660	140	J
13		Unknown-06	15.760	140	J
14		Unknown-07	15.810	270	J
15		Unknown-08	15.950	180	J
16		Unknown-09	16.090	170	J
17		Unknown-10	16.240	110	J
18	13287-23-5	Heptadecane, 8-methyl-	16.300	250	NJ
19	33125-86-9	Phosphoric acid, 1,2-	16.340	220	NJ
20		Unknown-11	16.440	340	JN
21		Unknown-12	16.600	140	J
22		Unknown-13	16.730	380	J
23	112-95-8	Eicosane	16.840	290	NJ
24		Unknown-14	17.050	120	JN
25	612-71-5	1,1':3',1''-Terphenyl, 5'-	17.530	1100	NJ
26		Unknown-15	18.090	140	JN
27		Unknown-16	18.750	320	J
28		Unknown-17	19.470	170	J
29					
30					
	E966796[2]	Total Alkanes	N/A		

SH 03/08/10

[2]EPA-designated Registry Number.

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B09

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	440	U
108-95-2	Phenol	440	U
111-44-4	Bis(2-Chloroethyl)ether	440	U
95-57-8	2-Chlorophenol	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	2,2'-Oxybis(1-chloropropane)	440	U
98-86-2	Acetophenone	99	JQ
106-44-5	4-Methylphenol	440	U
621-64-7	N-Nitroso-di-n-propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
111-91-1	Bis(2-Chloroethoxy)methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
91-20-3	Naphthalene	440	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	440	U
105-60-2	Caprolactam	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	440	U
92-52-4	1,1'-Biphenyl	440	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	440	U
606-20-2	2,6-Dinitrotoluene	440	U
208-96-8	Acenaphthylene	440	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	440	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B09

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	440	U
121-14-2	2,4-Dinitrotoluene	440	U
84-66-2	Diethylphthalate	440	U
86-73-7	Fluorene	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine [1]	440	U
95-94-3	1,2,4,5-Tetrachlorobenzene	440	U
101-55-3	4-Bromophenyl-phenylether	440	U
118-74-1	Hexachlorobenzene	440	U
1912-24-9	Atrazine	440	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	440	U
120-12-7	Anthracene	440	U
86-74-8	Carbazole	440	U
84-74-2	Di-n-butylphthalate	440	U
206-44-0	Fluoranthene	440	U
129-00-0	Pyrene	440	U
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3'-Dichlorobenzidine	440	U
56-55-3	Benzo(a)anthracene	440	U
218-01-9	Chrysene	440	U
117-81-7	Bis(2-ethylhexyl)phthalate	110	JQ
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo(b)fluoranthene	440	U
207-08-9	Benzo(k)fluoranthene	440	U
50-32-8	Benzo(a)pyrene	440	U
193-39-5	Indeno(1,2,3-cd)pyrene	440	U
53-70-3	Dibenzo(a,h)anthracene	440	U
191-24-2	Benzo(g,h,i)perylene	440	U
58-90-2	2,3,4,6-Tetrachlorophenol	440	U

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B09

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 2.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.940	290	JN
02		Unknown-02	4.700	1200	J ~~B~~N KMM 03/08/10
03	556-67-2	Cyclotetrasiloxane,	5.880	260	NJ
04		Unknown-03	7.200	240	JN
05		Unknown-04	17.070	270	J
06		Unknown-05	17.310	190	J
07		Unknown-06	18.110	180	J
08	53584-60-4	28-Nor-17.alpha.(H)-hopane	19.090	230	NJ
09		Unknown-07	19.850	260	JN
10					
11					
12					
13					
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18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 0302B10

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 30 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	480	U
108-95-2	Phenol	480	U
111-44-4	Bis(2-Chloroethyl)ether	480	U
95-57-8	2-Chlorophenol	480	U
95-48-7	2-Methylphenol	480	U
108-60-1	2,2'-Oxybis(1-chloropropane)	480	U
98-86-2	Acetophenone	480	U
106-44-5	4-Methylphenol	120	JQ
621-64-7	N-Nitroso-di-n-propylamine	480	U
67-72-1	Hexachloroethane	480	U
98-95-3	Nitrobenzene	480	U
78-59-1	Isophorone	480	U
88-75-5	2-Nitrophenol	480	U
105-67-9	2,4-Dimethylphenol	480	U
111-91-1	Bis(2-Chloroethoxy)methane	480	U
120-83-2	2,4-Dichlorophenol	480	U
91-20-3	Naphthalene	480	U
106-47-8	4-Chloroaniline	480	U
87-68-3	Hexachlorobutadiene	480	U
105-60-2	Caprolactam	480	U
59-50-7	4-Chloro-3-methylphenol	480	U
91-57-6	2-Methylnaphthalene	480	U
77-47-4	Hexachlorocyclopentadiene	480	U
88-06-2	2,4,6-Trichlorophenol	480	U
95-95-4	2,4,5-Trichlorophenol	480	U
92-52-4	1,1'-Biphenyl	480	U
91-58-7	2-Chloronaphthalene	480	U
88-74-4	2-Nitroaniline	920	U
131-11-3	Dimethylphthalate	480	U
606-20-2	2,6-Dinitrotoluene	480	U
208-96-8	Acenaphthylene	480	U
99-09-2	3-Nitroaniline	920	U
83-32-9	Acenaphthene	480	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 0302B10

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 30 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	920	U
100-02-7	4-Nitrophenol	920	U
132-64-9	Dibenzofuran	480	U
121-14-2	2,4-Dinitrotoluene	480	U
84-66-2	Diethylphthalate	480	U
86-73-7	Fluorene	480	U
7005-72-3	4-Chlorophenyl-phenylether	480	U
100-01-6	4-Nitroaniline	920	U
534-52-1	4,6-Dinitro-2-methylphenol	920	U
86-30-6	N-Nitrosodiphenylamine [1]	480	U
95-94-3	1,2,4,5-Tetrachlorobenzene	480	U
101-55-3	4-Bromophenyl-phenylether	480	U
118-74-1	Hexachlorobenzene	480	U
1912-24-9	Atrazine	480	U
87-86-5	Pentachlorophenol	920	U
85-01-8	Phenanthrene	480	U
120-12-7	Anthracene	480	U
86-74-8	Carbazole	480	U
84-74-2	Di-n-butylphthalate	480	U
206-44-0	Fluoranthene	120	J Q
129-00-0	Pyrene	480	U
85-68-7	Butylbenzylphthalate	130	J Q
91-94-1	3,3'-Dichlorobenzidine	480	U
56-55-3	Benzo(a)anthracene	480	U
218-01-9	Chrysene	480	U
117-81-7	Bis(2-ethylhexyl)phthalate	2200	
117-84-0	Di-n-octylphthalate	480	U
205-99-2	Benzo(b)fluoranthene	480	U
207-08-9	Benzo(k)fluoranthene	480	U
50-32-8	Benzo(a)pyrene	480	U
193-39-5	Indeno(1,2,3-cd)pyrene	480	U
53-70-3	Dibenzo(a,h)anthracene	480	U
191-24-2	Benzo(g,h,i)perylene	480	U
58-90-2	2,3,4,6-Tetrachlorophenol	480	U

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 0302B10

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 30 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 2.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.930	330	JN
02		Unknown-02	4.700	1100	JBN
03	57-10-3	n-Hexadecanoic acid	12.640	880	NJ
04		Unknown-03	13.410	570	JN
05		Unknown-04	13.540	640	J
06		Unknown-05	15.030	210	J
07		Unknown-06	15.110	470	J
08	593-45-3	Octadecane	15.540	290	NJ
09	593-49-7	Heptacosane	16.000	450	NJ
10		Unknown-07	16.190	270	JN
11	630-02-4	Octacosane	16.520	280	NJ
12		Unknown-08	17.180	240	JN
13		Unknown-09	17.320	190	J
14		Unknown-10	18.080	210	J
15		Unknown-11	18.230	190	J
16		Unknown-12	18.290	550	J
17		Unknown-13	18.490	360	J
18		Unknown-14	18.730	190	J
19		Unknown-15	18.980	290	J
20		Unknown-16	19.110	530	J
21		Unknown-17	19.370	190	J
22		Unknown-18	19.880	910	J
23	36728-72-0	28-Nor-17.beta.(H)-hopane	20.900	300	NJ
24		Unknown-19	21.880	380	JN
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

KMW 03/08/10

2/1/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 030308

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	230	U
108-95-2	Phenol	230	U
111-44-4	Bis(2-Chloroethyl)ether	230	U
95-57-8	2-Chlorophenol	230	U
95-48-7	2-Methylphenol	230	U
108-60-1	2,2'-Oxybis(1-chloropropane)	230	U
98-86-2	Acetophenone	230	U
106-44-5	4-Methylphenol	76	JQ
621-64-7	N-Nitroso-di-n-propylamine	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
105-67-9	2,4-Dimethylphenol	230	U
111-91-1	Bis(2-Chloroethoxy)methane	230	U
120-83-2	2,4-Dichlorophenol	230	U
91-20-3	Naphthalene	230	U
106-47-8	4-Chloroaniline	230	U
87-68-3	Hexachlorobutadiene	230	U
105-60-2	Caprolactam	230	U
59-50-7	4-Chloro-3-methylphenol	230	U
91-57-6	2-Methylnaphthalene	230	U
77-47-4	Hexachlorocyclopentadiene	230	UJK R 3/29/10
88-06-2	2,4,6-Trichlorophenol	230	U
95-95-4	2,4,5-Trichlorophenol	230	U
92-52-4	1,1'-Biphenyl	230	U
91-58-7	2-Chloronaphthalene	230	U
88-74-4	2-Nitroaniline	440	U
131-11-3	Dimethylphthalate	230	U
606-20-2	2,6-Dinitrotoluene	230	U
208-96-8	Acenaphthylene	230	U
99-09-2	3-Nitroaniline	440	U
83-32-9	Acenaphthene	230	U

3/29/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 030308

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	440	U
100-02-7	4-Nitrophenol	440	U
132-64-9	Dibenzofuran	230	U
121-14-2	2,4-Dinitrotoluene	230	U
84-66-2	Diethylphthalate	230	U
86-73-7	Fluorene	230	U
7005-72-3	4-Chlorophenyl-phenylether	230	U
100-01-6	4-Nitroaniline	440	U
534-52-1	4,6-Dinitro-2-methylphenol	440	U
86-30-6	N-Nitrosodiphenylamine [1]	230	U
95-94-3	1,2,4,5-Tetrachlorobenzene	230	U
101-55-3	4-Bromophenyl-phenylether	230	U
118-74-1	Hexachlorobenzene	230	U
1912-24-9	Atrazine	230	U
87-86-5	Pentachlorophenol	440	U
85-01-8	Phenanthrene	50	JQ
120-12-7	Anthracene	230	U
86-74-8	Carbazole	230	U
84-74-2	Di-n-butylphthalate	230	U
206-44-0	Fluoranthene	110	JQ
129-00-0	Pyrene	72	JQ
85-68-7	Butylbenzylphthalate	61	JQ
91-94-1	3,3'-Dichlorobenzidine	230	U
56-55-3	Benzo(a)anthracene	43	JQ
218-01-9	Chrysene	50	JQ
117-81-7	Bis(2-ethylhexyl)phthalate	410	
117-84-0	Di-n-octylphthalate	230	U
205-99-2	Benzo(b)fluoranthene	54	JQ
207-08-9	Benzo(k)fluoranthene	230	U
50-32-8	Benzo(a)pyrene	40	JQ
193-39-5	Indeno(1,2,3-cd)pyrene	230	U
53-70-3	Dibenzo(a,h)anthracene	230	U
191-24-2	Benzo(g,h,i)perylene	230	U
58-90-2	2,3,4,6-Tetrachlorophenol	230	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 030308

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q N
01		Unknown Aldol Condensate	4.560	1100	~~A~~ J ~~B~~
02	544-63-8	Tetradecanoic acid	11.380	200	NJ
03	638-53-9	Tridecanoic acid	12.490	1900	NJ
04	593-39-5	6-Octadecenoic acid, (Z)-	13.380	1300	NJ
05	14167-59-0	Tetratriacontane	14.940	410	NJ
06	593-45-3	Octadecane	15.360	290	NJ
07	330207-53-9	E-14-Hexadecenal	15.800	290	NJ
08		Unknown-01	15.960	100	JN
09	7098-22-8	Tetratetracontane	16.290	210	NJ
10		Unknown-02	16.430	200	JN
11		Unknown-03	17.950	130	JN
12	630-02-4	Octacosane	18.160	160	NJ
13	53584-60-4	28-Nor-17.alpha.(H)-hopane	18.720	230	NJ
14		Unknown-04	19.450	150	JN
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Kmm 03/08/10

SOM01.2 (10/2006)

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B12

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 51 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 5.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	340	U
108-95-2	Phenol	340	U
111-44-4	Bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-Oxybis(1-chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	Bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
92-52-4	1,1'-Biphenyl	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	340	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B12

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 51 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 5.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine [1]	340	U
95-94-3	1,2,4,5-Tetrachlorobenzene	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
1912-24-9	Atrazine	340	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	Bis(2-ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U
58-90-2	2,3,4,6-Tetrachlorophenol	340	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B12

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 51 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 5.5 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.700	1700	J BN
02		Unknown-02	8.730	430	J BN
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
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24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

KMM 03/04/10

[2] EPA-designated Registry Number.

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 30.7 (g/mL) g Lab File ID: 0302B13

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 64 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	470	U
108-95-2	Phenol	470	U
111-44-4	Bis(2-Chloroethyl)ether	470	U
95-57-8	2-Chlorophenol	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-Oxybis(1-chloropropane)	470	U
98-86-2	Acetophenone	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-di-n-propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	Bis(2-Chloroethoxy)methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	470	U
105-60-2	Caprolactam	470	U
59-50-7	4-Chloro-3-methylphenol	470	U
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	470	U
92-52-4	1,1'-Biphenyl	470	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	470	U
606-20-2	2,6-Dinitrotoluene	470	U
208-96-8	Acenaphthylene	470	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	470	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 30.7 (g/mL) g Lab File ID: 0302B13

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 64 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	470	U
121-14-2	2,4-Dinitrotoluene	470	U
84-66-2	Diethylphthalate	470	U
86-73-7	Fluorene	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine [1]	470	U
95-94-3	1,2,4,5-Tetrachlorobenzene	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	470	U
1912-24-9	Atrazine	470	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	470	U
120-12-7	Anthracene	470	U
86-74-8	Carbazole	470	U
84-74-2	Di-n-butylphthalate	470	U
206-44-0	Fluoranthene	470	U
129-00-0	Pyrene	470	U
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3'-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	470	U
218-01-9	Chrysene	470	U
117-81-7	Bis(2-ethylhexyl)phthalate	470	U
117-84-0	Di-n-octylphthalate	470	U
205-99-2	Benzo(b)fluoranthene	470	U
207-08-9	Benzo(k)fluoranthene	470	U
50-32-8	Benzo(a)pyrene	470	U
193-39-5	Indeno(1,2,3-cd)pyrene	470	U
53-70-3	Dibenzo(a,h)anthracene	470	U
191-24-2	Benzo(g,h,i)perylene	470	U
58-90-2	2,3,4,6-Tetrachlorophenol	470	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 30.7 (g/mL) g Lab File ID: 0302B13

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 64 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.710	2300	J BN
02		Unknown-02	8.740	320	J BN
03	1002-84-2	Pentadecanoic acid	11.900	200	NJ
04		Unknown-03	21.780	1100	JN
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

KMM 03/04/10

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 0302B14

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 66 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 5.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	500	U
108-95-2	Phenol	500	U
111-44-4	Bis(2-Chloroethyl)ether	500	U
95-57-8	2-Chlorophenol	500	U
95-48-7	2-Methylphenol	500	U
108-60-1	2,2'-Oxybis(1-chloropropane)	500	U
98-86-2	Acetophenone	500	U
106-44-5	4-Methylphenol	500	U
621-64-7	N-Nitroso-di-n-propylamine	500	U
67-72-1	Hexachloroethane	500	U
98-95-3	Nitrobenzene	500	U
78-59-1	Isophorone	500	U
88-75-5	2-Nitrophenol	500	U
105-67-9	2,4-Dimethylphenol	500	U
111-91-1	Bis(2-Chloroethoxy)methane	500	U
120-83-2	2,4-Dichlorophenol	500	U
91-20-3	Naphthalene	500	U
106-47-8	4-Chloroaniline	500	U
87-68-3	Hexachlorobutadiene	500	U
105-60-2	Caprolactam	500	U
59-50-7	4-Chloro-3-methylphenol	500	U
91-57-6	2-Methylnaphthalene	500	U
77-47-4	Hexachlorocyclopentadiene	500	U
88-06-2	2,4,6-Trichlorophenol	500	U
95-95-4	2,4,5-Trichlorophenol	500	U
92-52-4	1,1'-Biphenyl	500	U
91-58-7	2-Chloronaphthalene	500	U
88-74-4	2-Nitroaniline	960	U
131-11-3	Dimethylphthalate	500	U
606-20-2	2,6-Dinitrotoluene	500	U
208-96-8	Acenaphthylene	500	U
99-09-2	3-Nitroaniline	960	U
83-32-9	Acenaphthene	500	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 0302B14

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 66 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 5.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	960	U
100-02-7	4-Nitrophenol	960	U
132-64-9	Dibenzofuran	500	U
121-14-2	2,4-Dinitrotoluene	500	U
84-66-2	Diethylphthalate	500	U
86-73-7	Fluorene	500	U
7005-72-3	4-Chlorophenyl-phenylether	500	U
100-01-6	4-Nitroaniline	960	U
534-52-1	4,6-Dinitro-2-methylphenol	960	U
86-30-6	N-Nitrosodiphenylamine [1]	500	U
95-94-3	1,2,4,5-Tetrachlorobenzene	500	U
101-55-3	4-Bromophenyl-phenylether	500	U
118-74-1	Hexachlorobenzene	500	U
1912-24-9	Atrazine	500	U
87-86-5	Pentachlorophenol	960	U
85-01-8	Phenanthrene	500	U
120-12-7	Anthracene	500	U
86-74-8	Carbazole	500	U
84-74-2	Di-n-butylphthalate	500	U
206-44-0	Fluoranthene	500	U
129-00-0	Pyrene	500	U
85-68-7	Butylbenzylphthalate	500	U
91-94-1	3,3'-Dichlorobenzidine	500	U
56-55-3	Benzo(a)anthracene	500	U
218-01-9	Chrysene	500	U
117-81-7	Bis(2-ethylhexyl)phthalate	500	U
117-84-0	Di-n-octylphthalate	500	U
205-99-2	Benzo(b)fluoranthene	500	U
207-08-9	Benzo(k)fluoranthene	500	U
50-32-8	Benzo(a)pyrene	500	U
193-39-5	Indeno(1,2,3-cd)pyrene	500	U
53-70-3	Dibenzo(a,h)anthracene	500	U
191-24-2	Benzo(g,h,i)perylene	500	U
58-90-2	2,3,4,6-Tetrachlorophenol	500	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 0302B14

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 66 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 5.7 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.710	2600	J ~~B~~N
02		Unknown-02	8.740	270	J ~~B~~N
03	1002-84-2	Pentadecanoic acid	11.900	250	NJ
04		Unknown-03	12.550	320	JN
05	638-53-9	Tridecanoic acid	12.630	250	NJ
06		Unknown-04	13.140	440	JN
07	112-80-1	Oleic Acid	13.550	320	NJ
08		Unknown-05	14.540	240	JN
09	629-92-5	Nonadecane	15.110	320	NJ
10	112-85-6	Docosanoic acid	15.400	240	NJ
11		Unknown-06	21.840	1500	JN
12		Unknown-07	21.950	490	J
13		Unknown-08	22.450	1400	J
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

KMM 03/08/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 030515

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 4.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	310	UJK
108-95-2	Phenol	310	U
111-44-4	Bis(2-Chloroethyl)ether	310	U
95-57-8	2-Chlorophenol	310	U
95-48-7	2-Methylphenol	310	U
108-60-1	2,2'-Oxybis(1-chloropropane)	310	U
98-86-2	Acetophenone	310	U
106-44-5	4-Methylphenol	310	U
621-64-7	N-Nitroso-di-n-propylamine	310	U
67-72-1	Hexachloroethane	310	U
98-95-3	Nitrobenzene	310	U
78-59-1	Isophorone	310	U
88-75-5	2-Nitrophenol	310	U
105-67-9	2,4-Dimethylphenol	310	U
111-91-1	Bis(2-Chloroethoxy)methane	310	U
120-83-2	2,4-Dichlorophenol	310	U
91-20-3	Naphthalene	310	U
106-47-8	4-Chloroaniline	310	U
87-68-3	Hexachlorobutadiene	310	U
105-60-2	Caprolactam	310	U
59-50-7	4-Chloro-3-methylphenol	310	U
91-57-6	2-Methylnaphthalene	310	U
77-47-4	Hexachlorocyclopentadiene	310	U
88-06-2	2,4,6-Trichlorophenol	310	U
95-95-4	2,4,5-Trichlorophenol	310	U
92-52-4	1,1'-Biphenyl	310	U
91-58-7	2-Chloronaphthalene	310	U
88-74-4	2-Nitroaniline	610	U
131-11-3	Dimethylphthalate	310	U
606-20-2	2,6-Dinitrotoluene	310	U
208-96-8	Acenaphthylene	310	U
99-09-2	3-Nitroaniline	610	U
83-32-9	Acenaphthene	310	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 030515

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 4.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	610	U
100-02-7	4-Nitrophenol	610	U
132-64-9	Dibenzofuran	310	U
121-14-2	2,4-Dinitrotoluene	310	U
84-66-2	Diethylphthalate	310	U
86-73-7	Fluorene	310	U
7005-72-3	4-Chlorophenyl-phenylether	310	U
100-01-6	4-Nitroaniline	610	U
534-52-1	4,6-Dinitro-2-methylphenol	610	U
86-30-6	N-Nitrosodiphenylamine [1]	310	U
95-94-3	1,2,4,5-Tetrachlorobenzene	310	U
101-55-3	4-Bromophenyl-phenylether	310	U
118-74-1	Hexachlorobenzene	310	U
1912-24-9	Atrazine	310	U
87-86-5	Pentachlorophenol	610	U
85-01-8	Phenanthrene	310	U
120-12-7	Anthracene	310	U
86-74-8	Carbazole	310	U
84-74-2	Di-n-butylphthalate	310	U
206-44-0	Fluoranthene	310	U
129-00-0	Pyrene	310	U
85-68-7	Butylbenzylphthalate	310	U
91-94-1	3,3'-Dichlorobenzidine	310	U
56-55-3	Benzo(a)anthracene	310	U
218-01-9	Chrysene	310	U
117-81-7	Bis(2-ethylhexyl)phthalate	310	U
117-84-0	Di-n-octylphthalate	310	U
205-99-2	Benzo(b)fluoranthene	310	U
207-08-9	Benzo(k)fluoranthene	310	U
50-32-8	Benzo(a)pyrene	310	U
193-39-5	Indeno(1,2,3-cd)pyrene	310	U
53-70-3	Dibenzo(a,h)anthracene	310	U
191-24-2	Benzo(g,h,i)perylene	310	U
58-90-2	2,3,4,6-Tetrachlorophenol	310	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 030515

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 4.9 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown Aldol Condensate	4.680	1600	~~J~~ ~~B~~ N
02	54833-48-6	Heptadecane, 2,6,10,15-	15.070	150	NJ
03	1560-97-0	Dodecane, 2-methyl-	15.950	180	NJ
04		Unknown-01	21.550	420	JN
05	22611-26-3	D:C-Friedoolean-8-en-3-one	22.410	1500	NJ
06		Unknown-02	23.000	920	JN
07					
08					
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30					
	E966796[2]	Total Alkanes	N/A		

Kmm 03/08/10

[2] EPA-designated Registry Number.

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 0302B16

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	260	U
108-95-2	Phenol	260	U
111-44-4	Bis(2-Chloroethyl)ether	260	U
95-57-8	2-Chlorophenol	260	U
95-48-7	2-Methylphenol	260	U
108-60-1	2,2'-Oxybis(1-chloropropane)	260	U
98-86-2	Acetophenone	260	U
106-44-5	4-Methylphenol	260	U
621-64-7	N-Nitroso-di-n-propylamine	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
105-67-9	2,4-Dimethylphenol	260	U
111-91-1	Bis(2-Chloroethoxy)methane	260	U
120-83-2	2,4-Dichlorophenol	260	U
91-20-3	Naphthalene	260	U
106-47-8	4-Chloroaniline	260	U
87-68-3	Hexachlorobutadiene	260	U
105-60-2	Caprolactam	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	260	U
95-95-4	2,4,5-Trichlorophenol	260	U
92-52-4	1,1'-Biphenyl	260	U
91-58-7	2-Chloronaphthalene	260	U
88-74-4	2-Nitroaniline	500	U
131-11-3	Dimethylphthalate	260	U
606-20-2	2,6-Dinitrotoluene	260	U
208-96-8	Acenaphthylene	260	U
99-09-2	3-Nitroaniline	500	U
83-32-9	Acenaphthene	260	U

3/11/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 0302B16

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	500	U
100-02-7	4-Nitrophenol	500	U
132-64-9	Dibenzofuran	260	U
121-14-2	2,4-Dinitrotoluene	260	U
84-66-2	Diethylphthalate	260	U
86-73-7	Fluorene	260	U
7005-72-3	4-Chlorophenyl-phenylether	260	U
100-01-6	4-Nitroaniline	500	U
534-52-1	4,6-Dinitro-2-methylphenol	500	U
86-30-6	N-Nitrosodiphenylamine [1]	260	U
95-94-3	1,2,4,5-Tetrachlorobenzene	260	U
101-55-3	4-Bromophenyl-phenylether	260	U
118-74-1	Hexachlorobenzene	260	U
1912-24-9	Atrazine	260	U
87-86-5	Pentachlorophenol	500	U
85-01-8	Phenanthrene	260	U
120-12-7	Anthracene	260	U
86-74-8	Carbazole	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
91-94-1	3,3'-Dichlorobenzidine	260	U
56-55-3	Benzo(a)anthracene	260	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	260	U
193-39-5	Indeno(1,2,3-cd)pyrene	260	U
53-70-3	Dibenzo(a,h)anthracene	260	U
191-24-2	Benzo(g,h,i)perylene	260	U
58-90-2	2,3,4,6-Tetrachlorophenol	260	U

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 0302B16

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.930	150	JN
02		Unknown-02	4.710	1300	J ~~B~~N } KMY 3/8/10
03		Unknown-03	8.740	130	J ~~B~~N }
04	1002-84-2	Pentadecanoic acid	11.900	170	NJ
05		Unknown-04	12.550	410	JN
06	57-10-3	n-Hexadecanoic acid	12.630	230	NJ
07	112-80-1	Oleic Acid	13.550	170	NJ
08	7098-22-8	Tetratetracontane	15.110	170	NJ
09	593-45-3	Octadecane	15.990	150	NJ
10	7390-81-0	Oxirane, hexadecyl-	16.750	140	NJ
11		Unknown-05	21.610	2000	JN
12	471-68-1	Olean-12-ene	21.860	1300	NJ
13		Unknown-06	21.950	240	JN
14		Unknown-07	22.310	350	J
15		Unknown-08	22.500	4900	J
16	303758-63-6	Benzenamine, 3-methyl-N-(2-	23.070	3200	NJ
17		Unknown-09	23.220	170	JN
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 030516

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	200	UJK
108-95-2	Phenol	200	U
111-44-4	Bis(2-Chloroethyl)ether	200	U
95-57-8	2-Chlorophenol	200	U
95-48-7	2-Methylphenol	200	U
108-60-1	2,2'-Oxybis(1-chloropropane)	200	U
98-86-2	Acetophenone	200	U
106-44-5	4-Methylphenol	200	U
621-64-7	N-Nitroso-di-n-propylamine	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
105-67-9	2,4-Dimethylphenol	200	U
111-91-1	Bis(2-Chloroethoxy)methane	200	U
120-83-2	2,4-Dichlorophenol	200	U
91-20-3	Naphthalene	200	U
106-47-8	4-Chloroaniline	200	U
87-68-3	Hexachlorobutadiene	200	U
105-60-2	Caprolactam	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	200	U
95-95-4	2,4,5-Trichlorophenol	200	U
92-52-4	1,1'-Biphenyl	200	U
91-58-7	2-Chloronaphthalene	200	U
88-74-4	2-Nitroaniline	390	U
131-11-3	Dimethylphthalate	200	U
606-20-2	2,6-Dinitrotoluene	200	U
208-96-8	Acenaphthylene	200	U
99-09-2	3-Nitroaniline	390	U
83-32-9	Acenaphthene	200	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 030516

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	390	U
100-02-7	4-Nitrophenol	390	U
132-64-9	Dibenzofuran	200	U
121-14-2	2,4-Dinitrotoluene	200	U
84-66-2	Diethylphthalate	200	U
86-73-7	Fluorene	200	U
7005-72-3	4-Chlorophenyl-phenylether	200	U
100-01-6	4-Nitroaniline	390	U
534-52-1	4,6-Dinitro-2-methylphenol	390	U
86-30-6	N-Nitrosodiphenylamine [1]	200	U
95-94-3	1,2,4,5-Tetrachlorobenzene	200	U
101-55-3	4-Bromophenyl-phenylether	200	U
118-74-1	Hexachlorobenzene	200	U
1912-24-9	Atrazine	200	U
87-86-5	Pentachlorophenol	390	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
86-74-8	Carbazole	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
91-94-1	3,3'-Dichlorobenzidine	200	U
56-55-3	Benzo(a)anthracene	200	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	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U
58-90-2	2,3,4,6-Tetrachlorophenol	200	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 030516

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown Aldol Condensate	4.690	1000	~~X~~ J ~~B~~ N
02		Unknown-01	11.890	91	JN
03		Unknown-02	12.530	280	JN
04	57-10-3	n-Hexadecanoic acid	12.610	320	NJ
05		Unknown-03	13.550	260	JN
06	6418-43-5	Hexadecane, 3-methyl-	15.060	100	NJ
07	112-95-8	Eicosane	15.950	110	NJ
08		Unknown-04	21.570	1400	JN
09		Unknown-05	21.810	680	JN
10	22611-26-3	D:C-Friedoolean-8-en-3-one	22.450	3700	NJ
11	6874-67-5	Farnesyl bromide	23.020	2100	NJ
12	1058-61-3	Stigmast-4-en-3-one	23.180	360	NJ
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Kmm 03/08/10

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 0302B18

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	310	U
108-95-2	Phenol	310	U
111-44-4	Bis(2-Chloroethyl)ether	310	U
95-57-8	2-Chlorophenol	310	U
95-48-7	2-Methylphenol	310	U
108-60-1	2,2'-Oxybis(1-chloropropane)	310	U
98-86-2	Acetophenone	310	U
106-44-5	4-Methylphenol	310	U
621-64-7	N-Nitroso-di-n-propylamine	310	U
67-72-1	Hexachloroethane	310	U
98-95-3	Nitrobenzene	310	U
78-59-1	Isophorone	310	U
88-75-5	2-Nitrophenol	310	U
105-67-9	2,4-Dimethylphenol	310	U
111-91-1	Bis(2-Chloroethoxy)methane	310	U
120-83-2	2,4-Dichlorophenol	310	U
91-20-3	Naphthalene	310	U
106-47-8	4-Chloroaniline	310	U
87-68-3	Hexachlorobutadiene	310	U
105-60-2	Caprolactam	310	U
59-50-7	4-Chloro-3-methylphenol	310	U
91-57-6	2-Methylnaphthalene	310	U
77-47-4	Hexachlorocyclopentadiene	310	U
88-06-2	2,4,6-Trichlorophenol	310	U
95-95-4	2,4,5-Trichlorophenol	310	U
92-52-4	1,1'-Biphenyl	310	U
91-58-7	2-Chloronaphthalene	310	U
88-74-4	2-Nitroaniline	610	U
131-11-3	Dimethylphthalate	310	U
606-20-2	2,6-Dinitrotoluene	310	U
208-96-8	Acenaphthylene	310	U
99-09-2	3-Nitroaniline	610	U
83-32-9	Acenaphthene	310	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 0302B18

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	610	U
100-02-7	4-Nitrophenol	610	U
132-64-9	Dibenzofuran	310	U
121-14-2	2,4-Dinitrotoluene	310	U
84-66-2	Diethylphthalate	310	U
86-73-7	Fluorene	310	U
7005-72-3	4-Chlorophenyl-phenylether	310	U
100-01-6	4-Nitroaniline	610	U
534-52-1	4,6-Dinitro-2-methylphenol	610	U
86-30-6	N-Nitrosodiphenylamine [1]	310	U
95-94-3	1,2,4,5-Tetrachlorobenzene	310	U
101-55-3	4-Bromophenyl-phenylether	310	U
118-74-1	Hexachlorobenzene	310	U
1912-24-9	Atrazine	310	U
87-86-5	Pentachlorophenol	610	U
85-01-8	Phenanthrene	310	U
120-12-7	Anthracene	310	U
86-74-8	Carbazole	310	U
84-74-2	Di-n-butylphthalate	310	U
206-44-0	Fluoranthene	310	U
129-00-0	Pyrene	310	U
85-68-7	Butylbenzylphthalate	310	U
91-94-1	3,3'-Dichlorobenzidine	310	U
56-55-3	Benzo(a)anthracene	310	U
218-01-9	Chrysene	310	U
117-81-7	Bis(2-ethylhexyl)phthalate	310	U
117-84-0	Di-n-octylphthalate	310	U
205-99-2	Benzo(b)fluoranthene	310	U
207-08-9	Benzo(k)fluoranthene	310	U
50-32-8	Benzo(a)pyrene	310	U
193-39-5	Indeno(1,2,3-cd)pyrene	310	U
53-70-3	Dibenzo(a,h)anthracene	310	U
191-24-2	Benzo(g,h,i)perylene	310	U
58-90-2	2,3,4,6-Tetrachlorophenol	310	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 0302B18

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.710	2100	J ~~B~~N
02		Unknown-02	5.870	390	JN
03	1002-84-2	Pentadecanoic acid	11.900	220	NJ
04	1000130-90-8	Z-7-Hexadecenoic acid	12.550	330	NJ
05	57-10-3	n-Hexadecanoic acid	12.630	350	NJ
06		Unknown-03	12.820	200	JN
07		Unknown-04	12.870	540	J
08		Unknown-05	12.930	1800	J
09	1000293-16-6	18-Norabietane	13.140	270	NJ
10		Unknown-06	13.170	420	JN
11		Unknown-07	13.240	220	J
12		Unknown-08	13.420	240	J
13	593-39-5	6-Octadecenoic acid, (Z)-	13.550	370	NJ
14	57-11-4	Octadecanoic acid	13.630	180	NJ
15		Unknown-09	13.710	450	JN
16		Unknown-10	14.380	420	J
17		Unknown-11	14.480	500	J
18		Unknown-12	14.540	370	J
19		Unknown-13	14.990	310	J
20		Unknown-14	15.130	950	J
21		Unknown-15	15.990	220	J
22	638-66-4	Octadecanal	16.760	210	NJ
23		Unknown-16	18.900	540	JN
24		Unknown-17	19.660	320	J
25		Unknown-18	21.610	1100	J
26		Unknown-19	21.860	2000	J
27		Unknown-20	21.960	330	J
28		Unknown-21	22.480	1900	J
29		Unknown-22	23.070	1500	J
30	1058-61-3	Stigmast-4-en-3-one	23.240	260	NJ
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

KMW 03/02/10

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 030517

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 39 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	280	UJK
108-95-2	Phenol	280	UJK
111-44-4	Bis(2-Chloroethyl)ether	280	U
95-57-8	2-Chlorophenol	280	U
95-48-7	2-Methylphenol	280	U
108-60-1	2,2'-Oxybis(1-chloropropane)	280	U
98-86-2	Acetophenone	280	U
106-44-5	4-Methylphenol	280	U
621-64-7	N-Nitroso-di-n-propylamine	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
105-67-9	2,4-Dimethylphenol	280	U
111-91-1	Bis(2-Chloroethoxy)methane	280	U
120-83-2	2,4-Dichlorophenol	280	U
91-20-3	Naphthalene	280	U
106-47-8	4-Chloroaniline	280	U
87-68-3	Hexachlorobutadiene	280	U
105-60-2	Caprolactam	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	280	U
95-95-4	2,4,5-Trichlorophenol	280	U
92-52-4	1,1'-Biphenyl	280	U
91-58-7	2-Chloronaphthalene	280	U
88-74-4	2-Nitroaniline	540	U
131-11-3	Dimethylphthalate	280	U
606-20-2	2,6-Dinitrotoluene	280	U
208-96-8	Acenaphthylene	280	U
99-09-2	3-Nitroaniline	540	U
83-32-9	Acenaphthene	280	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 030517

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 39 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	540	U
100-02-7	4-Nitrophenol	540	U
132-64-9	Dibenzofuran	280	U
121-14-2	2,4-Dinitrotoluene	280	U
84-66-2	Diethylphthalate	280	U
86-73-7	Fluorene	280	U
7005-72-3	4-Chlorophenyl-phenylether	280	U
100-01-6	4-Nitroaniline	540	U
534-52-1	4,6-Dinitro-2-methylphenol	540	U
86-30-6	N-Nitrosodiphenylamine [1]	280	U
95-94-3	1,2,4,5-Tetrachlorobenzene	280	U
101-55-3	4-Bromophenyl-phenylether	280	U
118-74-1	Hexachlorobenzene	280	U
1912-24-9	Atrazine	280	U
87-86-5	Pentachlorophenol	540	U
85-01-8	Phenanthrene	280	U
120-12-7	Anthracene	280	U
86-74-8	Carbazole	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
91-94-1	3,3'-Dichlorobenzidine	280	U
56-55-3	Benzo(a)anthracene	280	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	280	U
193-39-5	Indeno(1,2,3-cd)pyrene	280	U
53-70-3	Dibenzo(a,h)anthracene	280	U
191-24-2	Benzo(g,h,i)perylene	280	U
58-90-2	2,3,4,6-Tetrachlorophenol	280	U

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 030517

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 39 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown Aldol Condensate	4.670	1100	~~X~~ J ~~B~~ N
02		Unknown-01	12.880	420	J N
03	593-45-3	Octadecane	14.220	170	NJ
04	7225-66-3	Tridecane, 7-hexyl-	15.060	430	NJ
05	7098-22-8	Tetratetracontane	15.950	320	NJ
06	297-03-0	Cyclotetracosane	16.510	320	NJ
07		Unknown-02	17.740	230	J N
08		Unknown-03	21.350	710	J
09		Unknown-04	21.560	2100	J
10		Unknown-05	21.660	920	J
11	1617-70-5	Lup-20(29)-en-3-one	21.860	13000	NJ
12		Unknown-06	21.940	4600	J N
13	22611-26-3	D:C-Friedoolean-8-en-3-one	22.270	810	NJ
14	300574-36-1	5-Bromo-4-oxo-4,5,6,7-	22.450	6800	NJ
15		Unknown-07	23.020	3000	J N
16		Unknown-08	23.170	220	J
17		Unknown-09	23.760	450	J
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

SOM01.2 (10/2006)

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B24

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 84 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	1000	UJK RJ 3/16/10
108-95-2	Phenol	1000	U
111-44-4	Bis(2-Chloroethyl)ether	1000	U
95-57-8	2-Chlorophenol	1000	U
95-48-7	2-Methylphenol	1000	U
108-60-1	2,2'-Oxybis(1-chloropropane)	1000	U
98-86-2	Acetophenone	1000	U
106-44-5	4-Methylphenol	1000	U
621-64-7	N-Nitroso-di-n-propylamine	1000	U
67-72-1	Hexachloroethane	1000	U
98-95-3	Nitrobenzene	1000	U
78-59-1	Isophorone	1000	U
88-75-5	2-Nitrophenol	1000	U
105-67-9	2,4-Dimethylphenol	1000	U
111-91-1	Bis(2-Chloroethoxy)methane	1000	U
120-83-2	2,4-Dichlorophenol	1000	U
91-20-3	Naphthalene	1000	U
106-47-8	4-Chloroaniline	1000	U
87-68-3	Hexachlorobutadiene	1000	U
105-60-2	Caprolactam	1000	U
59-50-7	4-Chloro-3-methylphenol	1000	U
91-57-6	2-Methylnaphthalene	1000	U
77-47-4	Hexachlorocyclopentadiene	1000	UJK RJ 3/16/10
88-06-2	2,4,6-Trichlorophenol	1000	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	1000	U
91-58-7	2-Chloronaphthalene	1000	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethylphthalate	1000	U
606-20-2	2,6-Dinitrotoluene	1000	U
208-96-8	Acenaphthylene	1000	U
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	1000	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B24

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 84 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	1000	U
121-14-2	2,4-Dinitrotoluene	1000	U
84-66-2	Diethylphthalate	1000	U
86-73-7	Fluorene	1000	U
7005-72-3	4-Chlorophenyl-phenylether	1000	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine [1]	1000	U
95-94-3	1,2,4,5-Tetrachlorobenzene	1000	U
101-55-3	4-Bromophenyl-phenylether	1000	U
118-74-1	Hexachlorobenzene	1000	U
1912-24-9	Atrazine	1000	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	1000	U
120-12-7	Anthracene	1000	U
86-74-8	Carbazole	1000	U
84-74-2	Di-n-butylphthalate	1000	U
206-44-0	Fluoranthene	1000	U
129-00-0	Pyrene	1000	U
85-68-7	Butylbenzylphthalate	1000	U
91-94-1	3,3'-Dichlorobenzidine	1000	U
56-55-3	Benzo(a)anthracene	1000	U
218-01-9	Chrysene	1000	U
117-81-7	Bis(2-ethylhexyl)phthalate	1000	U
117-84-0	Di-n-octylphthalate	1000	U
205-99-2	Benzo(b)fluoranthene	1000	U
207-08-9	Benzo(k)fluoranthene	1000	U
50-32-8	Benzo(a)pyrene	1000	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000	U
53-70-3	Dibenzo(a,h)anthracene	1000	U
191-24-2	Benzo(g,h,i)perylene	1000	U
58-90-2	2,3,4,6-Tetrachlorophenol	1000	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B24

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 84 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.950	2100	JN
02		Unknown-02	4.710	5200	J ~~B~~N
03		Unknown-03	5.870	550	JN
04		Unknown-04	8.730	790	J ~~B~~N
05		Unknown-05	12.550	500	JN
06					
07					
08					
09					
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26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

kmm 03/08/10

3/16/10

Repat All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B25

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 80 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	820	U ~~JK~~ R 3/16/10
108-95-2	Phenol	820	U
111-44-4	Bis(2-Chloroethyl)ether	820	U
95-57-8	2-Chlorophenol	820	U
95-48-7	2-Methylphenol	820	U
108-60-1	2,2'-Oxybis(1-chloropropane)	820	U
98-86-2	Acetophenone	820	U
106-44-5	4-Methylphenol	820	U
621-64-7	N-Nitroso-di-n-propylamine	820	U
67-72-1	Hexachloroethane	820	U
98-95-3	Nitrobenzene	820	U
78-59-1	Isophorone	820	U
88-75-5	2-Nitrophenol	820	U
105-67-9	2,4-Dimethylphenol	820	U
111-91-1	Bis(2-Chloroethoxy)methane	820	U
120-83-2	2,4-Dichlorophenol	820	U
91-20-3	Naphthalene	820	U
106-47-8	4-Chloroaniline	820	U
87-68-3	Hexachlorobutadiene	820	U
105-60-2	Caprolactam	820	U
59-50-7	4-Chloro-3-methylphenol	820	U
91-57-6	2-Methylnaphthalene	820	U
77-47-4	Hexachlorocyclopentadiene	820	UJK ~~JK~~ R 3/16/10
88-06-2	2,4,6-Trichlorophenol	820	U
95-95-4	2,4,5-Trichlorophenol	820	U
92-52-4	1,1'-Biphenyl	820	U
91-58-7	2-Chloronaphthalene	820	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	820	U
606-20-2	2,6-Dinitrotoluene	820	U
208-96-8	Acenaphthylene	820	U
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	820	U

3/11/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B25

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 80 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	820	U
121-14-2	2,4-Dinitrotoluene	820	U
84-66-2	Diethylphthalate	820	U
86-73-7	Fluorene	820	U
7005-72-3	4-Chlorophenyl-phenylether	820	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine [1]	820	U
95-94-3	1,2,4,5-Tetrachlorobenzene	820	U
101-55-3	4-Bromophenyl-phenylether	820	U
118-74-1	Hexachlorobenzene	820	U
1912-24-9	Atrazine	820	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	820	U
120-12-7	Anthracene	820	U
86-74-8	Carbazole	820	U
84-74-2	Di-n-butylphthalate	820	U
206-44-0	Fluoranthene	820	U
129-00-0	Pyrene	820	U
85-68-7	Butylbenzylphthalate	820	U
91-94-1	3,3'-Dichlorobenzidine	820	U
56-55-3	Benzo(a)anthracene	820	U
218-01-9	Chrysene	820	U
117-81-7	Bis(2-ethylhexyl)phthalate	820	U
117-84-0	Di-n-octylphthalate	820	U
205-99-2	Benzo(b)fluoranthene	820	U
207-08-9	Benzo(k)fluoranthene	820	U
50-32-8	Benzo(a)pyrene	820	U
193-39-5	Indeno(1,2,3-cd)pyrene	820	U
53-70-3	Dibenzo(a,h)anthracene	820	U
191-24-2	Benzo(g,h,i)perylene	820	U
58-90-2	2,3,4,6-Tetrachlorophenol	820	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B25

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 80 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.940	1600	J N
02		Unknown-02	4.710	4600	J BN
03		Unknown-03	8.740	490	J BN
04		Unknown-04	12.550	610	J N
05		Unknown-05	21.830	1900	J
06		Unknown-06	21.940	630	J
07		Unknown-07	22.440	1200	J
08					
09					
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25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

KMM 3/8/10

[2] EPA-designated Registry Number.

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B28

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	300	U ~~JK~~ 3/16/10
108-95-2	Phenol	300	U
111-44-4	Bis(2-Chloroethyl)ether	300	U
95-57-8	2-Chlorophenol	300	U
95-48-7	2-Methylphenol	300	U
108-60-1	2,2'-Oxybis(1-chloropropane)	300	U
98-86-2	Acetophenone	300	U
106-44-5	4-Methylphenol	300	U
621-64-7	N-Nitroso-di-n-propylamine	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
105-67-9	2,4-Dimethylphenol	300	U
111-91-1	Bis(2-Chloroethoxy)methane	300	U
120-83-2	2,4-Dichlorophenol	300	U
91-20-3	Naphthalene	300	U
106-47-8	4-Chloroaniline	300	U
87-68-3	Hexachlorobutadiene	300	U
105-60-2	Caprolactam	300	U
59-50-7	4-Chloro-3-methylphenol	300	U
91-57-6	2-Methylnaphthalene	300	U
77-47-4	Hexachlorocyclopentadiene	300	UJK ~~UJK~~ 3/16/10
88-06-2	2,4,6-Trichlorophenol	300	U
95-95-4	2,4,5-Trichlorophenol	300	U
92-52-4	1,1'-Biphenyl	300	U
91-58-7	2-Chloronaphthalene	300	U
88-74-4	2-Nitroaniline	580	U
131-11-3	Dimethylphthalate	300	U
606-20-2	2,6-Dinitrotoluene	300	U
208-96-8	Acenaphthylene	300	U
99-09-2	3-Nitroaniline	580	U
83-32-9	Acenaphthene	300	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B28

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	580	U
100-02-7	4-Nitrophenol	580	U
132-64-9	Dibenzofuran	300	U
121-14-2	2,4-Dinitrotoluene	300	U
84-66-2	Diethylphthalate	300	U
86-73-7	Fluorene	300	U
7005-72-3	4-Chlorophenyl-phenylether	300	U
100-01-6	4-Nitroaniline	580	U
534-52-1	4,6-Dinitro-2-methylphenol	580	U
86-30-6	N-Nitrosodiphenylamine [1]	300	U
95-94-3	1,2,4,5-Tetrachlorobenzene	300	U
101-55-3	4-Bromophenyl-phenylether	300	U
118-74-1	Hexachlorobenzene	300	U
1912-24-9	Atrazine	300	U
87-86-5	Pentachlorophenol	580	U
85-01-8	Phenanthrene	300	U
120-12-7	Anthracene	300	U
86-74-8	Carbazole	300	U
84-74-2	Di-n-butylphthalate	300	U
206-44-0	Fluoranthene	300	U
129-00-0	Pyrene	300	U
85-68-7	Butylbenzylphthalate	300	U
91-94-1	3,3'-Dichlorobenzidine	300	U
56-55-3	Benzo(a)anthracene	300	U
218-01-9	Chrysene	300	U
117-81-7	Bis(2-ethylhexyl)phthalate	300	U
117-84-0	Di-n-octylphthalate	300	U
205-99-2	Benzo(b)fluoranthene	300	U
207-08-9	Benzo(k)fluoranthene	300	U
50-32-8	Benzo(a)pyrene	300	U
193-39-5	Indeno(1,2,3-cd)pyrene	300	U
53-70-3	Dibenzo(a,h)anthracene	300	U
191-24-2	Benzo(g,h,i)perylene	300	U
58-90-2	2,3,4,6-Tetrachlorophenol	300	U

[1] Cannot be separated from Diphenylamine

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B28

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.950	440	JN
02		Unknown-02	4.710	1600	J BN
03		Unknown-03	5.870	170	JN
04	541-02-6	Cyclopentasiloxane,	7.190	160	NJ
05		Unknown-04	8.740	250	J BN
06					
07					
08					
09					
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29					
30					
	E966796[2]	Total Alkanes	N/A		

Kimmy 03/08/10

[2] EPA-designated Registry Number.

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B29

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 42 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	290	UJK RJ 3/16/10
108-95-2	Phenol	290	U
111-44-4	Bis(2-Chloroethyl)ether	290	U
95-57-8	2-Chlorophenol	290	U
95-48-7	2-Methylphenol	290	U
108-60-1	2,2'-Oxybis(1-chloropropane)	290	U
98-86-2	Acetophenone	290	U
106-44-5	4-Methylphenol	290	U
621-64-7	N-Nitroso-di-n-propylamine	290	U
67-72-1	Hexachloroethane	290	U
98-95-3	Nitrobenzene	290	U
78-59-1	Isophorone	290	U
88-75-5	2-Nitrophenol	290	U
105-67-9	2,4-Dimethylphenol	290	U
111-91-1	Bis(2-Chloroethoxy)methane	290	U
120-83-2	2,4-Dichlorophenol	290	U
91-20-3	Naphthalene	290	U
106-47-8	4-Chloroaniline	290	U
87-68-3	Hexachlorobutadiene	290	U
105-60-2	Caprolactam	290	U
59-50-7	4-Chloro-3-methylphenol	290	U
91-57-6	2-Methylnaphthalene	290	U
77-47-4	Hexachlorocyclopentadiene	290	UJK ~~UJK~~ RJ 3/16/10
88-06-2	2,4,6-Trichlorophenol	290	U
95-95-4	2,4,5-Trichlorophenol	290	U
92-52-4	1,1'-Biphenyl	290	U
91-58-7	2-Chloronaphthalene	290	U
88-74-4	2-Nitroaniline	560	U
131-11-3	Dimethylphthalate	290	U
606-20-2	2,6-Dinitrotoluene	290	U
208-96-8	Acenaphthylene	290	U
99-09-2	3-Nitroaniline	560	U
83-32-9	Acenaphthene	290	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B29

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 42 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	560	U
100-02-7	4-Nitrophenol	560	U
132-64-9	Dibenzofuran	290	U
121-14-2	2,4-Dinitrotoluene	290	U
84-66-2	Diethylphthalate	290	U
86-73-7	Fluorene	290	U
7005-72-3	4-Chlorophenyl-phenylether	290	U
100-01-6	4-Nitroaniline	560	U
534-52-1	4,6-Dinitro-2-methylphenol	560	U
86-30-6	N-Nitrosodiphenylamine [1]	290	U
95-94-3	1,2,4,5-Tetrachlorobenzene	290	U
101-55-3	4-Bromophenyl-phenylether	290	U
118-74-1	Hexachlorobenzene	290	U
1912-24-9	Atrazine	290	U
87-86-5	Pentachlorophenol	560	U
85-01-8	Phenanthrene	290	U
120-12-7	Anthracene	290	U
86-74-8	Carbazole	290	U
84-74-2	Di-n-butylphthalate	290	U
206-44-0	Fluoranthene	290	U
129-00-0	Pyrene	290	U
85-68-7	Butylbenzylphthalate	290	U
91-94-1	3,3'-Dichlorobenzidine	290	U
56-55-3	Benzo(a)anthracene	290	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	290	U
193-39-5	Indeno(1,2,3-cd)pyrene	290	U
53-70-3	Dibenzo(a,h)anthracene	290	U
191-24-2	Benzo(g,h,i)perylene	290	U
58-90-2	2,3,4,6-Tetrachlorophenol	290	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 0302B29

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 42 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.0 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.940	570	J N
02		Unknown-02	4.710	1700	J ~~B~~ N
03		Unknown-03	8.740	260	J ~~B~~ N
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

FMW 03/04/10

SOM01.2 (10/2006)

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 0302B30

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	300	U ~~JK~~ 3/16/10
108-95-2	Phenol	300	U
111-44-4	Bis(2-Chloroethyl)ether	300	U
95-57-8	2-Chlorophenol	300	U
95-48-7	2-Methylphenol	300	U
108-60-1	2,2'-Oxybis(1-chloropropane)	300	U
98-86-2	Acetophenone	300	U
106-44-5	4-Methylphenol	300	U
621-64-7	N-Nitroso-di-n-propylamine	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
105-67-9	2,4-Dimethylphenol	300	U
111-91-1	Bis(2-Chloroethoxy)methane	300	U
120-83-2	2,4-Dichlorophenol	300	U
91-20-3	Naphthalene	300	U
106-47-8	4-Chloroaniline	300	U
87-68-3	Hexachlorobutadiene	300	U
105-60-2	Caprolactam	300	U
59-50-7	4-Chloro-3-methylphenol	300	U
91-57-6	2-Methylnaphthalene	300	U
77-47-4	Hexachlorocyclopentadiene	300	UJK ~~UJK~~ 3/16/10
88-06-2	2,4,6-Trichlorophenol	300	U
95-95-4	2,4,5-Trichlorophenol	300	U
92-52-4	1,1'-Biphenyl	300	U
91-58-7	2-Chloronaphthalene	300	U
88-74-4	2-Nitroaniline	590	U
131-11-3	Dimethylphthalate	300	U
606-20-2	2,6-Dinitrotoluene	300	U
208-96-8	Acenaphthylene	300	U
99-09-2	3-Nitroaniline	590	U
83-32-9	Acenaphthene	300	U

3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 0302B30

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	590	U
100-02-7	4-Nitrophenol	590	U
132-64-9	Dibenzofuran	300	U
121-14-2	2,4-Dinitrotoluene	300	U
84-66-2	Diethylphthalate	300	U
86-73-7	Fluorene	300	U
7005-72-3	4-Chlorophenyl-phenylether	300	U
100-01-6	4-Nitroaniline	590	U
534-52-1	4,6-Dinitro-2-methylphenol	590	U
86-30-6	N-Nitrosodiphenylamine [1]	300	U
95-94-3	1,2,4,5-Tetrachlorobenzene	300	U
101-55-3	4-Bromophenyl-phenylether	300	U
118-74-1	Hexachlorobenzene	300	U
1912-24-9	Atrazine	300	U
87-86-5	Pentachlorophenol	590	U
85-01-8	Phenanthrene	300	U
120-12-7	Anthracene	300	U
86-74-8	Carbazole	300	U
84-74-2	Di-n-butylphthalate	300	U
206-44-0	Fluoranthene	300	U
129-00-0	Pyrene	300	U
85-68-7	Butylbenzylphthalate	300	U
91-94-1	3,3'-Dichlorobenzidine	300	U
56-55-3	Benzo(a)anthracene	300	U
218-01-9	Chrysene	300	U
117-81-7	Bis(2-ethylhexyl)phthalate	300	U
117-84-0	Di-n-octylphthalate	300	U
205-99-2	Benzo(b)fluoranthene	300	U
207-08-9	Benzo(k)fluoranthene	300	U
50-32-8	Benzo(a)pyrene	300	U
193-39-5	Indeno(1,2,3-cd)pyrene	300	U
53-70-3	Dibenzo(a,h)anthracene	300	U
191-24-2	Benzo(g,h,i)perylene	300	U
58-90-2	2,3,4,6-Tetrachlorophenol	300	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 0302B30

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.910	530	JN
02		Unknown-02	4.700	1600	JNB
03		Unknown-03	12.550	240	JN
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

kmm 03/08/10

[2] EPA-designated Registry Number.

3/16/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B31

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 57 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
100-52-7	Benzaldehyde	390	U ~~JK~~ RJ 3/16/10
108-95-2	Phenol	390	U
111-44-4	Bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-Oxybis(1-chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
111-91-1	Bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	UJK ~~UJK~~ RJ 3/16/10
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	390	U
92-52-4	1,1'-Biphenyl	390	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	760	U
131-11-3	Dimethylphthalate	390	U
606-20-2	2,6-Dinitrotoluene	390	U
208-96-8	Acenaphthylene	390	U
99-09-2	3-Nitroaniline	760	U
83-32-9	Acenaphthene	390	U

RJ 3/16/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B31

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 57 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
51-28-5	2,4-Dinitrophenol	760	U
100-02-7	4-Nitrophenol	760	U
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
86-73-7	Fluorene	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
100-01-6	4-Nitroaniline	760	U
534-52-1	4,6-Dinitro-2-methylphenol	760	U
86-30-6	N-Nitrosodiphenylamine [1]	390	U
95-94-3	1,2,4,5-Tetrachlorobenzene	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
1912-24-9	Atrazine	390	U
87-86-5	Pentachlorophenol	760	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	Bis(2-ethylhexyl)phthalate	390	U
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U
58-90-2	2,3,4,6-Tetrachlorophenol	390	U

[1] Cannot be separated from Diphenylamine

3/16/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 0302B31

Level: (TRACE or LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 57 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.930	630	JN
02		Unknown-02	4.700	1900	JN
03		Unknown-03	8.740	230	J~~B~~N
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

KMM 03/08/10

[2] EPA-designated Registry Number.

3/16/10

Report All but Pyrene

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 12022812

Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	2.8	JQ
91-57-6	2-Methylnaphthalene	3.9	U
208-96-8	Acenaphthylene	3.9	U
83-32-9	Acenaphthene	1.2	JQ
86-73-7	Fluorene	3.9	U
87-86-5	Pentachlorophenol	7.8	U
85-01-8	Phenanthrene	9.0	
120-12-7	Anthracene	3.3	J
206-44-0	Fluoranthene	38	
129-00-0	Pyrene	41	E → Report from JC651DL
56-55-3	Benzo(a)anthracene	28	
218-01-9	Chrysene	18	
205-99-2	Benzo(b)fluoranthene	29	
207-08-9	Benzo(k)fluoranthene	11	
50-32-8	Benzo(a)pyrene	27	
193-39-5	Indeno(1,2,3-cd)pyrene	15	
53-70-3	Dibenzo(a,h)anthracene	4.5	
191-24-2	Benzo(g,h,i)perylene	7.4	

SOM01.2 (10/2006) 3/25/10

Report Only Pyrene

1F FORM I SV-SIM

SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC651DL

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 12030318

Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	7.7	U
91-57-6	2-Methylnaphthalene	7.7	U
208-96-8	Acenaphthylene	7.7	U
83-32-9	Acenaphthene	7.7	U
86-73-7	Fluorene	7.7	U
87-86-5	Pentachlorophenol	16	U
85-01-8	Phenanthrene	8.3	D
120-12-7	Anthracene	7.7	U
206-44-0	Fluoranthene	31	D
129-00-0	Pyrene	37	~~D~~ → Report
56-55-3	Benzo(a)anthracene	25	D
218-01-9	Chrysene	17	D
205-99-2	Benzo(b)fluoranthene	16	D
207-08-9	Benzo(k)fluoranthene	6.5	J D
50-32-8	Benzo(a)pyrene	17	D
193-39-5	Indeno(1,2,3-cd)pyrene	7.6	J D
53-70-3	Dibenzo(a,h)anthracene	7.7	U
191-24-2	Benzo(g,h,i)perylene	4.3	J D

3/25/10

Report All

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 12022813

Extraction: (Type) SONC

% Moisture: 35 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	7.0	
91-57-6	2-Methylnaphthalene	3.8	JQ
208-96-8	Acenaphthylene	5.0	U
83-32-9	Acenaphthene	5.2	
86-73-7	Fluorene	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	17	
120-12-7	Anthracene	2.8	JQ
206-44-0	Fluoranthene	24	
129-00-0	Pyrene	22	
56-55-3	Benzo(a)anthracene	5.8	
218-01-9	Chrysene	16	
205-99-2	Benzo(b)fluoranthene	9.9	
207-08-9	Benzo(k)fluoranthene	4.5	JQ
50-32-8	Benzo(a)pyrene	33	
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

Report A11

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 12022814

Extraction: (Type) SONC

% Moisture: 24 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	4.3	U
91-57-6	2-Methylnaphthalene	4.3	U
208-96-8	Acenaphthylene	4.3	U
83-32-9	Acenaphthene	4.3	U
86-73-7	Fluorene	4.3	U
87-86-5	Pentachlorophenol	4.4	J
85-01-8	Phenanthrene	4.0	J
120-12-7	Anthracene	2.5	J
206-44-0	Fluoranthene	16	
129-00-0	Pyrene	17	
56-55-3	Benzo(a)anthracene	5.9	
218-01-9	Chrysene	15	
205-99-2	Benzo(b)fluoranthene	11	
207-08-9	Benzo(k)fluoranthene	3.5	J
50-32-8	Benzo(a)pyrene	11	
193-39-5	Indeno(1,2,3-cd)pyrene	4.9	
53-70-3	Dibenzo(a,h)anthracene	4.3	U
191-24-2	Benzo(g,h,i)perylene	6.2	

SOM01.2 (10/2006)

3/25/10

Report Only Those "Not Marked Reported From DL"

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 12022815

Extraction: (Type) SONC

% Moisture: 30 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q	
91-20-3	Naphthalene	10		
91-57-6	2-Methylnaphthalene	14		
208-96-8	Acenaphthylene	4.6	U	
83-32-9	Acenaphthene	14		
86-73-7	Fluorene	15		
87-86-5	Pentachlorophenol	15		
85-01-8	Phenanthrene	69	E	→ Report from JC655DL
120-12-7	Anthracene	21		
206-44-0	Fluoranthene	140	E	→ "
129-00-0	Pyrene	130		
56-55-3	Benzo(a)anthracene	67	E	→ "
218-01-9	Chrysene	83	E	→ "
205-99-2	Benzo(b)fluoranthene	67	E	→ "
207-08-9	Benzo(k)fluoranthene	22		
50-32-8	Benzo(a)pyrene	75	E	→ "
193-39-5	Indeno(1,2,3-cd)pyrene	24		
53-70-3	Dibenzo(a,h)anthracene	4.6	U	
191-24-2	Benzo(g,h,i)perylene	18		

SOM01.2 (10/2006)

3/25/10

Report Only Those "Marked Report"

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC655DL

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 12030109

Extraction: (Type) SONC

% Moisture: 30 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/01/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	18	U
91-57-6	2-Methylnaphthalene	18	U
208-96-8	Acenaphthylene	18	U
83-32-9	Acenaphthene	18	U
86-73-7	Fluorene	18	U
87-86-5	Pentachlorophenol	38	U
85-01-8	Phenanthrene	76	~~D~~ → Report
120-12-7	Anthracene	18	J D
206-44-0	Fluoranthene	140	~~D~~ → Report
129-00-0	Pyrene	130	D
56-55-3	Benzo(a)anthracene	58	~~D~~ → Report
218-01-9	Chrysene	86	~~D~~ → Report
205-99-2	Benzo(b)fluoranthene	60	~~D~~ → Report
207-08-9	Benzo(k)fluoranthene	22	D
50-32-8	Benzo(a)pyrene	59	~~D~~ → Report
193-39-5	Indeno(1,2,3-cd)pyrene	22	D
53-70-3	Dibenzo(a,h)anthracene	18	U
191-24-2	Benzo(g,h,i)perylene	19	D

SOM01.2 (10/2006)

3/25/10

Repat Only Those "~~Not~~ Marked Report from DL"

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 12022816

Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q	
91-20-3	Naphthalene	8.2		
91-57-6	2-Methylnaphthalene	8.2		
208-96-8	Acenaphthylene	2.6	J	
83-32-9	Acenaphthene	12		
86-73-7	Fluorene	18		
87-86-5	Pentachlorophenol	13		
85-01-8	Phenanthrene	61	E	→ Report from JC656DL
120-12-7	Anthracene	17		
206-44-0	Fluoranthene	110	E	→ "
129-00-0	Pyrene	91		
56-55-3	Benzo(a)anthracene	54	E	→ "
218-01-9	Chrysene	44	E	→ "
205-99-2	Benzo(b)fluoranthene	51	E	→ "
207-08-9	Benzo(k)fluoranthene	20		
50-32-8	Benzo(a)pyrene	55	E	→ "
193-39-5	Indeno(1,2,3-cd)pyrene	22		
53-70-3	Dibenzo(a,h)anthracene	4.4	U	
191-24-2	Benzo(g,h,i)perylene	16		

SOM01.2 (10/2006)

3/25/10

Report Only Those "Marked Report"

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC656DL

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 12030112

Extraction: (Type) SONC

% Moisture: 25 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/01/2010

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q	
91-20-3	Naphthalene	18	U	
91-57-6	2-Methylnaphthalene	18	U	
208-96-8	Acenaphthylene	18	U	
83-32-9	Acenaphthene	18	U	
86-73-7	Fluorene	18	U	
87-86-5	Pentachlorophenol	36	U	
85-01-8	Phenanthrene	65	~~D~~	→ Report
120-12-7	Anthracene	15	J D	
206-44-0	Fluoranthene	130	~~D~~	→ "
129-00-0	Pyrene	130	D	
56-55-3	Benzo(a)anthracene	55	~~D~~	→ "
218-01-9	Chrysene	52	~~D~~	→ "
205-99-2	Benzo(b)fluoranthene	32	~~D~~	→ "
207-08-9	Benzo(k)fluoranthene	16	J D	
50-32-8	Benzo(a)pyrene	45	~~D~~	→ "
193-39-5	Indeno(1,2,3-cd)pyrene	15	J D	
53-70-3	Dibenzo(a,h)anthracene	18	U	
191-24-2	Benzo(g,h,i)perylene	13	J D	

SOM01.2 (10/2006)

3/25/10

Report

1F FORM I SV-SIM

SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 12022817

Extraction: (Type) SONC

% Moisture: 51 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 5.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	6.7	U
91-57-6	2-Methylnaphthalene	6.7	U
208-96-8	Acenaphthylene	6.7	U
83-32-9	Acenaphthene	6.7	U
86-73-7	Fluorene	6.7	U
87-86-5	Pentachlorophenol	14	U
85-01-8	Phenanthrene	6.7	U
120-12-7	Anthracene	6.7	U
206-44-0	Fluoranthene	6.7	U
129-00-0	Pyrene	6.7	U
56-55-3	Benzo(a)anthracene	6.7	U
218-01-9	Chrysene	6.7	U
205-99-2	Benzo(b)fluoranthene	6.7	U
207-08-9	Benzo(k)fluoranthene	6.7	U
50-32-8	Benzo(a)pyrene	6.7	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.7	U
53-70-3	Dibenzo(a,h)anthracene	6.7	U
191-24-2	Benzo(g,h,i)perylene	6.7	U

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 30.7 (g/mL) g Lab File ID: 12022818

Extraction: (Type) SONC

% Moisture: 64 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 4.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	9.1	U
91-57-6	2-Methylnaphthalene	9.1	U
208-96-8	Acenaphthylene	9.1	U
83-32-9	Acenaphthene	9.1	U
86-73-7	Fluorene	9.1	U
87-86-5	Pentachlorophenol	18	U
85-01-8	Phenanthrene	9.1	U
120-12-7	Anthracene	9.1	U
206-44-0	Fluoranthene	9.1	U
129-00-0	Pyrene	9.1	U
56-55-3	Benzo(a)anthracene	9.1	U
218-01-9	Chrysene	9.1	U
205-99-2	Benzo(b)fluoranthene	9.1	U
207-08-9	Benzo(k)fluoranthene	9.1	U
50-32-8	Benzo(a)pyrene	9.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	9.1	U
53-70-3	Dibenzo(a,h)anthracene	9.1	U
191-24-2	Benzo(g,h,i)perylene	9.1	U

SOM01.2 (10/2006)

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 12022819

Extraction: (Type) SONC

% Moisture: 66 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 5.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	9.6	U
91-57-6	2-Methylnaphthalene	9.6	U
208-96-8	Acenaphthylene	9.6	U
83-32-9	Acenaphthene	9.6	U
86-73-7	Fluorene	9.6	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	9.6	U
120-12-7	Anthracene	9.6	U
206-44-0	Fluoranthene	9.6	U
129-00-0	Pyrene	9.6	U
56-55-3	Benzo(a)anthracene	9.6	U
218-01-9	Chrysene	9.6	U
205-99-2	Benzo(b)fluoranthene	9.6	U
207-08-9	Benzo(k)fluoranthene	9.6	U
50-32-8	Benzo(a)pyrene	9.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	9.6	U
53-70-3	Dibenzo(a,h)anthracene	9.6	U
191-24-2	Benzo(g,h,i)perylene	9.6	U

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 12022820

Extraction: (Type) SONC

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 4.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	6.1	U
91-57-6	2-Methylnaphthalene	6.1	U
208-96-8	Acenaphthylene	6.1	U
83-32-9	Acenaphthene	6.1	U
86-73-7	Fluorene	6.1	U
87-86-5	Pentachlorophenol	12	U
85-01-8	Phenanthrene	6.1	U
120-12-7	Anthracene	6.1	U
206-44-0	Fluoranthene	6.1	U
129-00-0	Pyrene	6.1	U
56-55-3	Benzo(a)anthracene	6.1	U
218-01-9	Chrysene	6.1	U
205-99-2	Benzo(b)fluoranthene	6.1	U
207-08-9	Benzo(k)fluoranthene	6.1	U
50-32-8	Benzo(a)pyrene	6.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.1	U
53-70-3	Dibenzo(a,h)anthracene	6.1	U
191-24-2	Benzo(g,h,i)perylene	6.1	U

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 12022821

Extraction: (Type) SONC

% Moisture: 34 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
208-96-8	Acenaphthylene	5.0	U
83-32-9	Acenaphthene	5.0	U
86-73-7	Fluorene	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	6.5	→ Report
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U

SOM01.2 (10/2006)

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 12022822

Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	3.9	U
91-57-6	2-Methylnaphthalene	3.9	U
208-96-8	Acenaphthylene	3.9	U
83-32-9	Acenaphthene	3.9	U
86-73-7	Fluorene	3.9	U
87-86-5	Pentachlorophenol	7.9	U
85-01-8	Phenanthrene	3.9	U
120-12-7	Anthracene	3.9	U
206-44-0	Fluoranthene	3.9	U
129-00-0	Pyrene	3.9	U
56-55-3	Benzo(a)anthracene	3.9	U
218-01-9	Chrysene	3.9	U
205-99-2	Benzo(b)fluoranthene	3.9	U
207-08-9	Benzo(k)fluoranthene	3.9	U
50-32-8	Benzo(a)pyrene	3.9	U
193-39-5	Indeno(1,2,3-cd)pyrene	3.9	U
53-70-3	Dibenzo(a,h)anthracene	3.9	U
191-24-2	Benzo(g,h,i)perylene	3.9	U

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 12022823

Extraction: (Type) SONC

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	6.1	U
91-57-6	2-Methylnaphthalene	6.1	U
208-96-8	Acenaphthylene	6.3	JK → Report
83-32-9	Acenaphthene	6.1	U
86-73-7	Fluorene	7.5	JK → "
87-86-5	Pentachlorophenol	12	U
85-01-8	Phenanthrene	6.1	U
120-12-7	Anthracene	18	JK → "
206-44-0	Fluoranthene	6.1	U
129-00-0	Pyrene	6.1	U
56-55-3	Benzo(a)anthracene	6.1	U
218-01-9	Chrysene	6.1	U
205-99-2	Benzo(b)fluoranthene	6.1	U
207-08-9	Benzo(k)fluoranthene	6.1	U
50-32-8	Benzo(a)pyrene	6.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.1	U
53-70-3	Dibenzo(a,h)anthracene	6.1	U
191-24-2	Benzo(g,h,i)perylene	6.1	U

SOM01.2 (10/2006)

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 12022824

Extraction: (Type) SONC

% Moisture: 39 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	5.4	UJK
91-57-6	2-Methylnaphthalene	5.4	U
208-96-8	Acenaphthylene	5.4	U
83-32-9	Acenaphthene	5.4	U
86-73-7	Fluorene	5.4	U
87-86-5	Pentachlorophenol	11	U
85-01-8	Phenanthrene	5.4	U
120-12-7	Anthracene	5.4	U
206-44-0	Fluoranthene	5.4	U
129-00-0	Pyrene	5.4	U
56-55-3	Benzo(a)anthracene	5.4	U
218-01-9	Chrysene	5.4	U
205-99-2	Benzo(b)fluoranthene	5.4	U
207-08-9	Benzo(k)fluoranthene	5.4	U
50-32-8	Benzo(a)pyrene	5.4	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.4	U
53-70-3	Dibenzo(a,h)anthracene	5.4	U
191-24-2	Benzo(g,h,i)perylene	5.4	U

SOM01.2 (10/2006)

3/25/10

DO NOT REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC666RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 30.9 (g/mL) g Lab File ID: 12030605

Extraction: (Type) SONC

% Moisture: 39 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/03/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/06/2010

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	5.3	U
91-57-6	2-Methylnaphthalene	5.3	U
208-96-8	Acenaphthylene	5.3	U
83-32-9	Acenaphthene	5.3	U
86-73-7	Fluorene	5.3	U
87-86-5	Pentachlorophenol	11	U
85-01-8	Phenanthrene	5.3	U
120-12-7	Anthracene	5.3	U
206-44-0	Fluoranthene	5.3	U
129-00-0	Pyrene	5.3	U
56-55-3	Benzo(a)anthracene	5.3	U
218-01-9	Chrysene	5.3	U
205-99-2	Benzo(b)fluoranthene	5.3	U
207-08-9	Benzo(k)fluoranthene	5.3	U
50-32-8	Benzo(a)pyrene	5.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.3	U
53-70-3	Dibenzo(a,h)anthracene	5.3	U
191-24-2	Benzo(g,h,i)perylene	5.3	U

5/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 12022825

Extraction: (Type) SONC

% Moisture: 84 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	20	U
91-57-6	2-Methylnaphthalene	20	U
208-96-8	Acenaphthylene	20	U
83-32-9	Acenaphthene	20	U
86-73-7	Fluorene	20	U
87-86-5	Pentachlorophenol	40	U
85-01-8	Phenanthrene	20	U
120-12-7	Anthracene	20	U
206-44-0	Fluoranthene	20	U
129-00-0	Pyrene	20	U
56-55-3	Benzo(a)anthracene	20	U
218-01-9	Chrysene	20	U
205-99-2	Benzo(b)fluoranthene	20	U
207-08-9	Benzo(k)fluoranthene	20	U
50-32-8	Benzo(a)pyrene	27	→ Report
193-39-5	Indeno(1,2,3-cd)pyrene	20	U
53-70-3	Dibenzo(a,h)anthracene	20	U
191-24-2	Benzo(g,h,i)perylene	20	U

SOM01.2 (10/2006)

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 12030105

Extraction: (Type) SONC

% Moisture: 80 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/12/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/01/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	16	UJK
91-57-6	2-Methylnaphthalene	16	U
208-96-8	Acenaphthylene	16	U
83-32-9	Acenaphthene	16	U
86-73-7	Fluorene	16	U
87-86-5	Pentachlorophenol	33	U
85-01-8	Phenanthrene	16	U
120-12-7	Anthracene	16	U
206-44-0	Fluoranthene	16	U
129-00-0	Pyrene	16	U
56-55-3	Benzo(a)anthracene	16	U
218-01-9	Chrysene	16	U
205-99-2	Benzo(b)fluoranthene	16	U
207-08-9	Benzo(k)fluoranthene	16	U
50-32-8	Benzo(a)pyrene	16	U
193-39-5	Indeno(1,2,3-cd)pyrene	16	U
53-70-3	Dibenzo(a,h)anthracene	16	U
191-24-2	Benzo(g,h,i)perylene	16	U

SOM01.2 (10/2006)

3/25/10

DO NOT REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC668RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 12030606

Extraction: (Type) SONC

% Moisture: 80 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 03/03/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/06/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	16	U
91-57-6	2-Methylnaphthalene	16	U
208-96-8	Acenaphthylene	16	U
83-32-9	Acenaphthene	16	U
86-73-7	Fluorene	16	U
87-86-5	Pentachlorophenol	33	U
85-01-8	Phenanthrene	16	U
120-12-7	Anthracene	16	U
206-44-0	Fluoranthene	10	J
129-00-0	Pyrene	16	U
56-55-3	Benzo(a)anthracene	16	U
218-01-9	Chrysene	16	U
205-99-2	Benzo(b)fluoranthene	16	U
207-08-9	Benzo(k)fluoranthene	16	U
50-32-8	Benzo(a)pyrene	16	U
193-39-5	Indeno(1,2,3-cd)pyrene	16	U
53-70-3	Dibenzo(a,h)anthracene	16	U
191-24-2	Benzo(g,h,i)perylene	16	U

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 12022827

Extraction: (Type) SONC

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	5.8	UJK
91-57-6	2-Methylnaphthalene	5.8	UJK
208-96-8	Acenaphthylene	5.8	U
83-32-9	Acenaphthene	5.8	U
86-73-7	Fluorene	5.8	U
87-86-5	Pentachlorophenol	12	U
85-01-8	Phenanthrene	5.8	U
120-12-7	Anthracene	5.8	U
206-44-0	Fluoranthene	5.8	U
129-00-0	Pyrene	5.8	UJK
56-55-3	Benzo(a)anthracene	5.8	UJK
218-01-9	Chrysene	5.8	UJK
205-99-2	Benzo(b)fluoranthene	5.8	U
207-08-9	Benzo(k)fluoranthene	5.8	U
50-32-8	Benzo(a)pyrene	6.0	
193-39-5	Indeno(1,2,3-cd)pyrene	5.8	U
53-70-3	Dibenzo(a,h)anthracene	5.8	U
191-24-2	Benzo(g,h,i)perylene	5.8	U

SOM01.2 (10/2006)

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 12022828

Extraction: (Type) SONC

% Moisture: 42 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	5.6	U JK
91-57-6	2-Methylnaphthalene	5.6	U JK
208-96-8	Acenaphthylene	5.6	U JK
83-32-9	Acenaphthene	5.6	U JK
86-73-7	Fluorene	5.6	U JK
87-86-5	Pentachlorophenol	11	U
85-01-8	Phenanthrene	5.6	U
120-12-7	Anthracene	5.6	U
206-44-0	Fluoranthene	5.6	U
129-00-0	Pyrene	5.6	U
56-55-3	Benzo(a)anthracene	5.6	U
218-01-9	Chrysene	5.6	U
205-99-2	Benzo(b)fluoranthene	5.6	U
207-08-9	Benzo(k)fluoranthene	5.6	U
50-32-8	Benzo(a)pyrene	5.6	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.6	U
53-70-3	Dibenzo(a,h)anthracene	5.6	U
191-24-2	Benzo(g,h,i)perylene	5.6	U

SOM01.2 (10/2006)

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 12022829

Extraction: (Type) SONC

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 02/28/2010

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	5.9	UJK
91-57-6	2-Methylnaphthalene	5.9	U
208-96-8	Acenaphthylene	5.9	U
83-32-9	Acenaphthene	5.9	U
86-73-7	Fluorene	5.9	U
87-86-5	Pentachlorophenol	12	U
85-01-8	Phenanthrene	5.9	U
120-12-7	Anthracene	5.9	U
206-44-0	Fluoranthene	5.9	U
129-00-0	Pyrene	5.9	U
56-55-3	Benzo(a)anthracene	5.9	U
218-01-9	Chrysene	5.9	U
205-99-2	Benzo(b)fluoranthene	5.9	U
207-08-9	Benzo(k)fluoranthene	5.9	U
50-32-8	Benzo(a)pyrene	5.9	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.9	U
53-70-3	Dibenzo(a,h)anthracene	5.9	U
191-24-2	Benzo(g,h,i)perylene	5.9	U

SOM01.2 (10/2006)

3/25/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 12030113

Extraction: (Type) SONC

% Moisture: 57 Decanted: (Y/N) N Date Received: 02/02/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/08/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 03/01/2010

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
91-20-3	Naphthalene	7.7	U
91-57-6	2-Methylnaphthalene	7.7	U
208-96-8	Acenaphthylene	7.7	U
83-32-9	Acenaphthene	7.7	U
86-73-7	Fluorene	7.7	U
87-86-5	Pentachlorophenol	16	U
85-01-8	Phenanthrene	7.7	U
120-12-7	Anthracene	7.7	U
206-44-0	Fluoranthene	7.7	U
129-00-0	Pyrene	7.7	U
56-55-3	Benzo(a)anthracene	7.7	U
218-01-9	Chrysene	7.7	U
205-99-2	Benzo(b)fluoranthene	7.7	U
207-08-9	Benzo(k)fluoranthene	7.7	U
50-32-8	Benzo(a)pyrene	7.7	U
193-39-5	Indeno(1,2,3-cd)pyrene	7.7	U
53-70-3	Dibenzo(a,h)anthracene	7.7	U
191-24-2	Benzo(g,h,i)perylene	7.7	U

SOM01.2 (10/2006)

3/25/10

Report All But ~~α-Chlordane & γ-Chlordane~~

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 007F0801

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	2 ~~0.035~~	~~JP~~ U
319-85-7	beta-BHC	2 ~~0.085~~	~~JPB~~ U
319-86-8	delta-BHC	2 ~~0.41~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2 ~~0.067~~	~~JP~~ U
76-44-8	Heptachlor	9.8	
309-00-2	Aldrin	0.53	J~~P~~Q
1024-57-3	Heptachlor epoxide	2 ~~1.4~~	~~JP~~ U
959-98-8	Endosulfan I	2 ~~1.3~~	~~JP~~ U
60-57-1	Dieldrin	4 ~~0.42~~	~~JP~~ U
72-55-9	4,4'-DDE	4 ~~0.30~~	~~JP~~ U
72-20-8	Endrin	2.1	JQ
33213-65-9	Endosulfan II	4 ~~0.48~~	~~JP~~ U
72-54-8	4,4'-DDD	4 ~~0.26~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	0.16	JQ
50-29-3	4,4'-DDT	4.2	~~B~~ JK
72-43-5	Methoxychlor	20 ~~0.37~~	~~JB~~ U
53494-70-5	Endrin ketone	0.037	JQ
7421-93-4	Endrin aldehyde	4 ~~0.059~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	37	E → Report from
5103-74-2	gamma-Chlordane	40	E → JC651DL
8001-35-2	Toxaphene	200	U

3/24/10

Report Only α- Chlordane & γ-Chlordane

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC651DL

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 004F0401

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/01/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	4.0	U
319-85-7	beta-BHC	4.0	U
319-86-8	delta-BHC	4.0	U
58-89-9	gamma-BHC (Lindane)	4.0	U
76-44-8	Heptachlor	9.0	D
309-00-2	Aldrin	0.39	J DP
1024-57-3	Heptachlor epoxide	1.1	J DB
959-98-8	Endosulfan I	0.64	J DP
60-57-1	Dieldrin	7.7	U
72-55-9	4,4'-DDE	0.39	J DP
72-20-8	Endrin	1.7	J D
33213-65-9	Endosulfan II	7.7	U
72-54-8	4,4'-DDD	7.7	U
1031-07-8	Endosulfan sulfate	7.7	U
50-29-3	4,4'-DDT	3.4	J DB
72-43-5	Methoxychlor	40	U
53494-70-5	Endrin ketone	7.7	U
7421-93-4	Endrin aldehyde	0.47	J DPB
5103-71-9	alpha-Chlordane	35	~~D~~ → Report
5103-74-2	gamma-Chlordane	39	~~D~~ → "
8001-35-2	Toxaphene	400	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 30.6 (g/mL) g Lab File ID: 008F0901

% Moisture: 35 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	2.6 ~~1.2~~	~~JPB~~ U
319-86-8	delta-BHC	2.6 ~~0.18~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.6 ~~0.033~~	~~JP~~ U
76-44-8	Heptachlor	2.6 ~~0.034~~	~~JP~~ U
309-00-2	Aldrin	2.6 ~~0.053~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	2.6 ~~0.28~~	~~JPB~~ U
959-98-8	Endosulfan I	2.4	~~J~~ Q
60-57-1	Dieldrin	5.2 ~~0.27~~	~~JP~~ U
72-55-9	4,4'-DDE	5.2 ~~0.082~~	~~JP~~ U
72-20-8	Endrin	5.2 ~~0.13~~	~~JP~~ U
33213-65-9	Endosulfan II	0.43	JQ
72-54-8	4,4'-DDD	0.37	JQ
1031-07-8	Endosulfan sulfate	5.2 ~~0.20~~	~~JP~~ U
50-29-3	4,4'-DDT	5.2 ~~0.95~~	~~JPB~~ U
72-43-5	Methoxychlor	26 ~~1.2~~	~~JPB~~ U
53494-70-5	Endrin ketone	5.2 ~~0.23~~	~~JP~~ U
7421-93-4	Endrin aldehyde	5.2 ~~0.30~~	~~JB~~ U
5103-71-9	alpha-Chlordane	2.6 ~~2.5~~	~~JP~~ U
5103-74-2	gamma-Chlordane	1.8	~~J~~ Q
8001-35-2	Toxaphene	260	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 009F1001

% Moisture: 24 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	0.72	~~JP~~Q
319-85-7	beta-BHC	2.2 ~~0.42~~	~~JPB~~ U
319-86-8	delta-BHC	2.2 ~~0.075~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.2 ~~0.20~~	~~JP~~ U
76-44-8	Heptachlor	2.2 ~~0.042~~	~~JP~~ U
309-00-2	Aldrin	2.2 ~~0.14~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	2.2 ~~0.11~~	~~JPB~~ U
959-98-8	Endosulfan I	2.2 ~~0.20~~	~~JP~~ U
60-57-1	Dieldrin	4.4 ~~0.28~~	~~JP~~ U
72-55-9	4,4'-DDE	4.4 ~~0.18~~	~~JP~~ U
72-20-8	Endrin	4.4 ~~0.050~~	~~JP~~ U
33213-65-9	Endosulfan II	4.4 ~~0.33~~	~~JP~~ U
72-54-8	4,4'-DDD	4.4 ~~0.064~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.4 ~~0.052~~	~~JP~~ U
50-29-3	4,4'-DDT	4.4 ~~1.1~~	~~JPB~~ U
72-43-5	Methoxychlor	22 ~~1.2~~	~~JB~~ U
53494-70-5	Endrin ketone	4.4 ~~0.015~~	~~JP~~ U
7421-93-4	Endrin aldehyde	4.4 ~~0.15~~	~~JB~~ U
5103-71-9	alpha-Chlordane	2.2 ~~0.14~~	~~JP~~ U
5103-74-2	gamma-Chlordane	2.2 ~~0.36~~	~~JP~~ U
8001-35-2	Toxaphene	220	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 010F1101

% Moisture: 30 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	2.9	
319-85-7	beta-BHC	2.4 ~~0.18~~	~~JPB~~ U
319-86-8	delta-BHC	2.4 ~~0.035~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.4 ~~0.19~~	~~JP~~ U
76-44-8	Heptachlor	2.4 ~~0.057~~	~~JP~~ U
309-00-2	Aldrin	2.4 ~~0.23~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	2.4 ~~0.061~~	~~JPB~~ U
959-98-8	Endosulfan I	0.45	JP~~Q~~
60-57-1	Dieldrin	4.8 ~~0.36~~	~~JP~~ U
72-55-9	4,4'-DDE	4.8 ~~0.38~~	~~JP~~ U
72-20-8	Endrin	0.42	J~~Q~~
33213-65-9	Endosulfan II	0.76	J~~Q~~
72-54-8	4,4'-DDD	4.8 ~~0.88~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.8 ~~0.011~~	~~JP~~ U
50-29-3	4,4'-DDT	4.8 ~~3.1~~	~~JPB~~ U
72-43-5	Methoxychlor	24 ~~3.7~~	~~JPB~~ U
53494-70-5	Endrin ketone	4.8 ~~0.68~~	~~JP~~ U
7421-93-4	Endrin aldehyde	4.8 ~~0.11~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	2.4 ~~0.41~~	~~JP~~ U
5103-74-2	gamma-Chlordane	2.4 ~~0.41~~	~~JP~~ U
8001-35-2	Toxaphene	240	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 33.0 (g/mL) g Lab File ID: 011F1201

% Moisture: 25 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	1.4	~~JPQ~~
319-85-7	beta-BHC	2.1 ~~0.31~~	~~JB~~ U
319-86-8	delta-BHC	2.1 ~~0.029~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.1 ~~0.15~~	~~JP~~ U
76-44-8	Heptachlor	2.1 ~~0.038~~	~~JP~~ U
309-00-2	Aldrin	0.091	JQ
1024-57-3	Heptachlor epoxide	2.1 ~~0.039~~	~~JB~~ U
959-98-8	Endosulfan I	0.25	~~JPQ~~
60-57-1	Dieldrin	4.2 ~~0.11~~	~~JP~~ U
72-55-9	4,4'-DDE	4.2 ~~0.27~~	~~JP~~ U
72-20-8	Endrin	4.2 ~~0.17~~	~~JP~~ U
33213-65-9	Endosulfan II	4.2 ~~0.28~~	~~JP~~ U
72-54-8	4,4'-DDD	4.2 ~~0.17~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	0.061	~~JPQ~~
50-29-3	4,4'-DDT	4.2 ~~0.78~~	~~JPB~~ U
72-43-5	Methoxychlor	2.1 ~~0.85~~	~~JPB~~ U
53494-70-5	Endrin ketone	4.2 ~~0.25~~	~~JP~~ U
7421-93-4	Endrin aldehyde	4.2 ~~0.12~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	2.1 ~~0.11~~	~~JP~~ U
5103-74-2	gamma-Chlordane	2.1 ~~0.22~~	~~JP~~ U
8001-35-2	Toxaphene	210	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 31.2 (g/mL) g Lab File ID: 012F1301

% Moisture: 51 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	3.3 ~~0.058~~	~~JP~~ U
319-85-7	beta-BHC	3.3 ~~0.11~~	~~JPB~~ U
319-86-8	delta-BHC	3.3 ~~0.034~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	3.3 ~~0.039~~	~~JP~~ U
76-44-8	Heptachlor	3.3	U
309-00-2	Aldrin	3.3	U
1024-57-3	Heptachlor epoxide	3.3	U
959-98-8	Endosulfan I	3.3	U
60-57-1	Dieldrin	6.5	U
72-55-9	4,4'-DDE	6.5	U
72-20-8	Endrin	6.5	U
33213-65-9	Endosulfan II	6.5	U
72-54-8	4,4'-DDD	6.5 ~~0.072~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	6.5	U
50-29-3	4,4'-DDT	6.5 ~~0.14~~	~~JPB~~ U
72-43-5	Methoxychlor	33	U
53494-70-5	Endrin ketone	6.5 ~~0.11~~	~~JP~~ U
7421-93-4	Endrin aldehyde	6.5	U
5103-71-9	alpha-Chlordane	3.3	U
5103-74-2	gamma-Chlordane	3.3	U
8001-35-2	Toxaphene	330	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 013F1401

% Moisture: 64 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 4.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	4.7 ~~0.11~~	~~JP~~ U
319-85-7	beta-BHC	4.7 ~~0.31~~	~~JB~~ U
319-86-8	delta-BHC	0.29	JQ
58-89-9	gamma-BHC (Lindane)	4.7	U
76-44-8	Heptachlor	4.7	U
309-00-2	Aldrin	4.7 ~~0.010~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	4.7	U
959-98-8	Endosulfan I	4.7 ~~0.015~~	~~JP~~ U
60-57-1	Dieldrin	9.4 ~~0.074~~	~~JP~~ U
72-55-9	4,4'-DDE	9.4 ~~0.023~~	~~JP~~ U
72-20-8	Endrin	9.1	U
33213-65-9	Endosulfan II	9.4 ~~0.027~~	~~JP~~ U
72-54-8	4,4'-DDD	9.4 ~~0.031~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	9.4 ~~0.064~~	~~JP~~ U
50-29-3	4,4'-DDT	9.4 ~~0.048~~	~~JPB~~ U
72-43-5	Methoxychlor	47 ~~0.23~~	~~JPB~~ U
53494-70-5	Endrin ketone	0.076	~~J~~ Q
7421-93-4	Endrin aldehyde	9.4 ~~0.052~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	4.7	U
5103-74-2	gamma-Chlordane	4.7 ~~0.027~~	~~JP~~ U
8001-35-2	Toxaphene	470	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 014F1501

% Moisture: 66 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	5 ~~0.14~~	~~JP~~ U
319-85-7	beta-BHC	5 ~~0.29~~	~~JB~~ U
319-86-8	delta-BHC	0.20	JQ
58-89-9	gamma-BHC (Lindane)	5 ~~0.19~~	~~JP~~ U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5 ~~0.067~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	5 ~~0.076~~	~~JPB~~ U
959-98-8	Endosulfan I	0.18	~~JP~~ Q
60-57-1	Dieldrin	10 ~~0.083~~	~~JP~~ U
72-55-9	4,4'-DDE	9.6	U
72-20-8	Endrin	9.6	U
33213-65-9	Endosulfan II	10 ~~0.019~~	~~JP~~ U
72-54-8	4,4'-DDD	9.6	U
1031-07-8	Endosulfan sulfate	0.13	~~JP~~ Q
50-29-3	4,4'-DDT	10 ~~0.027~~	~~JPB~~ U
72-43-5	Methoxychlor	50 ~~0.54~~	~~JPB~~ U
53494-70-5	Endrin ketone	9.6	U
7421-93-4	Endrin aldehyde	10 ~~0.037~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	5 ~~0.10~~	~~JP~~ U
5103-74-2	gamma-Chlordane	5 ~~0.11~~	~~JP~~ U
8001-35-2	Toxaphene	500	U

3/21/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 015F1601

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 4.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	3.1 ~~0.0060~~	~~JP~~ U
319-85-7	beta-BHC	3.1 ~~0.080~~	~~JPB~~ U
319-86-8	delta-BHC	3.1 ~~0.044~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	3.1	U
76-44-8	Heptachlor	3.1 ~~0.031~~	~~JP~~ U
309-00-2	Aldrin	3.1	U
1024-57-3	Heptachlor epoxide	3.1 ~~0.0040~~	~~JPB~~ U
959-98-8	Endosulfan I	3.1	U
60-57-1	Dieldrin	6.1 ~~6.2~~ ~~0.28~~	~~JP~~ U
72-55-9	4,4'-DDE	6.1 ~~6.2~~ ~~0.013~~	~~JP~~ U
72-20-8	Endrin	6.1	U
33213-65-9	Endosulfan II	6.1	U
72-54-8	4,4'-DDD	0.070	JQ
1031-07-8	Endosulfan sulfate	6.1 ~~0.022~~	~~JP~~ U
50-29-3	4,4'-DDT	6.1 ~~0.12~~	~~JPB~~ U
72-43-5	Methoxychlor	31 ~~0.18~~	~~JB~~ U
53494-70-5	Endrin ketone	6.1 ~~0.050~~	~~JP~~ U
7421-93-4	Endrin aldehyde	6.1 ~~0.0097~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	3.1	U
5103-74-2	gamma-Chlordane	3.1	U
8001-35-2	Toxaphene	310	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 30.7 (g/mL) g Lab File ID: 016F1701

% Moisture: 34 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	2.5 ~~0.012~~	~~JP~~ U
319-85-7	beta-BHC	2.5 ~~0.27~~	~~JB~~ U
319-86-8	delta-BHC	2.5 ~~0.046~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.5 ~~0.046~~	~~JP~~ U
76-44-8	Heptachlor	0.046	JQ
309-00-2	Aldrin	0.051	JQ
1024-57-3	Heptachlor epoxide	2.5 ~~0.0091~~	~~JPB~~ U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	4.9 ~~0.28~~	~~JP~~ U
72-55-9	4,4'-DDE	4.9 ~~0.011~~	~~JP~~ U
72-20-8	Endrin	4.9	U
33213-65-9	Endosulfan II	4.9 ~~0.014~~	~~JP~~ U
72-54-8	4,4'-DDD	4.9 ~~0.017~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	4.9	U
50-29-3	4,4'-DDT	4.9 ~~0.072~~	~~JPB~~ U
72-43-5	Methoxychlor	25 ~~0.11~~	~~JPB~~ U
53494-70-5	Endrin ketone	4.9 ~~0.038~~	~~JP~~ U
7421-93-4	Endrin aldehyde	4.9	U
5103-71-9	alpha-Chlordane	2.5 ~~0.044~~	~~JP~~ U
5103-74-2	gamma-Chlordane	2.5 ~~0.020~~	~~JP~~ U
8001-35-2	Toxaphene	250	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 30.8 (g/mL) g Lab File ID: 017F1801

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	1.9 ~~0.0059~~	~~JP~~ U
319-85-7	beta-BHC	1.9 ~~0.23~~	~~JB~~ U
319-86-8	delta-BHC	0.070	J~~P~~Q
58-89-9	gamma-BHC (Lindane)	0.15	J~~P~~Q
76-44-8	Heptachlor	0.030	JQ
309-00-2	Aldrin	0.050	JQ
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8 ~~0.13~~	~~JP~~ U
72-55-9	4,4'-DDE	3.8 ~~0.018~~	~~JP~~ U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8 ~~0.016~~	~~JP~~ U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8 ~~0.038~~	~~JP~~ U
50-29-3	4,4'-DDT	3.8 ~~0.026~~	~~JPB~~ U
72-43-5	Methoxychlor	19 ~~0.077~~	~~JPB~~ U
53494-70-5	Endrin ketone	0.040	J~~P~~Q
7421-93-4	Endrin aldehyde	3.8 ~~0.037~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	1.9 ~~0.037~~	~~JP~~ U
5103-74-2	gamma-Chlordane	0.020	J~~P~~Q
8001-35-2	Toxaphene	190	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 30.6 (g/mL) g Lab File ID: 018F1901

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	3.1 ~~0.057~~	~~JP~~ U
319-85-7	beta-BHC	3.1 ~~0.30~~	~~JPB~~ U
319-86-8	delta-BHC	0.20	JQ
58-89-9	gamma-BHC (Lindane)	1.3	JQ
76-44-8	Heptachlor	3.1 ~~0.040~~	~~JP~~ U
309-00-2	Aldrin	3.1 ~~0.034~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	3.1	U
959-98-8	Endosulfan I	0.13 ~~0.13~~	~~JP~~ Q
60-57-1	Dieldrin	6.2 ~~0.26~~	~~JP~~ U
72-55-9	4,4'-DDE	6.2 ~~0.054~~	~~JP~~ U
72-20-8	Endrin	0.13	JQ
33213-65-9	Endosulfan II	6.2 ~~0.10~~	~~JP~~ U
72-54-8	4,4'-DDD	6.2 ~~0.16~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	6.2 ~~0.16~~	~~JP~~ U
50-29-3	4,4'-DDT	6.2 ~~0.12~~	~~JPB~~ U
72-43-5	Methoxychlor	31 ~~0.20~~	~~JPB~~ U
53494-70-5	Endrin ketone	6.2 ~~0.044~~	~~JP~~ U
7421-93-4	Endrin aldehyde	6.2 ~~0.083~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	0.057	~~JP~~ Q
5103-74-2	gamma-Chlordane	3.1	U
8001-35-2	Toxaphene	310	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 30.9 (g/mL) g Lab File ID: 019F2001

% Moisture: 39 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	0.035	JQ
319-85-7	beta-BHC	2.7 ~~0.12~~	~~JPB~~ U
319-86-8	delta-BHC	2.7 ~~0.072~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.7 ~~0.060~~	~~JP~~ U
76-44-8	Heptachlor	2.7 ~~0.030~~	~~JP~~ U
309-00-2	Aldrin	0.053	JQ
1024-57-3	Heptachlor epoxide	2.7	U
959-98-8	Endosulfan I	2.7	U
60-57-1	Dieldrin	5.3 ~~0.19~~	~~JP~~ U
72-55-9	4,4'-DDE	5.3 ~~0.012~~	~~JP~~ U
72-20-8	Endrin	5.3	U
33213-65-9	Endosulfan II	5.3 ~~0.0096~~	~~JP~~ U
72-54-8	4,4'-DDD	0.048	JQ
1031-07-8	Endosulfan sulfate	0.096	JQ
50-29-3	4,4'-DDT	5.3 ~~0.10~~	~~JPB~~ U
72-43-5	Methoxychlor	2.7 ~~0.13~~	~~JPB~~ U
53494-70-5	Endrin ketone	5.3	U
7421-93-4	Endrin aldehyde	5.3	U
5103-71-9	alpha-Chlordane	2.7	U
5103-74-2	gamma-Chlordane	2.7	U
8001-35-2	Toxaphene	270	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 020F2101

% Moisture: 84 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	0.27	JQ
319-85-7	beta-BHC	10 ~~0.01~~	~~JB~~ U
319-86-8	delta-BHC	0.40	JQ
58-89-9	gamma-BHC (Lindane)	0.26	JPQ
76-44-8	Heptachlor	10 ~~0.097~~	~~JP~~ U
309-00-2	Aldrin	10 ~~0.15~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	10 ~~0.20~~	~~JPB~~ U
959-98-8	Endosulfan I	0.62	JPQ
60-57-1	Dieldrin	20 ~~1.4~~	~~JP~~ U
72-55-9	4,4'-DDE	20 ~~1.1~~	~~JP~~ U
72-20-8	Endrin	20 ~~0.32~~	~~JP~~ U
33213-65-9	Endosulfan II	20 ~~0.20~~	~~JP~~ U
72-54-8	4,4'-DDD	2.0	JQ
1031-07-8	Endosulfan sulfate	20 ~~0.18~~	~~JP~~ U
50-29-3	4,4'-DDT	20 ~~7.0~~	~~JB~~ U
72-43-5	Methoxychlor	100 ~~1.1~~	~~JPB~~ U
53494-70-5	Endrin ketone	0.80	JQ
7421-93-4	Endrin aldehyde	20 ~~0.54~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	10 ~~0.24~~	~~JP~~ U
5103-74-2	gamma-Chlordane	0.22	JPQ
8001-35-2	Toxaphene	1000	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 30.0 (g/mL) g Lab File ID: 021F2201

% Moisture: 80 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	8.3 ~~0.12~~	~~JP~~ U
319-85-7	beta-BHC	8.3 ~~0.79~~	~~JB~~ U
319-86-8	delta-BHC	8.3 ~~0.46~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	8.3	U
76-44-8	Heptachlor	8.3 ~~0.10~~	~~JP~~ U
309-00-2	Aldrin	8.3 ~~0.15~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	8.3 ~~0.013~~	~~JPB~~ U
959-98-8	Endosulfan I	8.3 ~~0.53~~	~~JP~~ U
60-57-1	Dieldrin	16.6 ~~1.5~~	~~JP~~ U
72-55-9	4,4'-DDE	16.6 ~~0.95~~	~~JP~~ U
72-20-8	Endrin	16.6 ~~2.1~~	~~JP~~ U
33213-65-9	Endosulfan II	1.1	J Q
72-54-8	4,4'-DDD	1.1	J Q
1031-07-8	Endosulfan sulfate	16.6 ~~0.13~~	~~JP~~ U
50-29-3	4,4'-DDT	16.6 ~~6.1~~	~~JB~~ U
72-43-5	Methoxychlor	83 ~~1.8~~	~~JPB~~ U
53494-70-5	Endrin ketone	16.6 ~~1.3~~	~~JP~~ U
7421-93-4	Endrin aldehyde	16.6 ~~0.36~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	0.55	J Q
5103-74-2	gamma-Chlordane	0.20	J Q
8001-35-2	Toxaphene	830	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 31.6 (g/mL) g Lab File ID: 024F2501

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	2.9	U
319-85-7	beta-BHC	2.9 ~~0.11~~	~~JPB~~ U
319-86-8	delta-BHC	2.9 ~~0.014~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.9	U
76-44-8	Heptachlor	2.9 ~~0.079~~	~~JP~~ U
309-00-2	Aldrin	2.9	U
1024-57-3	Heptachlor epoxide	2.9	U
959-98-8	Endosulfan I	2.9	U
60-57-1	Dieldrin	5.6 ~~0.12~~	~~JP~~ U
72-55-9	4,4'-DDE	5.6 ~~0.0082~~	~~JP~~ U
72-20-8	Endrin	5.6	U
33213-65-9	Endosulfan II	5.6 ~~0.020~~	~~JP~~ U
72-54-8	4,4'-DDD	5.6	U
1031-07-8	Endosulfan sulfate	0.14	J
50-29-3	4,4'-DDT	5.6 ~~0.069~~	~~JB~~ U
72-43-5	Methoxychlor	29 ~~0.22~~	~~JPB~~ U
53494-70-5	Endrin ketone	5.6	U
7421-93-4	Endrin aldehyde	5.6 ~~0.016~~	~~JPB~~ U
5103-71-9	alpha-Chlordane	2.9	U
5103-74-2	gamma-Chlordane	2.9 ~~0.018~~	~~JP~~ U
8001-35-2	Toxaphene	290	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 025F2601

% Moisture: 42 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	0.038	~~J~~Q
319-85-7	beta-BHC	2.9 ~~0.086~~	~~JPB~~ U
319-86-8	delta-BHC	2.9 ~~0.036~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.9	U
76-44-8	Heptachlor	0.072	JQ
309-00-2	Aldrin	2.9	U
1024-57-3	Heptachlor epoxide	2.9	U
959-98-8	Endosulfan I	2.9	U
60-57-1	Dieldrin	5.6 ~~0.16~~	~~JP~~ U
72-55-9	4,4'-DDE	5.6	U
72-20-8	Endrin	5.6 ~~0.051~~	~~JP~~ U
33213-65-9	Endosulfan II	5.6	U
72-54-8	4,4'-DDD	5.6 ~~0.014~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	0.051	JQ
50-29-3	4,4'-DDT	5.6	U
72-43-5	Methoxychlor	29 ~~0.15~~	~~JPB~~ U
53494-70-5	Endrin ketone	5.6	U
7421-93-4	Endrin aldehyde	5.6	U
5103-71-9	alpha-Chlordane	2.9	U
5103-74-2	gamma-Chlordane	2.9 ~~0.015~~	~~JP~~ U
8001-35-2	Toxaphene	290	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 026F2701

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	0.13	JQ
319-85-7	beta-BHC	3 ~~0.097~~	~~JPB~~ U
319-86-8	delta-BHC	3 ~~0.049~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	3 ~~0.051~~	~~JP~~ U
76-44-8	Heptachlor	3 ~~0.075~~	~~JP~~ U
309-00-2	Aldrin	0.068	JQ
1024-57-3	Heptachlor epoxide	3.0	U
959-98-8	Endosulfan I	3 ~~0.038~~	~~JP~~ U
60-57-1	Dieldrin	5.9 ~~0.27~~	~~JP~~ U
72-55-9	4,4'-DDE	5.9 ~~0.11~~	~~JP~~ U
72-20-8	Endrin	5.9 ~~0.071~~	~~JP~~ U
33213-65-9	Endosulfan II	0.14	JQ
72-54-8	4,4'-DDD	5.9 ~~0.044~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	5.9 ~~0.060~~	~~JP~~ U
50-29-3	4,4'-DDT	5.9 ~~0.45~~	~~JP~~ U
72-43-5	Methoxychlor	30 ~~0.19~~	~~JPB~~ U
53494-70-5	Endrin ketone	5.9 ~~0.025~~	~~JP~~ U
7421-93-4	Endrin aldehyde	5.9	U
5103-71-9	alpha-Chlordane	0.089	JQ
5103-74-2	gamma-Chlordane	3 ~~0.021~~	~~JP~~ U
8001-35-2	Toxaphene	300	U

3/24/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 30.7 (g/mL) g Lab File ID: 027F2801

% Moisture: 57 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/03/2010

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 02/24/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
319-84-6	alpha-BHC	0.087	~~JP~~Q
319-85-7	beta-BHC	3.9 ~~0.14~~	~~JPB~~U
319-86-8	delta-BHC	3.9 ~~0.012~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	3.9	U
76-44-8	Heptachlor	0.10	~~JP~~Q
309-00-2	Aldrin	0.059	~~JP~~Q
1024-57-3	Heptachlor epoxide	3.9	U
959-98-8	Endosulfan I	3.9 ~~0.011~~	~~JP~~ U
60-57-1	Dieldrin	7.5 ~~0.20~~	~~JP~~ U
72-55-9	4,4'-DDE	7.5 ~~0.019~~	~~JP~~ U
72-20-8	Endrin	7.5	U
33213-65-9	Endosulfan II	7.5 ~~0.015~~	~~JP~~ U
72-54-8	4,4'-DDD	0.099	JQ
1031-07-8	Endosulfan sulfate	7.5	U
50-29-3	4,4'-DDT	7.5 ~~0.12~~	~~JB~~ U
72-43-5	Methoxychlor	39 ~~0.40~~	~~JPB~~ U
53494-70-5	Endrin ketone	7.5	U
7421-93-4	Endrin aldehyde	7.5	U
5103-71-9	alpha-Chlordane	3.9	U
5103-74-2	gamma-Chlordane	3.9	U
8001-35-2	Toxaphene	390	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC651

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-001

Sample wt/vol: 31.0 (g/mL) g Lab File ID: 027F2701

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC652

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-002

Sample wt/vol: 31.0 (g/mL) g Lab File ID: 028F2801

% Moisture: 35 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg): ug/kg	Q
12674-11-2	Aroclor-1016	17	J
11104-28-2	Aroclor-1221	49	U
11141-16-5	Aroclor-1232	49	U
53469-21-9	Aroclor-1242	49	U
12672-29-6	Aroclor-1248	49	U
11097-69-1	Aroclor-1254	49	U
11096-82-5	Aroclor-1260	49	U
37324-23-5	Aroclor-1262	49	U
11100-14-4	Aroclor-1268	49	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC653

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-003

Sample wt/vol: 31.0 (g/mL) g Lab File ID: 029F2901

% Moisture: 24 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	12	JPQ
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC655

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-004

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 030F3001

% Moisture: 30 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	12	JPQ
11104-28-2	Aroclor-1221	46	U
11141-16-5	Aroclor-1232	46	U
53469-21-9	Aroclor-1242	46	U
12672-29-6	Aroclor-1248	46	U
11097-69-1	Aroclor-1254	28	JQ
11096-82-5	Aroclor-1260	46	U
37324-23-5	Aroclor-1262	46	U
11100-14-4	Aroclor-1268	46	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC656

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-005

Sample wt/vol: 31.6 (g/mL) g Lab File ID: 031F3101

% Moisture: 25 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	42	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	41	JPQ
11096-82-5	Aroclor-1260	42	U
37324-23-5	Aroclor-1262	42	U
11100-14-4	Aroclor-1268	42	U

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC657

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-006

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 032F3201

% Moisture: 51 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	67	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	67	U
53469-21-9	Aroclor-1242	67	U
12672-29-6	Aroclor-1248	67	U
11097-69-1	Aroclor-1254	67	U
11096-82-5	Aroclor-1260	67	U
37324-23-5	Aroclor-1262	67	U
11100-14-4	Aroclor-1268	67	U

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC658

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-007

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 033F3301

% Moisture: 64 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.8 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	92	U
11104-28-2	Aroclor-1221	92	U
11141-16-5	Aroclor-1232	92	U
53469-21-9	Aroclor-1242	92	U
12672-29-6	Aroclor-1248	92	U
11097-69-1	Aroclor-1254	92	U
11096-82-5	Aroclor-1260	92	U
37324-23-5	Aroclor-1262	92	U
11100-14-4	Aroclor-1268	92	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC659

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-008

Sample wt/vol: 30.9 (g/mL) g Lab File ID: 034F3401

% Moisture: 66 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5.7 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	94	U
11104-28-2	Aroclor-1221	94	U
11141-16-5	Aroclor-1232	94	U
53469-21-9	Aroclor-1242	94	U
12672-29-6	Aroclor-1248	94	U
11097-69-1	Aroclor-1254	94	U
11096-82-5	Aroclor-1260	94	U
37324-23-5	Aroclor-1262	94	U
11100-14-4	Aroclor-1268	94	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC660

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-009

Sample wt/vol: 30.1 (g/mL) g Lab File ID: 035F3501

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 4.9 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	61	U
11104-28-2	Aroclor-1221	61	U
11141-16-5	Aroclor-1232	61	U
53469-21-9	Aroclor-1242	61	U
12672-29-6	Aroclor-1248	61	U
11097-69-1	Aroclor-1254	61	U
11096-82-5	Aroclor-1260	61	U
37324-23-5	Aroclor-1262	61	U
11100-14-4	Aroclor-1268	61	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC662

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-010

Sample wt/vol: 30.2 (g/mL) g Lab File ID: 036F3601

% Moisture: 34 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	50	U
11104-28-2	Aroclor-1221	50	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	50	U
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U
37324-23-5	Aroclor-1262	50	U
11100-14-4	Aroclor-1268	50	U

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC663

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-011

Sample wt/vol: 31.0 (g/mL) g Lab File ID: 037F3701

% Moisture: 15 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
37324-23-5	Aroclor-1262	38	U
11100-14-4	Aroclor-1268	38	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC665

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-012

Sample wt/vol: 30.3 (g/mL) g Lab File ID: 038F3801

% Moisture: 46 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	61	U
11104-28-2	Aroclor-1221	61	U
11141-16-5	Aroclor-1232	61	U
53469-21-9	Aroclor-1242	61	U
12672-29-6	Aroclor-1248	61	U
11097-69-1	Aroclor-1254	61	U
11096-82-5	Aroclor-1260	61	U
37324-23-5	Aroclor-1262	61	U
11100-14-4	Aroclor-1268	61	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC666

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-013

Sample wt/vol: 30.6 (g/mL) g Lab File ID: 039F3901

% Moisture: 39 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	53	U
11104-28-2	Aroclor-1221	53	U
11141-16-5	Aroclor-1232	53	U
53469-21-9	Aroclor-1242	53	U
12672-29-6	Aroclor-1248	53	U
11097-69-1	Aroclor-1254	53	U
11096-82-5	Aroclor-1260	53	U
37324-23-5	Aroclor-1262	53	U
11100-14-4	Aroclor-1268	53	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC667

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-014

Sample wt/vol: 30.6 (g/mL) g Lab File ID: 040F4001

% Moisture: 84 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg): ug/kg	Q
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	56	J
11096-82-5	Aroclor-1260	200	U
37324-23-5	Aroclor-1262	200	U
11100-14-4	Aroclor-1268	200	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC668

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-015

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 041F4101

% Moisture: 80 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	30	JQ
11096-82-5	Aroclor-1260	160	U
37324-23-5	Aroclor-1262	160	U
11100-14-4	Aroclor-1268	160	U

3/24/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC669

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-016

Sample wt/vol: 30.7 (g/mL) g Lab File ID: 044F4401

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg): ug/kg	Q
12674-11-2	Aroclor-1016	58	U
11104-28-2	Aroclor-1221	58	U
11141-16-5	Aroclor-1232	58	U
53469-21-9	Aroclor-1242	58	U
12672-29-6	Aroclor-1248	58	U
11097-69-1	Aroclor-1254	58	U
11096-82-5	Aroclor-1260	58	U
37324-23-5	Aroclor-1262	58	U
11100-14-4	Aroclor-1268	58	U

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC670

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-017

Sample wt/vol: 30.5 (g/mL) g Lab File ID: 045F4501

% Moisture: 42 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.0 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	55	U
11104-28-2	Aroclor-1221	55	U
11141-16-5	Aroclor-1232	55	U
53469-21-9	Aroclor-1242	55	U
12672-29-6	Aroclor-1248	55	U
11097-69-1	Aroclor-1254	55	U
11096-82-5	Aroclor-1260	55	U
37324-23-5	Aroclor-1262	55	U
11100-14-4	Aroclor-1268	55	U

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC671

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-018

Sample wt/vol: 30.4 (g/mL) g Lab File ID: 046F4601

% Moisture: 44 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	58	U
11104-28-2	Aroclor-1221	58	U
11141-16-5	Aroclor-1232	58	U
53469-21-9	Aroclor-1242	58	U
12672-29-6	Aroclor-1248	58	U
11097-69-1	Aroclor-1254	58	U
11096-82-5	Aroclor-1260	58	U
37324-23-5	Aroclor-1262	58	U
11100-14-4	Aroclor-1268	58	U

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC672

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC651

Matrix: (SOIL/SED/WATER) Soil Lab Sample ID: LB02012-019

Sample wt/vol: 30.7 (g/mL) g Lab File ID: 047F4701

% Moisture: 57 Decanted: (Y/N) N Date Received: 02/02/2010

Extraction: (Type) SONC Date Extracted: 02/04/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/06/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	75	U
11104-28-2	Aroclor-1221	75	U
11141-16-5	Aroclor-1232	75	U
53469-21-9	Aroclor-1242	75	U
12672-29-6	Aroclor-1248	75	U
11097-69-1	Aroclor-1254	75	U
11096-82-5	Aroclor-1260	75	U
37324-23-5	Aroclor-1262	75	U
11100-14-4	Aroclor-1268	75	U

3/24/10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

April 14, 2010

Reply to: Jennifer Crawford
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Organic Analyses of Water Samples Collected from the Warmhouse Beach Dump Project Case 39444, SDGs JC621 and JC622

From: Jennifer Crawford, Chemist
USEPA R10, OEA, Environmental Services Unit

To: Kathy Parker, Project Manager/On-Scene Coordinator
USEPA R10, Office of Environmental Clean-up

CC: Amy Dahl, Tech Law Inc.
Ginna Grepo-Grove, USEPA R10 RQAM
Maja Tritt, USEPA R10 CLP PO

The quality assurance (QA) review of the analytical data generated from the analysis of fourteen (14) water samples collected from the above referenced site has been completed. These samples were analyzed for Trace Volatile Organic Compounds (TVOC), Semi-Volatile Compounds (SVOC SIM only), Pesticides, and PCB Aroclors by Shealy Environmental Services located in West Columbia, South Carolina.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Quality Assurance Project Plan for Warmhouse Beach Dump, the technical specifications of the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2), the Contract Laboratory Program's National Functional Guidelines for Organic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified using the reviewer's professional judgment.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is listed in Attachment 1 – Sample Index. Please note that the SVOC analyses were reported in a separate SDG (JC622) and will be reviewed in a separate memo.

The laboratory (Shealy) was contacted for additional information and clarification regarding the sample analyses in order to facilitate the validation of the data in this SDG.

The conclusions presented herein are based on the information provided for the review.

I. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data points were qualified:

AFFECTED SAMPLE(s)	ANALYSIS / ANALYTE	QUAL. D/ND*	EXPLANATION
ALL	TVOC - 1,4-Dioxane	R/R	The response factor (RRF) for 1,4-Dioxane was <0.01. 1,4-Dioxane in all TVOC samples was consequently qualified unusable, "R". 1,4-Dioxane was added to the SVOC analysis for this project, reported in SDG JC622.
ALL	TVOC – Bromomethane	J/UJ	The Initial Calibration for bromomethane exceeded %RSD criteria. Bromomethane in all TVOC samples was consequently qualified with a "J", as an estimated result.
ALL	TVOC – Acetone, Carbon Disulfide, Chloromethane Methylene Chloride 1,2,3-Trichlorobenzene	U/UJ	The analytes listed at left were detected in the method blank and/or storage blank during TVOC analysis, but were below the method criteria (<CRQL or <2x CRQL as applicable). Samples with detected acetone, carbon disulfide, methylene chloride, chloromethane, and 1,2,3-Trichlorobenzene below the CRQL are qualified "U" and the reported at the CRQL.
ALL	TVOC – Acetone, Carbon Disulfide, 2-Butanone, 4-methyl-2-pentanone, 2-Hexanone	U/UJ	The closing CCV standard for TVOC analysis was below the regional criteria (±25%D) for the five analytes listed at left. All affected analytes are qualified with a "J" as an estimated result. Acetone and carbon disulfide are already qualified due to blank contamination.
JC624	TVOC- Methylcyclohexane	U/U	The sample had a detected level of analyte, however there is a mismatch of spectra (interference present). Methylcyclohexane was therefore reported at the detected level with a "U" qualifier.
JC634	PEST - ALL	J/UJ	The recovery of surrogate Decachlorobiphenyl (DCB) in sample JC634 was below the acceptance criteria on both columns, but greater than 10%. The results for the sample are considered an estimate, and qualified 'UJ' – no pesticides were detected in the sample.
ALL	SVOC SIM – Pentachlorophenol	R/R	The RRF was below the acceptance criteria for pentachlorophenol in both the ICV and CCVs. No pentachlorophenol was detected in the samples, and the results have been rejected.
JC626, JC628	SVOC SIM – 2-Methylnaphthalene Phenanthrene Benzo(a)anthracene	J/UJ	A CCV standard for SVOC SIM analysis was below the regional criteria (±25%D) for the three analytes listed at left. All affected analytes are qualified with a "J" as an estimated result
MANY	SVOC SIM – 2-Methylnaphthalene Phenanthrene	J/UJ	A CCV standard for SVOC SIM analysis was below the regional criteria (±25%D) for the two analytes listed at left. All affected analytes are qualified with a "J" as an estimated result
JC633RX	SVOC SIM – All analytes	J/UJ	The sample was re-extracted outside of Holding Time. The original extract had failing QC that would have required rejection of the data. The RX sample had improved QC, but is qualified as an estimate because it was extracted past the technical HT.
JC621,JC622, JC626,JC628, JC629	SVOC SIM – Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene	J/UJ	The internal standard Perylene-d12 was below the acceptance criteria, but had greater than 25% recovery. The four associated analytes to this IS have been qualified as an estimate (J) in the samples listed.

* D/ND = Qualifier for Detected / Non-Detect samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

Bias Qualifiers	L	Low bias.
	H	High bias.
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).
	K	Unknown Bias

Reasons for Validation Qualifiers

The reasons for applying a validation qualifier to a sample result is also listed in the validated electronic data deliverables (EDDs), under the column header "Reasons". Below is a list of reasons why a data point could be qualified during data validation.

Reasons for Validation Qualifiers:	
<CRQL	The value reported is <Contract Required Quantitation Limits (CRQLs)
%D	The percent difference (%D) of the concentrations calculated off the primary and secondary columns are >25% but <60% and were qualified estimated.
MULT	Multiple runs were conducted for the analyte. Use the other value reported for the same analyte. The value which is not to be used is qualified 'R'.
USE R1	Use the value(s) reported off the initial analytical run
USE DIL	The value reported is over the calibration range. Use the value reported off the dilution run.
SURR/DMCs/ IS	The surrogate/deuterated monitoring compound (DMC)/internal standard recoveries did not meet the specified control limits. Results are qualified estimated.
RRF	The response factor for the analyte did not meet the minimum acceptance criteria (0.005).
MS/MSD	The spiked recoveries and/or RPDs did not meet the specified control limits. Results are qualified estimated.

MB	Analyte was qualified as non-detect due to contamination in the associated blank. The value reported is <5x or <10x (if common lab contaminant) the value in the blank.
ND	The analyte was not detected in the sample, and is reported at the CRQL with the 'U' Qualifier.
COELN	Initial identification erroneous. Peak due to co-elution with other detected target analytes.
ICAL	Initial Calibration criteria not met
CCV	Continuing calibration criteria not met
GPC	GPC Clean-up criteria not met.
CLN-UP	Silica gel, alumina or sulfur clean-up criteria not met
LCS	LCS/LCSD criteria not met
HT	Holding time criteria not met
STORE	Sample Storage and preservation specified not met
TEMP	Cooler recommended temperature exceeded at the verified time of sample receipt at the lab (VTSR)
M/Z	Mass/ion resolution ratio not met
DPE	Diphenyl ether interferences. False positive. Elevate reporting limits at level of detection
MISMATCH	Mismatch of spectra, interference present. Report at detected level with a "U" qualifier.
2 RUNS	Multiple runs were conducted for the analyte. Use the other value reported for the same analyte. The value which is not to be used is qualified 'R'.

II. DATA REVIEW

The analytical data were evaluated following the recommended baseline checks used in the four stages of laboratory analytical data verification and validation for Superfund use listed as follows (EPA-540-R08-005, 2009):

Stage 1 – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
1	X			Documentation identifies the laboratory receiving and conducting analyses, and includes documentation for all samples submitted by the project or requester for analyses.
2	X			Requested analytical methods were performed and the analysis dates are present.
3	X			Requested target analyte results are reported along with the original laboratory data qualifiers and data qualifier definitions for each reported result
4	X			Requested target analyte result units are reported
5	X			Requested reporting limits for all samples are present and results at and below the requested (required) reporting limits are clearly identified (including sample detection limits if required).
6	X			Sampling dates (including times if needed), date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH and temperature) are documented.
7	X			Sample results are evaluated by comparing sample conditions upon receipt at the laboratory (e.g., preservation checks) and sample characteristics (e.g., percent moisture) to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract.

Stage 2A – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
8	X			Requested methods (handling, preparation, cleanup, and analytical) are performed.
9	X			Method dates (including dates, times and duration of analysis for radiation counting measurements and other methods, if needed) for handling (e.g., Toxicity Characteristic Leaching Procedure), preparation, cleanup and analysis are present, as appropriate.
10	X			Requested spike analytes or compounds (e.g., surrogate, DMCs, LCS spikes, post digestion spikes) have been added, as appropriate.
11	X			Sample holding times (from sampling date to preparation and preparation to analysis) are evaluated.
12	X			Frequency of QC samples is checked for appropriateness (e.g., one LCS per twenty samples in a preparation batch).
13	X			Sample results are evaluated by comparing holding times and sample-related QC data to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract
				Stage 2A – Data Validation QC Data
14	X			method blanks
15	X			surrogate recoveries/deuterated monitoring compounds (DMC) recoveries
16	X			laboratory control sample (LCS) recoveries
17	X			matrix spike and matrix spike duplicate recoveries
18	X			serial dilutions
19	X			post digestion spikes
20	X			standard reference materials
21	X			equipment blanks
22	X			trip blanks

Stage 2B – Data Validation				
Stage 2B validation builds on the validation conducted in Stage 2A. Stage 2B validation of the laboratory analytical data package consists of the Stage 2A validation plus the verification and validation checks for the compliance of instrument-related QC.				
	Verified		N/A	QC Procedure or Check
	YES	NO		
23	X			Initial calibration data (e.g., ICAL standards, ICV standards, ICBs) are provided for all requested analytes and linked to field samples reported. For each initial calibration, the calibration type used is present along with the initial calibration equation used including any weighting factor(s) applied and the associated correlation coefficients, as appropriate. Recalculations of the standard concentrations using the initial calibration curve are present, along with their associated percent recoveries, as appropriate (e.g., if required by the project, method, or contract). For the ICV standard, the associated percent recovery (or percent difference, as appropriate) is present.
24	X			Appropriate number and concentration of initial calibration standards are present.
25	X			Continuing calibration data (e.g. CCV standards and CCBs) are provided for all requested analytes and linked to field samples reported, as appropriate. For the CCV standard(s), the associated percent recoveries (or percent differences, as appropriate) are present.
26	X			Reported samples are bracketed by CCV standards and CCBs standards as appropriate.
27	X			Method specific instrument performance checks are present as appropriate (e.g., tunes for mass spectrometry methods, DDT/Endrin breakdown checks for pesticides and aroclors, instrument blanks and interference checks for ICP methods).

28	X			Frequency of instrument QC samples is checked for appropriateness (e.g., gas chromatography-mass spectroscopy [GC-MS] tunes have been run every 12 hours).

Stage 3 – Data Validation

Stage 3 validation builds on the validation conducted in Stage 2B. Stage 3 validation of the laboratory analytical data package consists of the Stage 2B validation plus the recalculation of instrument and sample results from the laboratory instrument responses, and comparison of recalculated results to laboratory reported results.

	Verified		N/A	QC Procedure or Check
	YES	NO		
29	X			Instrument response data (e.g., GC peak areas, ICP corrected intensities) are reported for requested analytes, surrogates, internal standards, and DMCs for all requested field samples, matrix spikes, matrix spike duplicates, LCS, and method blanks as well as calibration data and instrument QC checks (e.g., tunes, DDT/Endrin breakdowns, inter-element correction factors, and Florisil cartridge checks).
30	X			Reported target analyte instrument responses are associated with appropriate internal standard analyte(s) for each (or selected) analyte(s) (for methods using internal standard for calibration).
31	X			Fit and appropriateness of the initial calibration curve used or required (e.g., mean calibration factor, regression analysis [linear or non-linear, with or without weighting factors, with or without forcing]) is checked with recalculation of the initial calibration curve for each (or selected) analyte(s) from the instrument response.
32	X			Comparison of instrument response to the minimum response requirements for each (or selected) analyte(s).
33	X			Recalculation of each (or selected) opening and closing CCV (and CCB) response from the peak data reported for each (or selected) analyte(s) from the instrument response, as appropriate.
34	X			Compliance check of recalculated opening and/or closing CCV (and CCB) response to recalculated initial calibration response for each (or selected) analyte(s).
35	X			Recalculation of percent ratios for each (or selected) tune from the instrument response, as appropriate.
36	X			Compliance check of recalculated percent ratio for each (or selected) tune from the instrument response.
37	X			Recalculation of each (or selected) instrument performance check (e.g., DDT/Endrin breakdown for pesticide analysis, instrument blanks, interference checks) from the instrument response.
38	X			Recalculation and compliance check of retention time windows (for chromatographic methods) for each (or selected) analyte(s) from the laboratory reported retention times.
39	X			Recalculation of reported results for each reported (or selected) target analyte(s) from the instrument response.
40	X			Recalculation of each (or selected) reported spike recovery (surrogate recoveries, DMC recoveries, LCS recoveries, duplicate analyses, matrix spike and matrix spike duplicate recoveries, serial dilutions, post digestion spikes, standard reference materials etc.) from the instrument response.
41	X			Each (or selected) sample result(s) and spike recovery(ies) are evaluated by comparing the recalculated numbers to the laboratory reported numbers according to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract

Note: Selection of analytes, spikes, and performance evaluation checks for the Stage 3 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including (but not limited to) the type of verification and validation being performed (manual or electronic), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Stage 4 – Data Validation				
Stage 4 validation builds on the validation conducted in Stage 3. Stage 4 validation of the laboratory analytical data package consists of the Stage 3 validation plus the evaluation of instrument outputs.				
	Verified		N/A	QC Procedure or Check
	YES	NO		
42	X			All required instrument outputs (e.g., chromatograms, mass spectra, atomic emission spectra, instrument background corrections, and interference corrections) for evaluating sample and instrument performance are present.
43	X			Sample results are evaluated by checking each (or selected) instrument output (e.g., chromatograms, mass spectra, atomic emission spectra data, instrument background corrections, interference corrections) for correct identification and quantitation of analytes (e.g., peak integrations, use of appropriate internal standards for quantitation, elution order of analytes, and interferences).
44	X			Each (or selected) instrument's output(s) is evaluated for confirmation of non-detected or tentatively identified analytes.
Note: Selection of instrument outputs for the Stage 4 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including, but not limited to, the type of verification and validation being performed (electronic or manual), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.				

Attachments:

1. Summary of Samples Analyzed (Sample Index)
2. Summary of Electronic Data Review
3. Validated Electronic Data Deliverables

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 013F1301

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

JR
04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 014F1401

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-003

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 015F1501

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

JZ
02/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 016F1601

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 017F1701

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

DR
2/4/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 018F1801

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

02/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 019F1901

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg): ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 020F2001

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

02
04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021F2101

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 024F2401

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 025F2501

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

02
04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 026F2601

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-013

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 027F2701

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

04/14/10

1H - FORM I ARO
AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 028F2801

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000.0 (uL) Date Analyzed: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) Y

Acid Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U
37324-23-5	Aroclor-1262	1.0	U
11100-14-4	Aroclor-1268	1.0	U

4/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 006F0601

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 007F0701

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-003

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 008F0801

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 009F0901

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 010F1001

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

SV 04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 011F1101

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 012F1201

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

SZ 04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 013F1301

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 014F1401

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 017F1701

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg): ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

02/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 018F1801

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 019F1901

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

02 2/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-013

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 020F2001

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.0052	~~U~~ Q
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

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OL
04/14/10

1G - FORM I PEST
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021F2101

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Extraction: (Type) CONT Date Extracted: 02/02/2010

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.050	U JK
319-85-7	beta-BHC	0.050	U JK
319-86-8	delta-BHC	0.050	U JK
58-89-9	gamma-BHC (Lindane)	0.050	U JK
76-44-8	Heptachlor	0.050	U JK
309-00-2	Aldrin	0.050	U JK
1024-57-3	Heptachlor epoxide	0.050	U JK
959-98-8	Endosulfan I	0.050	U JK
60-57-1	Dieldrin	0.10	U JK
72-55-9	4,4'-DDE	0.10	U JK
72-20-8	Endrin	0.10	U JK
33213-65-9	Endosulfan II	0.10	U JK
72-54-8	4,4'-DDD	0.10	U JK
1031-07-8	Endosulfan sulfate	0.10	U JK
50-29-3	4,4'-DDT	0.10	U JK
72-43-5	Methoxychlor	0.50	U JK
53494-70-5	Endrin ketone	0.10	U JK
7421-93-4	Endrin aldehyde	0.10	U JK
5103-71-9	alpha-Chlordane	0.050	U JK
5103-74-2	gamma-Chlordane	0.050	U JK
8001-35-2	Toxaphene	5.0	U JK

02
04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120225B14

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/25/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	U	
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	U	
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	~~U~~	UJK
129-00-0	Pyrene	0.10	~~U~~	UJK
56-55-3	Benzo(a)anthracene	0.10	~~U~~	UJK
218-01-9	Chrysene	0.10	~~U~~	UJK
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

JL
04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC636

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-015

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C16

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022604

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	~~U~~
91-57-6	2-Methylnaphthalene	0.10	~~U~~
208-96-8	Acenaphthylene	0.10	~~U~~
83-32-9	Acenaphthene	0.10	~~U~~
86-73-7	Fluorene	0.10	~~U~~
87-86-5	Pentachlorophenol	0.20	~~U~~
85-01-8	Phenanthrene	0.10	~~U~~
120-12-7	Anthracene	0.10	~~U~~
206-44-0	Fluoranthene	0.10	~~U~~
129-00-0	Pyrene	0.10	~~U~~
56-55-3	Benzo(a)anthracene	0.10	~~U~~
218-01-9	Chrysene	0.10	~~U~~
205-99-2	Benzo(b)fluoranthene	0.10	~~U~~
207-08-9	Benzo(k)fluoranthene	0.10	~~U~~
50-32-8	Benzo(a)pyrene	0.10	~~U~~
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	~~U~~
53-70-3	Dibenzo(a,h)anthracene	0.10	~~U~~
191-24-2	Benzo(g,h,i)perylene	0.10	~~U~~

R

2 RUNS - USE R1

JC 04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120225B15

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/25/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	U	
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	U	
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	~~U~~	UJK
129-00-0	Pyrene	0.10	~~U~~	UJK
56-55-3	Benzo(a)anthracene	0.10	~~U~~	UJK
218-01-9	Chrysene	0.10	~~U~~	UJK
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

JL 04/14/10

SOM01.2 (10/2006)

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022605

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

R

2 RUNS - USE R1
JR
04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-003

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120225B16

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/25/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	~~U~~	R
91-57-6	2-Methylnaphthalene	0.10	~~U~~	R
208-96-8	Acenaphthylene	0.10	~~U~~	R
83-32-9	Acenaphthene	0.10	~~U~~	R
86-73-7	Fluorene	0.10	~~U~~	R
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	~~U~~	R
120-12-7	Anthracene	0.10	~~U~~	R
206-44-0	Fluoranthene	0.10	U	
129-00-0	Pyrene	0.070	~~J~~	Q
56-55-3	Benzo(a)anthracene	0.10	U	
218-01-9	Chrysene	0.10	U	
205-99-2	Benzo(b)fluoranthene	0.10	~~U~~	R
207-08-9	Benzo(k)fluoranthene	0.10	~~U~~	R
50-32-8	Benzo(a)pyrene	0.10	~~U~~	R
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	~~U~~	R
53-70-3	Dibenzo(a,h)anthracene	0.10	~~U~~	R
191-24-2	Benzo(g,h,i)perylene	0.10	~~U~~	R

R = 2 RUNS USE RE

2 RUNS USE "RE"

JR 04/14/10

SOM01.2 (10/2006)

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-003

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022618

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	~~U~~ UJK
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	~~U~~ R
85-01-8	Phenanthrene	0.10	~~U~~ UJK
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	~~U~~ R
129-00-0	Pyrene	0.10	~~U~~ R
56-55-3	Benzo(a)anthracene	0.10	~~U~~ R
218-01-9	Chrysene	0.10	~~U~~ R
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

2 RUNS - USE R1

02 04/14/10

SOM01.2 (10/2006)

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120225B17

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/25/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	~~U~~ R
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

JR 04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120225B18

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/25/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	~~U~~
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120221B15

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/21/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	All R
91-57-6	2-Methylnaphthalene	0.10	U	
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	U	
85-01-8	Phenanthrene	0.10	U	
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	~~U~~	UJK
129-00-0	Pyrene	0.10	~~U~~	UJK
56-55-3	Benzo(a)anthracene	0.10	~~U~~	UJK
218-01-9	Chrysene	0.10	~~U~~	UJK
205-99-2	Benzo(b)fluoranthene	0.10	U	All R
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

R= 2 runs, use "RE"
JL 04/14/10

SOM01.2 (10/2006)

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022619

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	~~U~~	UJK
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.084	~~J~~	Q
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	~~U~~	UJK
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	~~U~~	R
129-00-0	Pyrene	0.10	~~U~~	R
56-55-3	Benzo(a)anthracene	0.10	~~U~~	R
218-01-9	Chrysene	0.10	~~U~~	R
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

2 RUNS - USE R1

04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022620

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	~~U~~	UJK
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	~~U~~	UJK
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	U	
129-00-0	Pyrene	0.10	U	
56-55-3	Benzo(a)anthracene	0.10	U	
218-01-9	Chrysene	0.10	U	
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120221B17

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/21/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	~~U~~
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

R

WK

R

R = 2 RUNS
USE RE

SZ
04/14/10

SOM01.2 (10/2006)

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022621

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	~~U~~	UJK
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	~~U~~	UJK
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	~~U~~	R – R RUNS USE R1
129-00-0	Pyrene	0.10	~~U~~	
56-55-3	Benzo(a)anthracene	0.10	~~U~~	
218-01-9	Chrysene	0.10	~~U~~	
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120225B19

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/25/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	U	
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	U	
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	~~U~~	UJK
129-00-0	Pyrene	0.10	~~U~~	UJK
56-55-3	Benzo(a)anthracene	0.10	~~U~~	UJK
218-01-9	Chrysene	0.10	~~U~~	UJK
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

JR
04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022610

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	~~U~~	UJK
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	~~U~~	UJK
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	U	
129-00-0	Pyrene	0.10	U	
56-55-3	Benzo(a)anthracene	0.10	U	
218-01-9	Chrysene	0.10	U	
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

JR
04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022611

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	~~U~~	UJK
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	K
85-01-8	Phenanthrene	0.10	~~U~~	UJK
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	U	
129-00-0	Pyrene	0.10	U	
56-55-3	Benzo(a)anthracene	0.10	U	
218-01-9	Chrysene	0.10	U	
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

JR 04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022612

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	~~U~~ UJK
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	~~U~~ R
85-01-8	Phenanthrene	0.10	~~U~~ UJK
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

JL 04/14/10

SOM01.2 (10/2006)

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-013

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022614

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

R

2 RUNS - USE RX
JZ 04/14/10

SOM01.2 (10/2006)

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-013

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022626

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U JK
91-57-6	2-Methylnaphthalene	0.10	U JK
208-96-8	Acenaphthylene	0.10	U JK
83-32-9	Acenaphthene	0.10	U JK
86-73-7	Fluorene	0.10	U JK
87-86-5	Pentachlorophenol	0.20	~~U~~ R
85-01-8	Phenanthrene	0.10	U JK
120-12-7	Anthracene	0.10	U JK
206-44-0	Fluoranthene	0.10	U JK
129-00-0	Pyrene	0.10	U JK
56-55-3	Benzo(a)anthracene	0.10	U JK
218-01-9	Chrysene	0.10	U JK
205-99-2	Benzo(b)fluoranthene	0.10	U JK
207-08-9	Benzo(k)fluoranthene	0.10	U JK
50-32-8	Benzo(a)pyrene	0.10	U JK
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U JK
53-70-3	Dibenzo(a,h)anthracene	0.10	U JK
191-24-2	Benzo(g,h,i)perylene	0.10	U JK

JR
04/14/10

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12022616

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/26/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	~~U~~ R
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

04/14/10

SOM01.2 (10/2006)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C02

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ~~ug/L~~	Q	
75-71-8	Dichlorodifluoromethane	0.50	U	
74-87-3	Chloromethane	0.50	U	
75-01-4	Vinyl chloride	0.50	U	
74-83-9	Bromomethane	0.50	~~U~~	UJK
75-00-3	Chloroethane	0.50	U	
75-69-4	Trichlorofluoromethane	0.50	U	
75-35-4	1,1-Dichloroethene	0.50	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	
67-64-1	Acetone	5.0 ~~1.8~~	~~JB~~	U
75-15-0	Carbon Disulfide	0.50 ~~0.20~~	~~JB~~	U
79-20-9	Methyl acetate	0.50	U	
75-09-2	Methylene chloride	0.50 ~~0.059~~	~~JB~~	U
156-60-5	trans-1,2-Dichloroethene	0.50	U	
1634-04-4	Methyl tert-butyl ether	0.50	U	
75-34-3	1,1-Dichloroethane	0.50	U	
156-59-2	cis-1,2-Dichloroethene	0.50	U	
78-93-3	2-Butanone	5.0	U	
74-97-5	Bromochloromethane	0.50	U	
67-66-3	Chloroform	0.50	U	
71-55-6	1,1,1-Trichloroethane	0.50	U	
110-82-7	Cyclohexane	0.50	U	
56-23-5	Carbon tetrachloride	0.50	U	
71-43-2	Benzene	0.50	U	
107-06-2	1,2-Dichloroethane	0.50	U	

~~"A" CRQL~~
04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C02

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

JR 04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C02

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	13.610	0.99	J
02		Unknown-02	13.760	3.3	J
03		Unknown-03	14.040	2.2	J
04		Unknown-04	14.250	2.0	J
05	593-45-3	Octadecane	14.360	1.3	NJ
06	4602-84-0	2,6,10-Dodecatrien-1-ol, 3,7	14.540	0.54	NJ
07		Unknown-05	14.630	0.77	J
08		Unknown-06	14.700	0.80	J
09		Unknown-07	14.780	1.2	J
10		Unknown-08	14.850	0.68	J
11		Unknown-09	14.910	0.82	J
12	1000108-92-4	Farnesol isomer a	15.000	1.1	NJ
13					
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27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C03

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ~~ug/L~~	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.0~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.17~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.054~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C03

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

SR 04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C03

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	13.810	6.1	J
02		Unknown-02	14.090	3.8	J
03		Unknown-03	14.270	2.6	J
04		Unknown-04	14.420	0.60	J
05	1117-52-8	5,9,13-Pentadecatrien-2-one,	15.970	0.57	NJ
06		Unknown-05	16.050	0.52	J
07	1117-52-8	5,9,13-Pentadecatrien-2-one,	16.170	3.0	NJ
08	1117-52-8	5,9,13-Pentadecatrien-2-one,	16.320	1.6	NJ
09	1117-52-8	5,9,13-Pentadecatrien-2-one,	16.350	0.92	NJ
10		Unknown-06	16.400	0.92	J
11		Unknown-07	16.440	3.7	J
12		Unknown-08	16.620	1.7	J
13	111-02-4	2,6,10,14,18,22-Tetracosahex	17.550	3.0	NJ
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21					
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23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C04

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~1.8~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.16~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.051~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

~~"U" @ CRQL~~

04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C04

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C04

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	7683-64-9	Squalene	13.860	71	NJ
02	111-02-4	2,6,10,14,18,22-Tetracosahex	14.330	100	NJ
03	7614-21-3	Hexadeca-2,6,10,14-tetraen-1	14.940	6.3	NJ
04	75581-03-2	2,6,10,14,18-Pentamethyl-2,6	15.030	2.7	NJ
05		Unknown-01	16.480	0.56	J
06		Unknown-02	16.540	0.53	J
07	3790-71-4	2,6,10-Dodecatrien-1-ol, 3,7	16.640	0.74	NJ
08		Unknown-03	16.690	1.3	J
09		Unknown-04	16.770	0.90	J
10	4602-84-0	2,6,10-Dodecatrien-1-ol, 3,7	16.860	2.0	NJ
11		Unknown-05	17.010	2.1	J
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C05

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
75-71-8	Dichlorodifluoromethane	0.50	U	
74-87-3	Chloromethane	0.5 ~~0.25~~	~~J~~	U
75-01-4	Vinyl chloride	0.50	U	
74-83-9	Bromomethane	0.50	~~U~~	UJK
75-00-3	Chloroethane	0.50	U	
75-69-4	Trichlorofluoromethane	0.50	U	
75-35-4	1,1-Dichloroethene	0.50	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	
67-64-1	Acetone	5.0 ~~2.7~~	~~JB~~	U
75-15-0	Carbon Disulfide	0.50 ~~0.13~~	~~JB~~	U
79-20-9	Methyl acetate	0.50	U	
75-09-2	Methylene chloride	0.50 ~~0.057~~	~~JB~~	U
156-60-5	trans-1,2-Dichloroethene	0.50	U	
1634-04-4	Methyl tert-butyl ether	0.50	U	
75-34-3	1,1-Dichloroethane	0.50	U	
156-59-2	cis-1,2-Dichloroethene	0.50	U	
78-93-3	2-Butanone	5.0	U	
74-97-5	Bromochloromethane	0.50	U	
67-66-3	Chloroform	0.50	U	
71-55-6	1,1,1-Trichloroethane	0.50	U	
110-82-7	Cyclohexane	0.50	U	
56-23-5	Carbon tetrachloride	0.50	U	
71-43-2	Benzene	0.50	U	
107-06-2	1,2-Dichloroethane	0.50	U	

"U" ~~@CRQL~~

JZ 04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C05

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50 ~~0.76~~	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C05

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	14.980	0.52	J
02		Unknown-02	15.040	0.74	J
03		Unknown-03	15.090	0.66	J
04		Unknown-04	15.210	0.92	J
05					
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27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-005

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C06

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.5~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.12~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.060~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

2/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-005

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C06

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

JR 04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-005

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C06

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	13.980	0.53	J
02		Unknown-02	14.300	0.52	J
03		Unknown-03	16.650	0.76	J
04		Unknown-04	16.810	0.51	J
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
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17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-006

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C07

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ~~ug/L~~	Q	
75-71-8	Dichlorodifluoromethane	0.50	U	
74-87-3	Chloromethane	0.50	U	
75-01-4	Vinyl chloride	0.50	U	
74-83-9	Bromomethane	0.50 ~~0.50~~	~~U~~	UJK
75-00-3	Chloroethane	0.50	U	
75-69-4	Trichlorofluoromethane	0.50	U	
75-35-4	1,1-Dichloroethene	0.50	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	
67-64-1	Acetone	5.0 ~~1.4~~	~~JB~~	U
75-15-0	Carbon Disulfide	0.50 ~~0.12~~	~~JB~~	U
79-20-9	Methyl acetate	0.50	U	
75-09-2	Methylene chloride	0.50 ~~0.033~~	~~JB~~	U
156-60-5	trans-1,2-Dichloroethene	0.50	U	
1634-04-4	Methyl tert-butyl ether	0.50	U	
75-34-3	1,1-Dichloroethane	0.50	U	
156-59-2	cis-1,2-Dichloroethene	0.50	U	
78-93-3	2-Butanone	5.0	U	
74-97-5	Bromochloromethane	0.50	U	
67-66-3	Chloroform	0.50	U	
71-55-6	1,1,1-Trichloroethane	0.50	U	
110-82-7	Cyclohexane	0.50	U	
56-23-5	Carbon tetrachloride	0.50	U	
71-43-2	Benzene	0.50	U	
107-06-2	1,2-Dichloroethane	0.50	U	

04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-006

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C07

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

02
04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-006

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C07

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-007

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C08

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.8~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.15~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.055~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-007

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C08

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-007

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C08

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-008

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C09

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ~~ug/L~~	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.3~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.13~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.066~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	1.1	

JL 04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-008

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C09

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

JR
04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-008

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C09

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-009

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C10

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50 ~~0.12~~	~~J~~ ~~Q~~ U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.1~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.11~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.056~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.19	~~J~~ Q ✓

JR 04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-009

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C10

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-009

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C10

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-010

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C11

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.2~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.12~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.053~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

JR 04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-010

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C11

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

JR 04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-010

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C11

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
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10					
11					
12					
13					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-011

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C12

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50 ~~0.084~~	~~J~~ U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.4~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.12~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.058~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

JR 04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-011

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C12

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

02/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-011

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C12

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/05/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-012

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C13

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ~~ug/L~~	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50 ~~0.084~~	~~J~~ U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~1.1~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.12~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

UCKQL

02/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-012

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C13

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-012

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C13

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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07					
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22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-013

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C14

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50 ~~0.086~~	~~J~~ U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.3~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.11~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.083	~~J~~ Q

04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-013

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C14

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

DR 04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-013

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C14

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
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11					
12					
13					
14					
15					
16					
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18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-014

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C15

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50 ~~0.062~~	~~J~~ U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~1.3~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.10~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.076~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-014

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C15

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

02 04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-014

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C15

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC636

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-015

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C16

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	~~U~~ UJK
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~3.9~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.11~~	~~JB~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.34~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

JR 04/14/10

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC636

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-015

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C16

Level: (TRACE/LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

04/14/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC636

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-015

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80205C16

Level: (TRACE or LOW/MED) TRACE Date Received: 01/30/2010

% Moisture: not dec. _____ Date Analyzed: 02/06/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC621

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LA30013-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 120225B14

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/02/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/25/2010

GPC Cleanup: (Y/N) N pH: 2.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
91-20-3	Naphthalene	0.10	U	
91-57-6	2-Methylnaphthalene	0.10	U	
208-96-8	Acenaphthylene	0.10	U	
83-32-9	Acenaphthene	0.10	U	
86-73-7	Fluorene	0.10	U	
87-86-5	Pentachlorophenol	0.20	~~U~~	R
85-01-8	Phenanthrene	0.10	U	
120-12-7	Anthracene	0.10	U	
206-44-0	Fluoranthene	0.10	~~U~~	UJK
129-00-0	Pyrene	0.10	~~U~~	UJK
56-55-3	Benzo(a)anthracene	0.10	~~U~~	UJK
218-01-9	Chrysene	0.10	~~U~~	UJK
205-99-2	Benzo(b)fluoranthene	0.10	U	
207-08-9	Benzo(k)fluoranthene	0.10	U	
50-32-8	Benzo(a)pyrene	0.10	U	
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U	
53-70-3	Dibenzo(a,h)anthracene	0.10	U	
191-24-2	Benzo(g,h,i)perylene	0.10	U	

04/14/10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

May 5, 2010

Reply to: Jennifer Crawford
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the SVOC Analysis of Water Samples Collected from the Warmhouse Beach Dump Project Case 39444, SDG JC622

From: Jennifer Crawford, Chemist
USEPA R10, OEA, Environmental Services Unit

To: Kathy Parker, Project Manager/On-Scene Coordinator
USEPA R10, Office of Environmental Clean-up

CC: Amy Dahl, Tech Law Inc.
Brandon Perkins, EPA R10 – ECL, SAM
Ginna Grepo-Grove, USEPA R10 RQAM
Maja Tritt, USEPA R10 CLP PO

The quality assurance (QA) review of the analytical data generated from the analysis of fourteen (14) water samples collected from the above referenced site has been completed. These samples were analyzed for Semi-Volatile Compounds (SVOC) by Shealy Environmental Services located in West Columbia, South Carolina.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Quality Assurance Project Plan for Warmhouse Beach Dump, the technical specifications of the EPA Contract Laboratory Program's (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2), the Contract Laboratory Program's National Functional Guidelines for Organic Data Review, and the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005). Some of the data quality elements were qualified using the reviewer's professional judgment.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is listed in Attachment 1 – Sample Index. Please note that the other organic analyses associated with these samples were reported in a separate SDG (JC621) and reviewed in a separate memo.

The laboratory (Shealy) was contacted for additional information and data regarding the sample analyses in order to facilitate the validation of the data in this SDG.

The conclusions presented herein are based on the information provided for the review.

I. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied

After the manual and electronic data review, the following data points were qualified:

AFFECTED SAMPLE(s)	ANALYSIS / ANALYTE	QUAL. D/ND*	EXPLANATION
ALL	SVOC – all analytes	J/UJ	The samples were all extracted past the 7 day holding time. All sample results are qualified as an estimate.
JC632, JC634	SVOC – 4-Chloroaniline, Hexachlorocyclopentadiene, 3,3'-Dichlorobenzidine	J/R	The recovery of DMC 4-Dhloroaniline-d4 was less than 10%, and all associated analytes listed at left have been qualified.
Other issues with the sample analysis were present in the data, but the samples are already qualified as an estimate or rejected as outlined above. The most stringent qualifier was applied during data validation.			

* D/ND = Qualifier for Detected / Non-Detect samples

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

Bias Qualifiers	L	Low bias.
	H	High bias.
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).
	K	Unknown Bias

Reasons for Validation Qualifiers

The reasons for applying a validation qualifier to a sample result is also listed in the validated electronic data deliverables (EDDs), under the column header "Reasons". Below is a list of reasons why a data point could be qualified during data validation.

Reasons for Validation Qualifiers:	
<CRQL	The value reported is <Contract Required Quantitation Limits (CRQLs)
%D	The percent difference (%D) of the concentrations calculated off the primary and secondary columns are >25% but <60% and were qualified estimated.
MULT	Multiple runs were conducted for the analyte. Use the other value reported for the same analyte. The value which is not to be used is qualified 'R'.
USE R1	Use the value(s) reported off the initial analytical run
USE DIL	The value reported is over the calibration range. Use the value reported off the dilution run.
SURR/DMCs/ IS	The surrogate/deuterated monitoring compound (DMC)/internal standard recoveries did not meet the specified control limits. Results are qualified estimated.
RRF	The response factor for the analyte did not meet the minimum acceptance criteria (0.005).
MS/MSD	The spiked recoveries and/or RPDs did not meet the specified control limits. Results are qualified estimated.
MB	Analyte was qualified as non-detect due to contamination in the associated blank. The value reported is <5x or <10x (if common lab contaminant) the value in the blank.
ND	The analyte was not detected in the sample, and is reported at the CRQL with the 'U' Qualifier.
COELN	Initial identification erroneous. Peak due to co-elution with other detected target analytes.
ICAL	Initial Calibration criteria not met
CCV	Continuing calibration criteria not met
GPC	GPC Clean-up criteria not met.
CLN-UP	Silica gel, alumina or sulfur clean-up criteria not met
LCS	LCS/LCSD criteria not met
HT	Holding time criteria not met
STORE	Sample Storage and preservation specified not met
TEMP	Cooler recommended temperature exceeded at the verified time of sample receipt at the lab (VTSR)
M/Z	Mass/ion resolution ratio not met
DPE	Diphenyl ether interferences. False positive. Elevate reporting limits at level of detection
MISMATCH	Mismatch of spectra, interference present. Report at detected level with a "U" qualifier.
2 RUNS	Multiple runs were conducted for the analyte. Use the other value reported for the same analyte. The value which is not to be used is qualified 'R'.

II. DATA REVIEW

The analytical data were evaluated following the recommended baseline checks used in the four stages of laboratory analytical data verification and validation for Superfund use listed as follows (EPA-540-R08-005, 2009):

Stage 1 – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
1	X			Documentation identifies the laboratory receiving and conducting analyses, and includes documentation for all samples submitted by the project or requester for analyses.
2	X			Requested analytical methods were performed and the analysis dates are present.
3	X			Requested target analyte results are reported along with the original laboratory data qualifiers and data qualifier definitions for each reported result
4	X			Requested target analyte result units are reported
5	X			Requested reporting limits for all samples are present and results at and below the requested (required) reporting limits are clearly identified (including sample detection limits if required).
6	X			Sampling dates (including times if needed), date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH and temperature) are documented.
7	X			Sample results are evaluated by comparing sample conditions upon receipt at the laboratory (e.g., preservation checks) and sample characteristics (e.g., percent moisture) to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract.

Stage 2A – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
8	X			Requested methods (handling, preparation, cleanup, and analytical) are performed.
9	X			Method dates (including dates, times and duration of analysis for radiation counting measurements and other methods, if needed) for handling (e.g., Toxicity Characteristic Leaching Procedure), preparation, cleanup and analysis are present, as appropriate.
10	X			Requested spike analytes or compounds (e.g., surrogate, DMCs, LCS spikes, post digestion spikes) have been added, as appropriate.
11	X			Sample holding times (from sampling date to preparation and preparation to analysis) are evaluated.
12	X			Frequency of QC samples is checked for appropriateness (e.g., one LCS per twenty samples in a preparation batch).
13	X			Sample results are evaluated by comparing holding times and sample-related QC data to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract
				Stage 2A – Data Validation QC Data
14	X			method blanks
15	X			surrogate recoveries/deuterated monitoring compounds (DMC) recoveries
16	X			laboratory control sample (LCS) recoveries
17	X			matrix spike and matrix spike duplicate recoveries
18			X	serial dilutions
19			X	post digestion spikes

20			X	standard reference materials
21	X			equipment blanks
22			X	trip blanks

Stage 2B – Data Validation

Stage 2B validation builds on the validation conducted in Stage 2A. Stage 2B validation of the laboratory analytical data package consists of the Stage 2A validation plus the verification and validation checks for the compliance of instrument-related QC.

	Verified		N/A	QC Procedure or Check
	YES	NO		
23	X			Initial calibration data (e.g., ICAL standards, ICV standards, ICBs) are provided for all requested analytes and linked to field samples reported. For each initial calibration, the calibration type used is present along with the initial calibration equation used including any weighting factor(s) applied and the associated correlation coefficients, as appropriate. Recalculations of the standard concentrations using the initial calibration curve are present, along with their associated percent recoveries, as appropriate (e.g., if required by the project, method, or contract). For the ICV standard, the associated percent recovery (or percent difference, as appropriate) is present.
24	X			Appropriate number and concentration of initial calibration standards are present.
25	X			Continuing calibration data (e.g. CCV standards and CCBs) are provided for all requested analytes and linked to field samples reported, as appropriate. For the CCV standard(s), the associated percent recoveries (or percent differences, as appropriate) are present.
26	X			Reported samples are bracketed by CCV standards and CCBs standards as appropriate.
27	X			Method specific instrument performance checks are present as appropriate (e.g., tunes for mass spectrometry methods, DDT/Endrin breakdown checks for pesticides and aroclors, instrument blanks and interference checks for ICP methods).
28	X			Frequency of instrument QC samples is checked for appropriateness (e.g., gas chromatography-mass spectroscopy [GC-MS] tunes have been run every 12 hours).

Stage 3 – Data Validation

Stage 3 validation builds on the validation conducted in Stage 2B. Stage 3 validation of the laboratory analytical data package consists of the Stage 2B validation plus the recalculation of instrument and sample results from the laboratory instrument responses, and comparison of recalculated results to laboratory reported results.

	Verified		N/A	QC Procedure or Check
	YES	NO		
29	X			Instrument response data (e.g., GC peak areas, ICP corrected intensities) are reported for requested analytes, surrogates, internal standards, and DMCs for all requested field samples, matrix spikes, matrix spike duplicates, LCS, and method blanks as well as calibration data and instrument QC checks (e.g., tunes, DDT/Endrin breakdowns, inter-element correction factors, and Florisil cartridge checks).
30	X			Reported target analyte instrument responses are associated with appropriate internal standard analyte(s) for each (or selected) analyte(s) (for methods using internal standard for calibration).
31	X			Fit and appropriateness of the initial calibration curve used or required (e.g., mean calibration factor, regression analysis [linear or non-linear, with or without weighting factors, with or without forcing]) is checked with recalculation of the initial calibration curve for each (or selected) analyte(s) from the instrument response.
32	X			Comparison of instrument response to the minimum response requirements for each (or selected) analyte(s).
33	X			Recalculation of each (or selected) opening and closing CCV (and CCB) response from the peak data reported for each (or selected) analyte(s) from the instrument response, as appropriate.

34	X			Compliance check of recalculated opening and/or closing CCV (and CCB) response to recalculated initial calibration response for each (or selected) analyte(s).
35	X			Recalculation of percent ratios for each (or selected) tune from the instrument response, as appropriate.
36	X			Compliance check of recalculated percent ratio for each (or selected) tune from the instrument response.
37	X			Recalculation of each (or selected) instrument performance check (e.g., DDT/Endrin breakdown for pesticide analysis, instrument blanks, interference checks) from the instrument response.
38	X			Recalculation and compliance check of retention time windows (for chromatographic methods) for each (or selected) analyte(s) from the laboratory reported retention times.
39	X			Recalculation of reported results for each reported (or selected) target analyte(s) from the instrument response.
40	X			Recalculation of each (or selected) reported spike recovery (surrogate recoveries, DMC recoveries, LCS recoveries, duplicate analyses, matrix spike and matrix spike duplicate recoveries, serial dilutions, post digestion spikes, standard reference materials etc.) from the instrument response.
41	X			Each (or selected) sample result(s) and spike recovery(ies) are evaluated by comparing the recalculated numbers to the laboratory reported numbers according to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract

Note: Selection of analytes, spikes, and performance evaluation checks for the Stage 3 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including (but not limited to) the type of verification and validation being performed (manual or electronic), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Stage 4 – Data Validation

Stage 4 validation builds on the validation conducted in Stage 3. Stage 4 validation of the laboratory analytical data package consists of the Stage 3 validation plus the evaluation of instrument outputs.

	Verified		N/A	QC Procedure or Check
	YES	NO		
42	X			All required instrument outputs (e.g., chromatograms, mass spectra, atomic emission spectra, instrument background corrections, and interference corrections) for evaluating sample and instrument performance are present.
43	X			Sample results are evaluated by checking each (or selected) instrument output (e.g., chromatograms, mass spectra, atomic emission spectra data, instrument background corrections, interference corrections) for correct identification and quantitation of analytes (e.g., peak integrations, use of appropriate internal standards for quantitation, elution order of analytes, and interferences).
44	X			Each (or selected) instrument's output(s) is evaluated for confirmation of non-detected or tentatively identified analytes.

Note: Selection of instrument outputs for the Stage 4 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including, but not limited to, the type of verification and validation being performed (electronic or manual), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Attachments:

1. Summary of Samples Analyzed (Sample Index)
2. Summary of Electronic Data Review
3. Validated Electronic Data Deliverables

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021615

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

UJK

JL 5/5/10

42 rev

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021615

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

UJK

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

JL 5/5/10

43 ser.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021615

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~

VJK
JL
5/5/10

SOM01.2 (10/2006)

44 rev.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC621

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021615

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

45 ser.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021616

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U UJK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

all UJK
OL 5/5/10

52 ser

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021616

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U WJL
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

OK 5/5/10

53 rev.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021616

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~

UJK
5/5/10

SOM01.2 (10/2006)

54 rev.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC622

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021616

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

55 rev.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021910

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

USE JC622 R1

66 zer.

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021910

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

USE JC622 R1

SOM01.2 (10/2006)

67 rev. 5/5/10

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC622RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021910

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ R

VSE JC622 R1
JL
5/5/10

68 rev

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC622RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021910

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

69 rev.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-003

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021617

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

02 5/5/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-003

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021617

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

5/5/10

77

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-003

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021617

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U

WK
JL
5/5/10

SOM01.2 (10/2006)

78 rev

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC623

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-003

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021617

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

79 rev

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021618

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

5/5/10

SOM01.2 (10/2006)

88

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021618

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

5/5/10

89 ser.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021618

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ UJK

3/5/16

SOM01.2 (10/2006)

90 ser.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC624

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021618

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

91 ser

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021619

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

JK 3/5/10

98 JK

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021619

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

05/5/10

99 2cr

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021619

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ UJK

JL 5/5/10

SOM01.2 (10/2006)

1cv 2cv.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC625

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021619

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

101 Jer.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021620

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	UJK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

02/5/10

108 ser

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021620

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

02/5/10

109 ser.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021620

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	UJK

JC 5/5/10

SOM01.2 (10/2006)

110 ser.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC626

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021620

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

(1) 2er

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021621

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

R

use JC627 RX
5/5/10

SOM01.2 (10/2006)

119

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021621

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	~~U~~ R

[1] Cannot be separated from Diphenylamine

Use JC627RX
JL 5/5/10

SOM01.2 (10/2006)

120 [illegible]

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021621

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ R

JL 5/5/10
USC JC627 RL

SOM01.2 (10/2006)

121 rev.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC627

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021621

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

122 ser

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021912

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	~~U~~ R

USCJC627 RX

SOM01.2 (10/2006) JZ 5/5/10

130 JCR

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021912

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	~~U~~ R

USE JC627RX.
JL 5/5/10

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

131 JL

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021912

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	UR

JL
5/5/10

132 ser

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC627RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021912

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031210

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

OL 5/5/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031210

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	UJL
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

5/5/10

141 sev

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC627RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031210

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U JK

JL
5/5/10

SOM01.2 (10/2006)

142 rev-

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC627RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-007

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031210

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021622

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	~~U~~ R
111-44-4	Bis(2-Chloroethyl)ether	5.0	U JK
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

USE JC628RX

5/5/10

152 ser

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021622

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U J K
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

JC 5/5/10

153 2ev -

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021622

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ R

USE JC628RX
JL 5/5/10

SOM01.2 (10/2006)

154 rev

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC628

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021622

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

155 Jev.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031211

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U JK
111-44-4	Bis(2-Chloroethyl)ether	5.0	~~U~~ R
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone MISMATCH	5.0 ~~0.57~~	J
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

use JC628 for all R data

R 02/5/11

164 per.

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031211

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

use JC62 R1 JC 5/5/10

165 rev.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC628RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031211

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U JK

03/5/10

SOM01.2 (10/2006)

166 rev.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC628RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-008

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031211

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	763-93-9	3-Hexen-2-one	4.270	5.9	NJ
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021623

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	~~U~~ R

use JC629RX
JL 5/5/10

SOM01.2 (10/2006)

178 JL

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021623

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U R

[1] Cannot be separated from Diphenylamine

JC 5/5/11
DJR
JC629RX

SOM01.2 (10/2006)

179 ser

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021623

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~R

JL 5/5/10
use JC629RX

SOM01.2 (10/2006)

180 ser.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC629

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021623

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	141-79-7	3-Penten-2-one, 4-methyl-	4.220	23	NJ
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

181 ser

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031212

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

OL 5/5/10

195 2ev

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031212

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

JC 5/5/10

[1] Cannot be separated from Diphenylamine

196 2er

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC629RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031212

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U JK

JR 5/5/10

SOM01.2 (10/2006)

197 ser.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC629RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-009

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031212

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	7.200	4.4	J
02		Unknown-02	8.770	4.3	J
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021626

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

82 5/5/10

208 2er

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021626

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

JK 5/5/10

209 ser.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021626

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U JL

JL 5/5/10

SOM01.2 (10/2006)

210 rev.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC630

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-010

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021626

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/16/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

2/11 ser-

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031218

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U UJK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	~~U~~ R
87-68-3	Hexachlorobutadiene	5.0	U UJK
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	~~U~~ R
77-47-4	Hexachlorocyclopentadiene	5.0	U UJK
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

N 5/5/10

SOM01.2 (10/2006) "R" = use JC631 RX

220 ser

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031218

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	~~U~~ R
56-55-3	Benzo(a)anthracene	5.0	U JK
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

OL 5/5/10 "R" = use JC631 RX

221 per.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031218

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	UJK

2
5/5/10

222 Jer.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC631

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031218

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	141-79-7	3-Penten-2-one, 4-methyl-	4.270	13	NJ
02					
03					
04					
05					
06					
07					
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09					
10					
11					
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22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031214

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	R
106-47-8	4-Chloroaniline	5.0	U JK
87-68-3	Hexachlorobutadiene	5.0	~~U~~ R
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	R
77-47-4	Hexachlorocyclopentadiene	5.0	U JK
88-06-2	2,4,6-Trichlorophenol	5.0	~~U~~ R
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

R 2 5/5/10

SOM01.2 (10/2006) "R" = use JC631

232 2er.

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031214

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U R
91-94-1	3,3'-Dichlorobenzidine	5.0	UJK
56-55-3	Benzo(a)anthracene	5.0	~~U~~ R
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U R

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

JL 5/5/10
"R" = use
J C631
R1

233 rev.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC631RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031214

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ R

USE JC631R1
JL
5/5/10

SOM01.2 (10/2006)

234 zer-

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC631RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-011

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031214

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

235 rev

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021628

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/17/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	~~U~~ R

use JC632 RE

SOM01.2 (10/2006) JZ 5/5/10

242 [illegible]

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021628

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/17/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	R

JZ 5/5/10

[1] Cannot be separated from Diphenylamine

use JC632 RE

243 rev

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021628

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/17/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ R

JR 5/5/10
use
JC632RE

SOM01.2 (10/2006)

244 rev.

EPA SAMPLE NO.

JC632

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021628

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/17/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

245

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021917

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	~~U~~ R
87-68-3	Hexachlorobutadiene	5.0	U JK
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	~~U~~ R
88-06-2	2,4,6-Trichlorophenol	5.0	U JK
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

JR 5/5/10

256 rev.

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021917

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	~~U~~ R
56-55-3	Benzo(a)anthracene	5.0	U JK
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

JL 5/5/10

[1] Cannot be separated from Diphenylamine

257 rev.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC632RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021917

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U JK

02/5/10

SOM01.2 (10/2006)

258 rev.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC632RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-012

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021917

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	59242-27-2	Furan, 2,5-dihydro-2,5-	4.220	5.9	NJ
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

259 rev

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-013

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031209

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JL
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

02/5/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-013

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031209

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

JK 5/5/10

268 Jer-

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-013

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031209

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	UJL

JL 5/5/10

269 ser.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC633

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-013

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031209

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/09/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

270 ser

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021629

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/17/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

USE JC634 RE
d 5/5/10

SOM01.2 (10/2006)

278 [illegible]

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021629

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/17/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

use JC634 RE
2/5/10

[1] Cannot be separated from Diphenylamine

SOM01.2 (10/2006)

279 rev.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021629

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/17/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ R

JZ 5/5/10
USE JC634RE

SOM01.2 (10/2006)

280 ser

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC634

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021629

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/17/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	141-79-7	3-Penten-2-one, 4-methyl-	4.220	14	NJ
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

28 rev

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021918

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	U JK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	~~U~~ R
87-68-3	Hexachlorobutadiene	5.0	U JK
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	~~U~~ R
88-06-2	2,4,6-Trichlorophenol	5.0	U JK
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

JL 5/5/10

295 rev.

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021918

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U JK
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	~~U~~ R
56-55-3	Benzo(a)anthracene	5.0	U JK
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

JC 5/5/10

[1] Cannot be separated from Diphenylamine

296 rev.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021918

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	UJL

JL 5/5/10

SOM01.2 (10/2006)

297 rev.

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC634RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 021918

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/10/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 02/19/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	141-79-7	3-Penten-2-one, 4-methyl-	4.230	17	NJ
02		Unknown-01	7.420	17	J
03		Unknown-02	9.930	13	J
04		Unknown-03	10.780	36	J
05		Unknown-04	10.820	15	J
06		Unknown-05	13.830	19	J
07					
08					
09					
10					
11					
12					
13					
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25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

298 rev.

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031215

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	~~U~~ R
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

USE JC634 RE

JL 5/5/10

SOM01.2 (10/2006)

321 rev

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031215

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	~~U~~ R
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

Use JC634 RE

JC 5/5/10

[1] Cannot be separated from Diphenylamine

322 rev.

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC634RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031215

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	~~U~~ R

QL 5/5/10
use JC634RE

SOM01.2 (10/2006)

323 rev

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC634RX

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC622

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10072-014

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 031215

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 01/30/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 03/04/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/12/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	763-93-9	3-Hexen-2-one	4.270	6.9	NJ
02	541-05-9	Cyclotrisiloxane, hexamethyl-	4.340	39	NJ
03	556-67-2	Cyclotetrasiloxane,	5.880	31	NJ
04	541-02-6	Cyclopentasiloxane,	7.200	9.0	NJ
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

324 ser

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

Date: April 7, 2010

Reply to:
Attn of: OEA-095

MEMORANDUM

Subject: Data Validation Report for the Volatile Organic (VOC), Semivolatile Organic (SVOC / SIM), Organochlorine Pesticide (PEST) and Polychlorinated Biphenyl (PCB) analyses of water samples collected from the Makah Warmhouse Beach Dump Site
Case Number: 39444 SDG: JC6A1

From: Raymond Wu, QA Chemist 4/6/10
Office of Environmental Assessment (OEA - 095), USEPA Region 10

To: Kathy Parker, On-Scene Coordinator
Office of Environmental Clean-up (ECL – 116), USEPA Region 10

CC: Amy Dahl, Data Manager
TechLaw, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of 11 water samples collected from the above referenced site has been completed. These samples were analyzed for TVOA, SVOC / SIM, Pesticide, and PCB in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Multi-Media, Multi-Concentration Organic Analyses (SOM01.2) by Shealy Environmental Services, Inc. located in Cayce, South Carolina.

All sample analyses were evaluated following EPA's Stage 4 Data Validation Electronic/Manual Process (S4VEM). The validations were conducted and appropriate qualifiers were applied according to the Quality Control Specifications outlined in the Quality Assurance Project Plan for Makah Warmhouse Beach Dump Site (@ Neah Bay, WA) dated January 11, 2010, the technical specifications of USEPA CLP SOW for Organic Data Review, the Contract Laboratory Program's National Functional Guidelines for Organic Data Review, the Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA-540-R08-005) and MA (Modified Analysis) 1564.3 for semivolatiles. Some of the data quality elements were qualified based on the professional judgment of the reviewer.

A summary of samples evaluated in this validation report and the pertinent dates for sample collection, sample receipt at the laboratory, extraction and analyses is listed in Sample Index Table found at the end of this report. 1,4-Dioxane was reported out of SVOC portion of the analyses according to the MA.

The conclusions presented herein are based on the information provided for the review.

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I. DATA QUALIFICATIONS

Summary of Validation Qualifiers Applied:

After the manual and electronic data review, the following data points were qualified:

Associated Samples	Analysis / Analyte	Qualifier Detect/Non-detect	Reason for Qualifier
JC6A1 -> JC6A5	VOA	U	Trace detected in Method Blank or Storage Blank
JC6A6->JC6A9, JC6B0->JC6B1	SVOC	J/UJ	ICAL
JC6A7,JC6A9,JC6B0,JC6B1	"	J/UJ	CCV
JC6A6 -> JC6A7, JC6A9, JC6B0 -> JC6B1	"	J/UJ	SURR/DMCs
JC6A7RE -> JC6A9RE JC6B0RE -> JC6B1RE	SIM	J/UJ	IS

Data Qualifiers

The following is a list of validation qualifiers applied to the sample result(s) when needed to indicate associated out-of-control QA/QC results.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

For site assessment and investigations, the following bias qualifiers are applied to the data in addition to the above data qualifiers when necessary to allow for data analysis and interpretation using Pre-Score software calculations for National Priority Listing Hazard Rankling Scoring (NPL-HRS).

Bias Qualifiers		
	L	Low bias.
	H	High bias.
	Q	The result is estimated because the concentration is below the Contract Required Quantitation Limits (CRQLs).
	K	Unknown Bias

Reasons for Validation Qualifiers

The reasons for applying a validation qualifier to a sample result is also listed in the validated electronic data deliverables (EDDs), under the column header "Reasons". Below is a list of reasons why a data point could be qualified during data validation.

Reasons for Validation Qualifiers:	
<CRQL	The value reported is <Contract Required Quantitation Limits (CRQLs)
%D	The percent difference (%D) of the concentrations calculated off the primary and secondary columns are >25% but <60% and were qualified estimated.
MULT	Multiple runs were conducted for the analyte. Use the other value reported for the same analyte. The value which is not to be used is qualified 'R'.
USE R1	Use the value(s) reported off the initial analytical run
USE DIL	The value reported is over the calibration range. Use the value reported off the dilution run.
USE SIM	The value reported off the SIM run
USE SIM DIL	The value reported is over the calibration range. Use the value reported off the SIM dilution run.
SURR/DMCs	The surrogate/deuterated monitoring compound (DMC) recoveries did not meet the specified control limits. Results are qualified estimated.
RRF	The response factor for the analyte did not meet the minimum acceptance criteria (0.005).
MS/MSD	The spiked recoveries and/or RPDs did not meet the specified control limits. Results are qualified estimated.
MB	Analyte was qualified as non-detect due to contamination in the associated blank. The value reported is <5x or <10x (if common lab contaminant) the value in the blank.
ND	The analyte was not detected in the sample, and is reported at the CRQL with the 'U' Qualifier.
COELN	Initial identification erroneous. Peak due to co-elution with other detected target analytes.
ICAL	Initial Calibration criteria not met
CCV	Continuing calibration criteria not met
IS	Internal standard criteria not met
GPC	GPC Clean-up criteria not met.
CLN-UP	Silica gel, alumina or sulfur clean-up criteria not met
LCS	LCS/LCSD criteria not met
HT	Holding time criteria not met
STORE	Sample Storage and preservation specified not met
TEMP	Cooler recommended temperature exceeded at the verified time of sample receipt at the lab (VTSR)
M/Z	Mass/ion resolution ratio not met

DPE	Diphenyl ether interferences. False positive. Elevate reporting limits at level of detection
< CRQL	Positive hits under the contract required quantitation limit
R	Data is unusable

II. DATA REVIEW

The analytical data were evaluated following the recommended baseline checks used in the four stages of laboratory analytical data verification and validation for Superfund use listed as follows (EPA-540-R08-005, 2009):

Stage 1 – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
1	X			Documentation identifies the laboratory receiving and conducting analyses, and includes documentation for all samples submitted by the project or requester for analyses.
2	X			Requested analytical methods were performed and the analysis dates are present.
3	X			Requested target analyte results are reported along with the original laboratory data qualifiers and data qualifier definitions for each reported result
4				Requested target analyte result units are reported
5	X			Requested reporting limits for all samples are present and results at and below the requested (required) reporting limits are clearly identified (including sample detection limits if required).
6	X			Sampling dates (including times if needed), date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH and temperature) are documented.
7	X			Sample results are evaluated by comparing sample conditions upon receipt at the laboratory (e.g., preservation checks) and sample characteristics (e.g., percent moisture) to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract.

Stage 2A – Data Validation				
	Verified		N/A	QC Procedure or Check
	YES	NO		
8	X			Requested methods (handling, preparation, cleanup, and analytical) are performed.
9	X			Method dates (including dates, times and duration of analysis for radiation counting measurements and other methods, if needed) for handling (e.g., Toxicity Characteristic Leaching Procedure), preparation, cleanup and analysis are present, as appropriate.
10	X			Requested spike analytes or compounds (e.g., surrogate, DMCs, LCS spikes, post digestion spikes) have been added, as appropriate.
11	X			Sample holding times (from sampling date to preparation and preparation to analysis) are evaluated.
12	X			Frequency of QC samples is checked for appropriateness (e.g., one LCS per twenty samples in a preparation batch).

13	X			Sample results are evaluated by comparing holding times and sample-related QC data to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract
				Stage 2A – Data Validation QC Data
14	X			method blanks
15	X			surrogate recoveries/deuterated monitoring compounds (DMC) recoveries
16	X			laboratory control sample (LCS) recoveries
17	X			matrix spike and matrix spike duplicate recoveries
18	X			serial dilutions
19	X			post digestion spikes
20	X			standard reference materials
21	X			equipment blanks
22	X			trip blanks

Stage 2B – Data Validation

Stage 2B validation builds on the validation conducted in Stage 2A. Stage 2B validation of the laboratory analytical data package consists of the Stage 2A validation plus the verification and validation checks for the compliance of instrument-related QC.

	Verified		N/A	QC Procedure or Check
	YES	NO		
23	X			Initial calibration data (e.g., ICAL standards, ICV standards, ICBs) are provided for all requested analytes and linked to field samples reported. For each initial calibration, the calibration type used is present along with the initial calibration equation used including any weighting factor(s) applied and the associated correlation coefficients, as appropriate. Recalculations of the standard concentrations using the initial calibration curve are present, along with their associated percent recoveries, as appropriate (e.g., if required by the project, method, or contract). For the ICV standard, the associated percent recovery (or percent difference, as appropriate) is present.
24	X			Appropriate number and concentration of initial calibration standards are present.
25	X			Continuing calibration data (e.g. CCV standards and CCBs) are provided for all requested analytes and linked to field samples reported, as appropriate. For the CCV standard(s), the associated percent recoveries (or percent differences, as appropriate) are present.
26				Reported samples are bracketed by CCV standards and CCBs standards as appropriate.
27	X			Method specific instrument performance checks are present as appropriate (e.g., tunes for mass spectrometry methods, DDT/Endrin breakdown checks for pesticides and aroclors, instrument blanks and interference checks for ICP methods).
28	X			Frequency of instrument QC samples is checked for appropriateness (e.g., gas chromatography-mass spectroscopy [GC-MS] tunes have been run every 12 hours).

Stage 3 – Data Validation

Stage 3 validation builds on the validation conducted in Stage 2B. Stage 3 validation of the laboratory analytical data package consists of the Stage 2B validation plus the recalculation of instrument and sample results from the laboratory instrument responses, and comparison of recalculated results to laboratory reported results.

	Verified		N/A	QC Procedure or Check
	YES	NO		
29	X			Instrument response data (e.g., GC peak areas, ICP corrected intensities) are reported for requested analytes, surrogates, internal standards, and DMCs for all requested field samples, matrix spikes, matrix spike duplicates, LCS, and method blanks as well as calibration data and instrument QC checks (e.g., tunes, DDT/Endrin breakdowns, inter-element correction factors, and Florisil cartridge checks).
30	X			Reported target analyte instrument responses are associated with appropriate internal standard analyte(s) for each (or selected) analyte(s) (for methods using internal standard for calibration).
31	X			Fit and appropriateness of the initial calibration curve used or required (e.g., mean calibration factor, regression analysis [linear or non-linear, with or without weighting factors, with or without forcing]) is checked with recalculation of the initial calibration curve for each (or selected) analyte(s) from the instrument response.
32	X			Comparison of instrument response to the minimum response requirements for each (or selected) analyte(s).
33	X			Recalculation of each (or selected) opening and closing CCV (and CCB) response from the peak data reported for each (or selected) analyte(s) from the instrument response, as appropriate.
34	X			Compliance check of recalculated opening and/or closing CCV (and CCB) response to recalculated initial calibration response for each (or selected) analyte(s).
35	X			Recalculation of percent ratios for each (or selected) tune from the instrument response, as appropriate.
36	X			Compliance check of recalculated percent ratio for each (or selected) tune from the instrument response.
37	X			Recalculation of each (or selected) instrument performance check (e.g., DDT/Endrin breakdown for pesticide analysis, instrument blanks, interference checks) from the instrument response.
38	X			Recalculation and compliance check of retention time windows (for chromatographic methods) for each (or selected) analyte(s) from the laboratory reported retention times.
39	X			Recalculation of reported results for each reported (or selected) target analyte(s) from the instrument response.
40	X			Recalculation of each (or selected) reported spike recovery (surrogate recoveries, DMC recoveries, LCS recoveries, duplicate analyses, matrix spike and matrix spike duplicate recoveries, serial dilutions, post digestion spikes, standard reference materials etc.) from the instrument response.
41	X			Each (or selected) sample result(s) and spike recovery(ies) are evaluated by comparing the recalculated numbers to the laboratory reported numbers according to the requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract

Note: Selection of analytes, spikes, and performance evaluation checks for the Stage 3 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including (but not limited to) the type of verification and validation being performed (manual or electronic), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.

Stage 4 – Data Validation				
Stage 4 validation builds on the validation conducted in Stage 3. Stage 4 validation of the laboratory analytical data package consists of the Stage 3 validation plus the evaluation of instrument outputs.				
	Verified		N/A	QC Procedure or Check
	YES	NO		
42	X			All required instrument outputs (e.g., chromatograms, mass spectra, atomic emission spectra, instrument background corrections, and interference corrections) for evaluating sample and instrument performance are present.
43	X			Sample results are evaluated by checking each (or selected) instrument output (e.g., chromatograms, mass spectra, atomic emission spectra data, instrument background corrections, interference corrections) for correct identification and quantitation of analytes (e.g., peak integrations, use of appropriate internal standards for quantitation, elution order of analytes, and interferences).
44	X			Each (or selected) instrument's output(s) is evaluated for confirmation of non-detected or tentatively identified analytes.
Note: Selection of instrument outputs for the Stage 4 validation checks for a laboratory analytical data package being verified and validated generally will depend on many factors including, but not limited to, the type of verification and validation being performed (electronic or manual), requirements and guidelines present in national or regional data validation documents, analytical method(s) or contract, the number of laboratories reporting the data, the number and type of analytical methods reported, the number of analytes reported in each method, and the number of detected analytes.				

Attachments:

Summary of Samples Analyzed (Sample Index)
Summary of Electronic Data Review
Validated Electronic Data Deliverables

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A1

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a12

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ~~ug/L~~	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~1.1~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.081~~	~~J~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.18~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

4/2/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A1

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a12

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.079	JQ
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.11	JQ
95-47-6	o-Xylene	0.37	JQ
179601-23-1	m,p-Xylene	0.33	JQ
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

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1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A1

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a12

Level: (TRACE or LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

4/2/10

SOM01.2 (10/2006)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A2

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a13

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon Disulfide	0.50 ~~0.083~~	~~J~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.25~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.31	JQ
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

4/2/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A2

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a13

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.065	JQ
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

4/2/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A2

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a13

Level: (TRACE or LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

4/2/10

SOM01.2 (10/2006)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A3

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a14

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~0.71~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.064~~	~~J~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	5.0 ~~0.73~~	~~B~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

4/2/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A3

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a14

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

4/2/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A3

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a14

Level: (TRACE or LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

4/2/10

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A4

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a15

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.11	JQ
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	9.4	~~B~~U
75-15-0	Carbon Disulfide	0.50 ~~0.32~~	~~J~~U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.39~~	~~JB~~U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	2.5	JQ
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.17	JQ
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

4/2/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A4

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a15

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.44	JQ
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.14	JQ
95-47-6	o-Xylene	0.21	JQ
179601-23-1	m,p-Xylene	0.40	JQ
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

4/2/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A4

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a15

Level: (TRACE or LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

4/2/10

SOM01.2 (10/2006)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A5

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-005

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a16

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0 ~~2.9~~	~~JB~~ U
75-15-0	Carbon Disulfide	0.50 ~~0.11~~	~~J~~ U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50 ~~0.28~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

4/2/10

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A5

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-005

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a16

Level: (TRACE/LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.29	JQ
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

4/2/10

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A5

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB06007-005

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 80212a16

Level: (TRACE or LOW/MED) TRACE Date Received: 02/06/2010

% Moisture: not dec. _____ Date Analyzed: 02/12/2010

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

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

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

4/2/10

SOM01.2 (10/2006)

Report All but the PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A6

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 030503

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	UJK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	UJK
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	UJK
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

11/5/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A6

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 030503

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	UJK
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.1	JQ
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

4/15/10

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A6

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 030503

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U

4/5/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A6

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 030503

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	15.700	2.4	JN
02		Unknown-02	15.920	2.9	JN
03	7098-22-8	Tetratetracontane	16.190	4.1	NJ
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

4/5/10

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A7

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301103

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	UJK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	UJK
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	UJK
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

4/5/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A7

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301103

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	UJK
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	2.1	J
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

4/5/10

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A7

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301103

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U

4/5/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A7

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301103

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown Aldol Condensate	4.280	27	~~X~~ JN
02		Unknown-01	4.700	4.5	JN
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A8

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-003

Sample wt/vol: 500 (g/mL) mL Lab File ID: 030505

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	UJK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	U
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

4/5/10

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A8

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-003

Sample wt/vol: 500 (g/mL) mL Lab File ID: 030505

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	U
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	0.81	JQ
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

4/5/10

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A8

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-003

Sample wt/vol: 500 (g/mL) mL Lab File ID: 030505

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U

4/5/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A8

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-003

Sample wt/vol: 500 (g/mL) mL Lab File ID: 030505

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/05/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2]EPA-designated Registry Number.

REPORT All But PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A9

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301104

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	1.1	JQ
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	UJK
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	UJK
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

4/5/11

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A9

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301104

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	UJK
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	2.6	J
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

4/5/10

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A9

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301104

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U

4/5/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6A9

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301104

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown Aldol Condensate	4.290	36	~~X~~ JN
02		Unknown-01	4.700	5.2	JN
03	62016-79-9	Heptacosane, 1-chloro-	16.210	2.3	NJ
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

REPORT All But PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B0

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301105

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	UJK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	UJK
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	UJK
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B0

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301105

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	UJK
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	0.59	JB
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

4/5/10

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B0

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301105

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U

4/5/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6B0

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301105

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown Aldol Condensate	4.280	27	~~A~~ JN
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

Report All but PAHs

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B1

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301106

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-52-7	Benzaldehyde	5.0	UJK
108-95-2	Phenol	5.0	U
111-44-4	Bis(2-Chloroethyl)ether	5.0	U
95-57-8	2-Chlorophenol	5.0	U
95-48-7	2-Methylphenol	5.0	U
108-60-1	2,2'-Oxybis(1-chloropropane)	5.0	U
98-86-2	Acetophenone	5.0	U
106-44-5	4-Methylphenol	5.0	U
621-64-7	N-Nitroso-di-n-propylamine	5.0	U
67-72-1	Hexachloroethane	5.0	U
98-95-3	Nitrobenzene	5.0	U
78-59-1	Isophorone	5.0	U
88-75-5	2-Nitrophenol	5.0	U
105-67-9	2,4-Dimethylphenol	5.0	U
111-91-1	Bis(2-Chloroethoxy)methane	5.0	U
120-83-2	2,4-Dichlorophenol	5.0	U
91-20-3	Naphthalene	5.0	U
106-47-8	4-Chloroaniline	5.0	UJK
87-68-3	Hexachlorobutadiene	5.0	U
105-60-2	Caprolactam	5.0	U
59-50-7	4-Chloro-3-methylphenol	5.0	U
91-57-6	2-Methylnaphthalene	5.0	U
77-47-4	Hexachlorocyclopentadiene	5.0	UJK
88-06-2	2,4,6-Trichlorophenol	5.0	U
95-95-4	2,4,5-Trichlorophenol	5.0	U
92-52-4	1,1'-Biphenyl	5.0	U
91-58-7	2-Chloronaphthalene	5.0	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	5.0	U
606-20-2	2,6-Dinitrotoluene	5.0	U
208-96-8	Acenaphthylene	5.0	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	5.0	U

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B1

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301106

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	10	U
132-64-9	Dibenzofuran	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U
84-66-2	Diethylphthalate	5.0	U
86-73-7	Fluorene	5.0	U
7005-72-3	4-Chlorophenyl-phenylether	5.0	U
100-01-6	4-Nitroaniline	10	U
534-52-1	4,6-Dinitro-2-methylphenol	10	U
86-30-6	N-Nitrosodiphenylamine [1]	5.0	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.0	U
101-55-3	4-Bromophenyl-phenylether	5.0	U
118-74-1	Hexachlorobenzene	5.0	U
1912-24-9	Atrazine	5.0	U
87-86-5	Pentachlorophenol	10	U
85-01-8	Phenanthrene	5.0	U
120-12-7	Anthracene	5.0	U
86-74-8	Carbazole	5.0	U
84-74-2	Di-n-butylphthalate	5.0	U
206-44-0	Fluoranthene	5.0	U
129-00-0	Pyrene	5.0	U
85-68-7	Butylbenzylphthalate	5.0	U
91-94-1	3,3'-Dichlorobenzidine	5.0	UJK
56-55-3	Benzo(a)anthracene	5.0	U
218-01-9	Chrysene	5.0	U
117-81-7	Bis(2-ethylhexyl)phthalate	5.0	U
117-84-0	Di-n-octylphthalate	5.0	U
205-99-2	Benzo(b)fluoranthene	5.0	U
207-08-9	Benzo(k)fluoranthene	5.0	U
50-32-8	Benzo(a)pyrene	5.0	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	U
53-70-3	Dibenzo(a,h)anthracene	5.0	U
191-24-2	Benzo(g,h,i)perylene	5.0	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.0	U

[1] Cannot be separated from Diphenylamine

4/5/10

1 - FORM I SV-1 MODIFIED
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B1

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301106

Level: (LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
123-91-1	1,4-Dioxane	2.0	U

4/5/10

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
JC6B1

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: 1564.3 SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 0301106

Level: (TRACE or LOW/MED) LOW Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/11/2010

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown Aldol Condensate	4.290	37	~~A~~ JN
02		Unknown-01	4.700	3.9	JN
03	~~556-67-2~~	~~Cyclotetrasiloxane,~~	~~5.880~~	~~12~~	~~NJ~~
04	~~541-02-6~~	~~Cyclopentasiloxane,~~	~~7.200~~	~~3.0~~	~~NJ~~
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A6

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-001

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030304

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) N pH: 5.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

DO NOT REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A7

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030315

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A7RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-002

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030319

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	UJK
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

4/5/10

DO NOT REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A8

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-003

Sample wt/vol: 500 (g/mL) mL Lab File ID: 12030219

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) N pH: 5.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

4/5/10

Report

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A8RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-003

Sample wt/vol: 500 (g/mL) mL Lab File ID: 12030306

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) N pH: 5.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	UJK
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

SOM01.2 (10/2006)

4/5/10

DO NOT REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A9

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030221

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) N pH: 5.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

SOM01.2 (10/2006)

4/5/10

REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6A9RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-004

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030308

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) N pH: 5.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	UJK
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

SOM01.2 (10/2006)

4/5/10

DO NOT REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B0

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030316

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.12	
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B0RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-005

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030320

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.13	
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U JK
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

SOM01.2 (10/2006)

4/5/10

DO NOT REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B1

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030215

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/02/2010

GPC Cleanup: (Y/N) N pH: 5.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	U
83-32-9	Acenaphthene	0.10	U
86-73-7	Fluorene	0.10	U
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	U
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

REPORT

1F - FORM I SV-SIM
SEMIVOLATILE SIM ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
JC6B1RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 39444 Mod. Ref No.: _____ SDG No.: JC6A1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: LB10007-006

Sample wt/vol: 1000 (g/mL) mL Lab File ID: 12030313

Extraction: (Type) CONT

% Moisture: _____ Decanted: (Y/N) _____ Date Received: 02/10/2010

Concentrated Extract Volume: 1000 (uL) Date Extracted: 02/11/2010

Injection Volume: 1.0 (uL) GPC Factor: 1.0 Date Analyzed: 03/03/2010

GPC Cleanup: (Y/N) N pH: 5.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
91-20-3	Naphthalene	0.10	U
91-57-6	2-Methylnaphthalene	0.10	U
208-96-8	Acenaphthylene	0.10	UJK
83-32-9	Acenaphthene	0.10	UJK
86-73-7	Fluorene	0.13	JK
87-86-5	Pentachlorophenol	0.20	U
85-01-8	Phenanthrene	0.10	U
120-12-7	Anthracene	0.10	U
206-44-0	Fluoranthene	0.10	U
129-00-0	Pyrene	0.10	UJK
56-55-3	Benzo(a)anthracene	0.10	U
218-01-9	Chrysene	0.10	U
205-99-2	Benzo(b)fluoranthene	0.10	U
207-08-9	Benzo(k)fluoranthene	0.10	U
50-32-8	Benzo(a)pyrene	0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	U
53-70-3	Dibenzo(a,h)anthracene	0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	U

SOM01.2 (10/2006)

4/5/10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

August 6, 2010

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation for Warm House Beach Investigation, Case# 39444, SDG: MJC651, Inorganic Analysis

FROM: Donald Matheny, Chemist DM
Environmental Services Unit, OEA

TO: Kathy Parker, On-Scene Coordinator
Office of Environmental Cleanup (ECL-116)

CC: Amy Dahl, Techlaw Inc.

The data validation of inorganic analyses for the above sample set is complete. Nineteen soil/sediments were analyzed for total elements by CompuChem, Cary, NC. The sample numbers for this delivery group are:

MJC651	MJC652	MJC653	MJC655	MJC656	MJC657	MJC658
MJC659	MJC660	MJC662	MJC663	MJC665	MJC666	MJC667
MJC668	MJC669	MJC670	MJC671	MJC672		

DATA QUALIFICATIONS

The following comments refer to the lab's performance in meeting the specifications outlined in the "CLP Statement of Work (CLP-SOW) for Inorganic Analysis, rev. ILM05.4", the "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" and the judgment of the reviewer. The comments presented herein are based on the information provided for the review.

TIMELINESS - Acceptable

Holding times from the date of collection to the date of digestion and analyses were met for all elements (180 days, Hg 28 days). Samples were collected on 1/26/10 and 1/27/10. ICP-AES analysis was performed on 2/11/10 and 2/12/10. Mercury analysis was performed on 2/4/10.

INSTRUMENT CALIBRATION/VERIFICTION - Acceptable

For ICP-AES, instrument calibration was performed in accordance with method requirements. Recoveries for instrument verification standards (91-106%) met the frequency (10%) and recovery (90-110%) criteria.

For mercury, a blank and five standards were digested for instrument calibration. The correlation coefficient (0.999) met the linearity criterion ($\geq$ 0.995). Percent recoveries for verification standards (100-109%) met the frequency (10%) and recovery (80-120%) criteria.

Quantitation verification standards met both the frequency and recovery criteria for all elements.

INTERFERENCE CHECK SAMPLE (ICS) - Acceptable

An ICS was analyzed at the required frequency and recoveries met the criteria (80-120% or $\pm$ 2xCRQL) for all elements.

LABORATORY CONTROL SAMPLES (LCS) - Acceptable

A solid LCS was digested and analyzed. Recoveries were within the control limits for soils/sediments.

BLANKS

Preparation and instrument control blanks were prepared and analyzed in accordance with method requirements. Blanks were not detected within a concentration factor (5X) of sample values with the exception of beryllium. Affected samples were qualified (U).

MATRIX SPIKE ANALYSIS

A matrix spike was analyzed for sample MJC668. Percent recoveries (89-107%) met the criterion (75-125%) for all elements with the exception of antimony (51%) and zinc (73%). Data were qualified (JL or UJL) for these elements and may be biased low.

DUPLICATE SAMPLE ANALYSIS - Acceptable

A duplicate sample was analyzed for sample MJC668. Relative percent differences ($\leq$ 19%) met the control limits ($\pm$ 35% or $\pm$ 2xCRQL) for soil/sediments.

SERIAL DILUTION

A serial dilution was analyzed for sample MJC668. Percent differences ($\leq$ 11%) were within the 1% allowable deviance for the acceptance criteria ($\leq$ 10%) with the exception of calcium, chromium, iron, lead, magnesium, manganese and zinc (13-16%). Affected data were qualified (JL) and may be biased low.

ASSESSMENT SUMMARY

The following is a summary of qualified data: The (D) qualifier was applied by the lab to indicate that a dilution was required on the sample digest.

Beryllium data were qualified (U) due to the detection of these elements in laboratory blanks.

Antimony data were qualified (JL or UJL) due to a low spike recovery. Values for antimony may be biased low.

Zinc data were qualified (JL) due to a low spike recovery and a high percent difference for the serial dilution result. Zinc values may be biased low.

Data for calcium, chromium, iron, lead, magnesium and manganese were qualified (JL) due to high percent differences in the serial dilution results. Values for these elements may be biased low.

DATA QUALIFIERS

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J - The associated value is an estimated quantity.

R - The data are unusable. The analyte may or may not be present in the sample.

UJ - The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

PROJECT SPECIFIC DATA QUALIFIERS:

L - Low bias.

H - High bias.

K - Unknown Bias.

Q - Detected concentration is below the method reporting limit / Contract Required Quantitation Limit, but is above the method detection limit.

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC651

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-01

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 86.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15900			P
7440-36-0	Antimony	6.8	~~B~~	~~N~~ UJL	P
7440-38-2	Arsenic	9.6			P
7440-39-3	Barium	81.1			P
7440-41-7	Beryllium	0.40	~~J~~	Q	P
7440-43-9	Cadmium	0.26	~~J~~	Q	P
7440-70-2	Calcium	5230		~~E~~ JL	P
7440-47-3	Chromium	36.4		~~E~~ JL	P
7440-48-4	Cobalt	13.1			P
7440-50-8	Copper	69.7			P
7439-89-6	Iron	34500		~~E~~ JL	P
7439-92-1	Lead	23.5		~~E~~ JL	P
7439-95-4	Magnesium	7150		~~E~~ JL	P
7439-96-5	Manganese	954		~~E~~ JL	P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	35.8			P
7440-09-7	Potassium	618			P
7782-49-2	Selenium	4.0	U		P
7440-22-4	Silver	0.17	~~J~~	Q	P
7440-23-5	Sodium	95.6	~~J~~	Q	P
7440-28-0	Thallium	4.5			P
7440-62-2	Vanadium	73.0		~~E~~ JL	P
7440-66-6	Zinc	80.7		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC652

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-02

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 76.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14700			P
7440-36-0	Antimony	33.7		~~N~~ JL	P
7440-38-2	Arsenic	6.9			P
7440-39-3	Barium	178			P
7440-41-7	Beryllium	0.22	~~J~~	U	P
7440-43-9	Cadmium	10.8			P
7440-70-2	Calcium	26000		~~E~~ JL	P
7440-47-3	Chromium	35.0		~~E~~ JL	P
7440-48-4	Cobalt	10.8			P
7440-50-8	Copper	520			P
7439-89-6	Iron	29900		~~E~~ JL	P
7439-92-1	Lead	127		~~E~~ JL	P
7439-95-4	Magnesium	4390		~~E~~ JL	P
7439-96-5	Manganese	540		~~E~~ JL	P
7439-97-6	Mercury	0.095	~~J~~	Q	CV
7440-02-0	Nickel	40.7			P
7440-09-7	Potassium	1890			P
7782-49-2	Selenium	4.6	U		P
7440-22-4	Silver	2.0			P
7440-23-5	Sodium	817			P
7440-28-0	Thallium	3.3			P
7440-62-2	Vanadium	35.5		~~E~~ JL	P
7440-66-6	Zinc	923		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC653

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-03

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 73.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21700			P
7440-36-0	Antimony	1.2	~~J~~	~~N~~ JL	P
7440-38-2	Arsenic	7.2			P
7440-39-3	Barium	70.1			P
7440-41-7	Beryllium	0.42	~~J~~	Q	P
7440-43-9	Cadmium	0.54	~~J~~	Q	P
7440-70-2	Calcium	5710		~~E~~ JL	P
7440-47-3	Chromium	44.5		~~E~~ JL	P
7440-48-4	Cobalt	15.3			P
7440-50-8	Copper	83.0			P
7439-89-6	Iron	39400		~~E~~ JL	P
7439-92-1	Lead	58.9		~~E~~ JL	P
7439-95-4	Magnesium	8930		~~E~~ JL	P
7439-96-5	Manganese	575		~~E~~ JL	P
7439-97-6	Mercury	0.27			CV
7440-02-0	Nickel	31.0			P
7440-09-7	Potassium	941			P
7782-49-2	Selenium	4.7	U		P
7440-22-4	Silver	0.074	~~J~~	Q	P
7440-23-5	Sodium	171	~~J~~	Q	P
7440-28-0	Thallium	4.5			P
7440-62-2	Vanadium	83.8		~~E~~ JL	P
7440-66-6	Zinc	165		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC655

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-04

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 71.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18000			P
7440-36-0	Antimony	0.99	~~J~~	~~N~~ JL	P
7440-38-2	Arsenic	8.3			P
7440-39-3	Barium	112			P
7440-41-7	Beryllium	0.34	~~J~~	U	P
7440-43-9	Cadmium	0.75			P
7440-70-2	Calcium	7830		~~E~~ JL	P
7440-47-3	Chromium	35.7		~~E~~ JL	P
7440-48-4	Cobalt	13.4			P
7440-50-8	Copper	182			P
7439-89-6	Iron	34200		~~E~~ JL	P
7439-92-1	Lead	137		~~E~~ JL	P
7439-95-4	Magnesium	7750		~~E~~ JL	P
7439-96-5	Manganese	481		~~E~~ JL	P
7439-97-6	Mercury	0.15			CV
7440-02-0	Nickel	32.7			P
7440-09-7	Potassium	1050			P
7782-49-2	Selenium	4.9	U		P
7440-22-4	Silver	0.11	~~J~~	Q	P
7440-23-5	Sodium	309	~~J~~	Q	P
7440-28-0	Thallium	4.3			P
7440-62-2	Vanadium	74.2		~~E~~ JL	P
7440-66-6	Zinc	375		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC656

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-05

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 86.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12700			P
7440-36-0	Antimony	1.0	J	~~N~~ JL	P
7440-38-2	Arsenic	6.1			P
7440-39-3	Barium	81.4			P
7440-41-7	Beryllium	0.27	J	U	P
7440-43-9	Cadmium	0.62			P
7440-70-2	Calcium	8020		~~E~~ JL	P
7440-47-3	Chromium	27.5		~~E~~ JL	P
7440-48-4	Cobalt	10.4			P
7440-50-8	Copper	140			P
7439-89-6	Iron	27300		~~E~~ JL	P
7439-92-1	Lead	104		~~E~~ JL	P
7439-95-4	Magnesium	5770		~~E~~ JL	P
7439-96-5	Manganese	346		~~E~~ JL	P
7439-97-6	Mercury	0.12	J	Q	CV
7440-02-0	Nickel	24.0			P
7440-09-7	Potassium	775			P
7782-49-2	Selenium	3.8	U		P
7440-22-4	Silver	0.12	J	Q	P
7440-23-5	Sodium	235	J	Q	P
7440-28-0	Thallium	3.1			P
7440-62-2	Vanadium	52.3		~~E~~ JL	P
7440-66-6	Zinc	262		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC657

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-06

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 45.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28400			P
7440-36-0	Antimony	13.0	~~J~~	~~N~~ UJL	P
7440-38-2	Arsenic	4.7			P
7440-39-3	Barium	77.8			P
7440-41-7	Beryllium	0.62	~~J~~	Q	P
7440-43-9	Cadmium	1.1	U		P
7440-70-2	Calcium	1920		~~E~~ JL	P
7440-47-3	Chromium	46.0		~~E~~ JL	P
7440-48-4	Cobalt	8.0	~~J~~	Q	P
7440-50-8	Copper	36.7			P
7439-89-6	Iron	23700		~~E~~ JL	P
7439-92-1	Lead	8.1		~~E~~ JL	P
7439-95-4	Magnesium	5550		~~E~~ JL	P
7439-96-5	Manganese	188		~~E~~ JL	P
7439-97-6	Mercury	0.13	~~J~~	Q	CV
7440-02-0	Nickel	23.9			P
7440-09-7	Potassium	768	~~J~~	Q	P
7782-49-2	Selenium	1.5	~~J~~	Q	P
7440-22-4	Silver	0.34	~~J~~	Q	P
7440-23-5	Sodium	126	~~J~~	Q	P
7440-28-0	Thallium	1.8	~~J~~	Q	P
7440-62-2	Vanadium	86.1		~~E~~ JL	P
7440-66-6	Zinc	62.6		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC658

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-07

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 39.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21800			P
7440-36-0	Antimony	15.1	~~J~~	~~N~~ UJL	P
7440-38-2	Arsenic	8.0			P
7440-39-3	Barium	30.9	~~J~~	Q	P
7440-41-7	Beryllium	0.42	~~J~~	Q	P
7440-43-9	Cadmium	1.3	U		P
7440-70-2	Calcium	1380		~~E~~ JL	P
7440-47-3	Chromium	31.9		~~E~~ JL	P
7440-48-4	Cobalt	6.1	~~J~~	Q	P
7440-50-8	Copper	30.2			P
7439-89-6	Iron	33800		~~E~~ JL	P
7439-92-1	Lead	10.6		~~E~~ JL	P
7439-95-4	Magnesium	3010		~~E~~ JL	P
7439-96-5	Manganese	274		~~E~~ JL	P
7439-97-6	Mercury	0.26			CV
7440-02-0	Nickel	14.1			P
7440-09-7	Potassium	395	~~J~~	Q	P
7782-49-2	Selenium	1.5	~~J~~	Q	P
7440-22-4	Silver	0.27	~~J~~	Q	P
7440-23-5	Sodium	99.5	~~J~~	Q	P
7440-28-0	Thallium	3.4	~~J~~	Q	P
7440-62-2	Vanadium	78.3		~~E~~ JL	P
7440-66-6	Zinc	39.2		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC659

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-08

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 39.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25100			P
7440-36-0	Antimony	15.2	~~J~~	~~N~~ UJL	P
7440-38-2	Arsenic	5.1			P
7440-39-3	Barium	113			P
7440-41-7	Beryllium	0.64	~~J~~	Q	P
7440-43-9	Cadmium	1.3	U		P
7440-70-2	Calcium	3380		~~E~~ JL	P
7440-47-3	Chromium	47.4		~~E~~ JL	P
7440-48-4	Cobalt	14.3			P
7440-50-8	Copper	35.7			P
7439-89-6	Iron	32600		~~E~~ JL	P
7439-92-1	Lead	8.8		~~E~~ JL	P
7439-95-4	Magnesium	6590		~~E~~ JL	P
7439-96-5	Manganese	837		~~E~~ JL	P
7439-97-6	Mercury	0.15	~~J~~	Q	CV
7440-02-0	Nickel	32.7			P
7440-09-7	Potassium	848	~~J~~	Q	P
7782-49-2	Selenium	8.8	U		P
7440-22-4	Silver	0.19	~~J~~	Q	P
7440-23-5	Sodium	144	~~J~~	Q	P
7440-28-0	Thallium	2.1	~~J~~	Q	P
7440-62-2	Vanadium	78.2		~~E~~ JL	P
7440-66-6	Zinc	81.8		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC660

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-09

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 52.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13700			P
7440-36-0	Antimony	11.1	~~J~~	~~N~~ UJL	P
7440-38-2	Arsenic	4.1			P
7440-39-3	Barium	45.3			P
7440-41-7	Beryllium	0.26	~~J~~	U	P
7440-43-9	Cadmium	0.20	~~J~~	Q	P
7440-70-2	Calcium	2850		~~E~~ JL	P
7440-47-3	Chromium	34.8		~~E~~ JL	P
7440-48-4	Cobalt	6.0	~~J~~	Q	P
7440-50-8	Copper	23.0			P
7439-89-6	Iron	24300		~~E~~ JL	P
7439-92-1	Lead	14.5		~~E~~ JL	P
7439-95-4	Magnesium	3590		~~E~~ JL	P
7439-96-5	Manganese	377		~~E~~ JL	P
7439-97-6	Mercury	0.12	~~J~~	Q	CV
7440-02-0	Nickel	18.9			P
7440-09-7	Potassium	412	~~J~~	Q	P
7782-49-2	Selenium	6.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	78.6	~~J~~	Q	P
7440-28-0	Thallium	2.1	~~J~~	Q	P
7440-62-2	Vanadium	68.8		~~E~~ JL	P
7440-66-6	Zinc	179		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC662

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-10

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 54.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9410			P
7440-36-0	Antimony	10.9	~~B~~	~~N~~ UJL	P
7440-38-2	Arsenic	2.3			P
7440-39-3	Barium	50.2			P
7440-41-7	Beryllium	0.24	~~J~~	U	P
7440-43-9	Cadmium	0.68	~~J~~	Q	P
7440-70-2	Calcium	3670		~~E~~ JL	P
7440-47-3	Chromium	19.4		~~E~~ JL	P
7440-48-4	Cobalt	7.6	~~J~~	Q	P
7440-50-8	Copper	18.3			P
7439-89-6	Iron	18900		~~E~~ JL	P
7439-92-1	Lead	12.1		~~E~~ JL	P
7439-95-4	Magnesium	3260		~~E~~ JL	P
7439-96-5	Manganese	927		~~E~~ JL	P
7439-97-6	Mercury	0.088	~~J~~	Q	CV
7440-02-0	Nickel	23.8			P
7440-09-7	Potassium	378	~~J~~	Q	P
7782-49-2	Selenium	6.4	U		P
7440-22-4	Silver	0.093	~~J~~	Q	P
7440-23-5	Sodium	124	~~J~~	Q	P
7440-28-0	Thallium	1.3	~~J~~	Q	P
7440-62-2	Vanadium	36.6		~~E~~ JL	P
7440-66-6	Zinc	345		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC663

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-11

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 72.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10700			P
7440-36-0	Antimony	7.9	~~J~~	~~N~~ UJL	P
7440-38-2	Arsenic	2.3			P
7440-39-3	Barium	38.2			P
7440-41-7	Beryllium	0.22	~~J~~	U	P
7440-43-9	Cadmium	0.46	~~J~~	Q	P
7440-70-2	Calcium	2670		~~E~~ JL	P
7440-47-3	Chromium	18.0		~~E~~ JL	P
7440-48-4	Cobalt	7.4			P
7440-50-8	Copper	13.2			P
7439-89-6	Iron	19600		~~E~~ JL	P
7439-92-1	Lead	8.4		~~E~~ JL	P
7439-95-4	Magnesium	4040		~~E~~ JL	P
7439-96-5	Manganese	771		~~E~~ JL	P
7439-97-6	Mercury	0.14	U		CV
7440-02-0	Nickel	21.9			P
7440-09-7	Potassium	332	~~J~~	Q	P
7782-49-2	Selenium	4.6	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	73.6	~~J~~	Q	P
7440-28-0	Thallium	1.7	~~J~~	Q	P
7440-62-2	Vanadium	38.7		~~E~~ JL	P
7440-66-6	Zinc	343		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC665

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-12

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 33.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13500			P
7440-36-0	Antimony	17.5	~~J~~	~~N~~ UJL	P
7440-38-2	Arsenic	4.8			P
7440-39-3	Barium	71.1			P
7440-41-7	Beryllium	1.5	U		P
7440-43-9	Cadmium	0.94	~~J~~	Q	P
7440-70-2	Calcium	8080		~~E~~ JL	P
7440-47-3	Chromium	28.7		~~E~~ JL	P
7440-48-4	Cobalt	10.3	~~J~~	Q	P
7440-50-8	Copper	28.3			P
7439-89-6	Iron	24500		~~E~~ JL	P
7439-92-1	Lead	20.9		~~E~~ JL	P
7439-95-4	Magnesium	4350		~~E~~ JL	P
7439-96-5	Manganese	1270		~~E~~ JL	P
7439-97-6	Mercury	0.14	~~J~~	Q	CV
7440-02-0	Nickel	28.5			P
7440-09-7	Potassium	571	~~J~~	Q	P
7782-49-2	Selenium	10.2	U		P
7440-22-4	Silver	0.14	~~J~~	Q	P
7440-23-5	Sodium	200	~~J~~	Q	P
7440-28-0	Thallium	1.6	~~J~~	Q	P
7440-62-2	Vanadium	53.2		~~E~~ JL	P
7440-66-6	Zinc	425		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC666

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-13

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 52.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9620			P
7440-36-0	Antimony	11.3	~~J~~	~~N~~ UJL	P
7440-38-2	Arsenic	2.5			P
7440-39-3	Barium	65.5			P
7440-41-7	Beryllium	0.94	U		P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	6890		~~E~~ JL	P
7440-47-3	Chromium	19.7		~~E~~ JL	P
7440-48-4	Cobalt	8.6	~~J~~	Q	P
7440-50-8	Copper	22.2			P
7439-89-6	Iron	17800		~~E~~ JL	P
7439-92-1	Lead	16.5		~~E~~ JL	P
7439-95-4	Magnesium	3190		~~E~~ JL	P
7439-96-5	Manganese	1060		~~E~~ JL	P
7439-97-6	Mercury	0.19	U		CV
7440-02-0	Nickel	29.6			P
7440-09-7	Potassium	412	~~J~~	Q	P
7782-49-2	Selenium	6.6	U		P
7440-22-4	Silver	0.13	~~J~~	Q	P
7440-23-5	Sodium	162	~~J~~	Q	P
7440-28-0	Thallium	1.0	~~J~~	Q	P
7440-62-2	Vanadium	37.8		~~E~~ JL	P
7440-66-6	Zinc	477		~~NE~~ JL	P

RM 8-6-10

RM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC667

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-14

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 17.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15600			P
7440-36-0	Antimony	8.1	~~J~~	~~N~~ JL	P
7440-38-2	Arsenic	13.4			P
7440-39-3	Barium	701			P
7440-41-7	Beryllium	0.68	~~J~~	Q	P
7440-43-9	Cadmium	6.0			P
7440-70-2	Calcium	17700		~~E~~ JL	P
7440-47-3	Chromium	32.6		~~E~~ JL	P
7440-48-4	Cobalt	68.7			P
7440-50-8	Copper	111			P
7439-89-6	Iron	86100		~~E~~ JL	P
7439-92-1	Lead	50.5		~~E~~ JL	P
7439-95-4	Magnesium	4310		~~E~~ JL	P
7439-96-5	Manganese	26500		~~ED~~ JL	P
7439-97-6	Mercury	0.48	~~J~~	Q	CV
7440-02-0	Nickel	129			P
7440-09-7	Potassium	935	~~J~~	Q	P
7782-49-2	Selenium	19.8	U		P
7440-22-4	Silver	1.6	~~J~~	Q	P
7440-23-5	Sodium	396	~~J~~	Q	P
7440-28-0	Thallium	6.3	~~J~~	Q	P
7440-62-2	Vanadium	62.3		~~E~~ JL	P
7440-66-6	Zinc	2610		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC668

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-15

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 19.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16900			P
7440-36-0	Antimony	3.9	J	~~N~~ JL	P
7440-38-2	Arsenic	11.3			P
7440-39-3	Barium	316			P
7440-41-7	Beryllium	0.79	J	Q	P
7440-43-9	Cadmium	2.7			P
7440-70-2	Calcium	17000		~~E~~ JL	P
7440-47-3	Chromium	34.1		~~E~~ JL	P
7440-48-4	Cobalt	47.2			P
7440-50-8	Copper	78.0			P
7439-89-6	Iron	59800		~~E~~ JL	P
7439-92-1	Lead	38.0		~~E~~ JL	P
7439-95-4	Magnesium	4950		~~E~~ JL	P
7439-96-5	Manganese	10000		~~E~~ JL	P
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	88.0			P
7440-09-7	Potassium	908	J	Q	P
7782-49-2	Selenium	17.6	U		P
7440-22-4	Silver	0.74	J	Q	P
7440-23-5	Sodium	416	J	Q	P
7440-28-0	Thallium	3.9	J	Q	P
7440-62-2	Vanadium	65.9		~~E~~ JL	P
7440-66-6	Zinc	1200		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC669

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-16

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 61.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	31900			P
7440-36-0	Antimony	9.3	~~U~~	~~N~~ U JL	P
7440-38-2	Arsenic	6.1			P
7440-39-3	Barium	105			P
7440-41-7	Beryllium	0.61	~~J~~	Q	P
7440-43-9	Cadmium	0.25	~~J~~	Q	P
7440-70-2	Calcium	5570		~~E~~ JL	P
7440-47-3	Chromium	60.9		~~E~~ JL	P
7440-48-4	Cobalt	16.5			P
7440-50-8	Copper	36.2			P
7439-89-6	Iron	42600		~~E~~ JL	P
7439-92-1	Lead	8.2		~~E~~ JL	P
7439-95-4	Magnesium	11300		~~E~~ JL	P
7439-96-5	Manganese	508		~~E~~ JL	P
7439-97-6	Mercury	0.10	~~J~~	Q	CV
7440-02-0	Nickel	47.3			P
7440-09-7	Potassium	1100			P
7782-49-2	Selenium	5.4	U		P
7440-22-4	Silver	1.6	U		P
7440-23-5	Sodium	133	~~J~~	Q	P
7440-28-0	Thallium	5.2			P
7440-62-2	Vanadium	102		~~E~~ JL	P
7440-66-6	Zinc	153		~~NE~~ JL	P

DM 8-6-10

RM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC670

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-17

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 57.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	32600			P
7440-36-0	Antimony	10.2	~~U~~	~~N~~ U JL	P
7440-38-2	Arsenic	8.9			P
7440-39-3	Barium	83.4			P
7440-41-7	Beryllium	0.61	~~J~~	Q	P
7440-43-9	Cadmium	0.85	U		P
7440-70-2	Calcium	2990		~~E~~ JL	P
7440-47-3	Chromium	64.0		~~E~~ JL	P
7440-48-4	Cobalt	17.6			P
7440-50-8	Copper	62.4			P
7439-89-6	Iron	41400		~~E~~ JL	P
7439-92-1	Lead	9.2		~~E~~ JL	P
7439-95-4	Magnesium	8520		~~E~~ JL	P
7439-96-5	Manganese	304		~~E~~ JL	P
7439-97-6	Mercury	0.17	U		CV
7440-02-0	Nickel	43.1			P
7440-09-7	Potassium	790	~~J~~	Q	P
7782-49-2	Selenium	5.9	U		P
7440-22-4	Silver	0.14	~~J~~	Q	P
7440-23-5	Sodium	101	~~J~~	Q	P
7440-28-0	Thallium	4.9			P
7440-62-2	Vanadium	121		~~E~~ JL	P
7440-66-6	Zinc	80.3		~~NE~~ JL	P

DM 8-6-10

DM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC671

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-18

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 42.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15400			P
7440-36-0	Antimony	13.8	~~U~~	~~N~~ UJL	P
7440-38-2	Arsenic	4.6			P
7440-39-3	Barium	91.2			P
7440-41-7	Beryllium	0.35	~~J~~	Q	P
7440-43-9	Cadmium	1.2	U		P
7440-70-2	Calcium	6730		~~E~~ JL	P
7440-47-3	Chromium	30.1		~~E~~ JL	P
7440-48-4	Cobalt	10.0	~~J~~	Q	P
7440-50-8	Copper	35.6			P
7439-89-6	Iron	23700		~~E~~ JL	P
7439-92-1	Lead	8.2		~~E~~ JL	P
7439-95-4	Magnesium	4510		~~E~~ JL	P
7439-96-5	Manganese	752		~~E~~ JL	P
7439-97-6	Mercury	0.14	~~J~~	Q	CV
7440-02-0	Nickel	32.6			P
7440-09-7	Potassium	591	~~J~~	Q	P
7782-49-2	Selenium	1.1	~~J~~	Q	P
7440-22-4	Silver	0.17	~~J~~	Q	P
7440-23-5	Sodium	176	~~J~~	Q	P
7440-28-0	Thallium	1.5	~~J~~	Q	P
7440-62-2	Vanadium	55.1		~~E~~ JL	P
7440-66-6	Zinc	160		~~NE~~ JL	P

PM 8-6-10

PM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC672

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Matrix (soil/water): SOIL Lab Sample ID: 1002018-19

Level (low/med): LOW Date Received: 02/02/2010

% Solids: 62.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	29700			P
7440-36-0	Antimony	9.4	~~U~~	~~N~~ UJL	P
7440-38-2	Arsenic	4.2			P
7440-39-3	Barium	98.0			P
7440-41-7	Beryllium	0.49	~~J~~	Q	P
7440-43-9	Cadmium	0.18	~~J~~	Q	P
7440-70-2	Calcium	5070		~~E~~ JL	P
7440-47-3	Chromium	60.4		~~E~~ JL	P
7440-48-4	Cobalt	16.4			P
7440-50-8	Copper	53.0			P
7439-89-6	Iron	39700		~~E~~ JL	P
7439-92-1	Lead	8.0		~~E~~ JL	P
7439-95-4	Magnesium	10700		~~E~~ JL	P
7439-96-5	Manganese	550		~~E~~ JL	P
7439-97-6	Mercury	0.16	U		CV
7440-02-0	Nickel	40.9			P
7440-09-7	Potassium	1030			P
7782-49-2	Selenium	5.5	U		P
7440-22-4	Silver	1.6	U		P
7440-23-5	Sodium	117	~~J~~	Q	P
7440-28-0	Thallium	4.8			P
7440-62-2	Vanadium	93.4		~~E~~ JL	P
7440-66-6	Zinc	141		~~NE~~ JL	P

RM 8-6-10

RM 3-1-10

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: _____ SDG NO.: MJC651

Instrument Type: P Instrument ID: P4 Date: 01/15/2010

Preparation Method: HS1

Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Wave-Length /Mass	CRQL	MDL
Aluminum	308.22	20.00	5.1
Antimony	206.84	6.00	0.64
Arsenic	189.04	1.00	0.22
Barium	493.41	20.00	0.099
Beryllium	313.04	0.50	0.110
Cadmium	226.50	0.50	0.068
Calcium	317.93	500.00	3.5
Chromium	267.72	1.00	0.051
Cobalt	228.62	5.00	0.360
Copper	324.75	2.50	0.052
Iron	271.44	10.00	3.7
Lead	220.35	1.00	0.079
Magnesium	279.08	500.00	1.1
Manganese	257.61	1.50	0.160
Nickel	231.60	4.00	0.590
Potassium	766.49	500.00	1.7
Selenium	196.02	3.50	0.38
Silver	328.07	1.00	0.048
Sodium	330.23	500.00	16.7
Thallium	190.86	2.50	0.35
Vanadium	292.40	5.00	0.076
Zinc	206.20	6.00	0.084

Comments: _____

US EPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: _____ SDG NO.: MJC651

Instrument Type: CV Instrument ID: V4 Date: 01/15/2010

Preparation Method: CS1

Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Wave-Length /Mass	CRQL	MDL
Mercury	253.70	0.1	0.042

Comments: _____

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Preparation Method: HS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume(mL)
LCSS	02/03/2010	1.00	100
MJC651	02/03/2010	1.02	100
MJC652	02/03/2010	1.00	100
MJC653	02/03/2010	1.02	100
MJC655	02/03/2010	1.00	100
MJC656	02/03/2010	1.05	100
MJC657	02/03/2010	1.01	100
MJC658	02/03/2010	1.01	100
MJC659	02/03/2010	1.00	100
MJC660	02/03/2010	1.04	100
MJC662	02/03/2010	1.00	100
MJC663	02/03/2010	1.04	100
MJC665	02/03/2010	1.01	100
MJC666	02/03/2010	1.02	100
MJC667	02/03/2010	1.00	100
MJC668	02/03/2010	1.00	100
MJC668D	02/03/2010	1.00	100
MJC668S	02/03/2010	1.00	100
MJC669	02/03/2010	1.05	100
MJC670	02/03/2010	1.03	100
MJC671	02/03/2010	1.01	100
MJC672	02/03/2010	1.01	100
PBS	02/03/2010	1.00	100

Comments:

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Preparation Method: CS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	02/03/2010		100
CCB	02/03/2010		100
CCB	02/03/2010		100
CCB	02/03/2010		100
CCV	02/03/2010		100
CCV	02/03/2010		100
CCV	02/03/2010		100
CCV	02/03/2010		100
CRI	02/03/2010		100
CRI	02/03/2010		100
CRI	02/03/2010		100
ICB	02/03/2010		100
ICV	02/03/2010		100
LCSS	02/03/2010	0.20	100
MJC651	02/03/2010	0.19	100
MJC652	02/03/2010	0.20	100
MJC653	02/03/2010	0.19	100
MJC655	02/03/2010	0.20	100
MJC656	02/03/2010	0.21	100
MJC657	02/03/2010	0.20	100
MJC658	02/03/2010	0.19	100
MJC659	02/03/2010	0.20	100
MJC660	02/03/2010	0.20	100
MJC662	02/03/2010	0.19	100
MJC663	02/03/2010	0.20	100
MJC665	02/03/2010	0.21	100
MJC666	02/03/2010	0.19	100
MJC667	02/03/2010	0.20	100
MJC668	02/03/2010	0.20	100
MJC668D	02/03/2010	0.20	100
MJC668S	02/03/2010	0.20	100
MJC669	02/03/2010	0.20	100
MJC670	02/03/2010	0.21	100
MJC671	02/03/2010	0.20	100
MJC672	02/03/2010	0.20	100
PBS	02/03/2010	0.20	100

Comments:

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC651

Preparation Method: CS1

EPA Sample No.	Preparation Date	Weight (gram)	Volume(mL)
S0	02/03/2010		100
S0.2	02/03/2010		100
S0.5	02/03/2010		100
S1	02/03/2010		100
S10	02/03/2010		100
S5	02/03/2010		100

Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

August 6, 2010

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation for Warm House Beach Investigation, Case# 39444, SDG: MJC621, Inorganic Analysis

FROM: Donald Matheny, Chemist
Environmental Services Unit, OEA

TO: Kathy Parker, On-Scene Coordinator
Office of Environmental Cleanup (ECL-116)

CC: Amy Dahl, Techlaw Inc.

The data validation of inorganic analyses for the above sample set is complete. Fourteen waters were analyzed for total elements by CompuChem, Cary, NC. The sample numbers for this delivery group are:

MJC621	MJC622	MJC623	MJC624	MJC625	MJC626	MJC627
MJC628	MJC629	MJC630	MJC631	MJC632	MJC633	MJC634

DATA QUALIFICATIONS

The following comments refer to the lab's performance in meeting the specifications outlined in the "CLP Statement of Work (CLP-SOW) for Inorganic Analysis, rev. ILM05.4", the "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" and the judgment of the reviewer. The comments presented herein are based on the information provided for the review.

TIMELINESS - Acceptable

Holding times from the date of collection to the date of digestion and analyses were met for all elements (180 days, Hg 28 days). Samples were collected on 1/26/10 through 1/29/10. ICP-MS analysis was conducted on 2/18/10. Mercury analysis was conducted on 2/5/10.

INSTRUMENT CALIBRATION/VERIFICTION - Acceptable

For the ICP-MS analysis, tuning and calibration were performed in accordance with method requirements. Verification standard results (90-109%) met the frequency (10%) and recovery (90-110%) criteria. Appropriate internal standards were analyzed and percent recoveries met the recovery criterion (60-125%).

For mercury, a blank and five standards were digested for instrument calibration. Correlation coefficients (0.999) met the linearity criterion ($\geq$ 0.995). Recoveries for verification standards (98-102%) were within the frequency (10%) and recovery (80-120%) criteria.

Quantitation verification standards met the frequency (5%) and percent recovery criteria ($\pm$ 30-50%).

ICP INTERFERENCE CHECK SAMPLE (ICS) - Acceptable

The Interference Check Standard met both the frequency (5%) and recovery criteria (80-120%; $\pm$ 3xCRQL) for the applicable elements.

LABORATORY CONTROL SAMPLES (LCS) - Acceptable

A liquid LCS was digested and analyzed. Recoveries (96-119%) were within the control limits ($\pm$ 20%) for waters.

BLANKS

Laboratory control blanks were prepared and analyzed in accordance with method requirements. Blanks were not detected within a concentration factor (5X) of sample values with the exception of antimony, chromium and selenium. Affected samples were qualified (U) for these elements.

MATRIX SPIKE ANALYSIS

A matrix spike was analyzed for sample MJC629. Recoveries (84-119%) met the criterion (75-125%) for all elements with the exception of silver (30%). Silver data were qualified (UJL) and may be biased low.

DUPLICATE SAMPLE ANALYSIS

A duplicate sample was analyzed for sample MJC629. Relative percent differences ($\leq$ 14%) met the control limits ($\pm$ 20% or $\pm$ CRQL) for waters with the exception of zinc (22%). Zinc data were qualified (JK) with no indication of bias.

SERIAL DILUTION

A serial dilution was analyzed for sample MJC629. Percent differences ($\leq$ 7%) met the acceptance criteria ($\leq$ 10%) with the exception of manganese (24%). Affected samples were qualified (JL) and may be biased low.

ASSESSMENT SUMMARY

The following is a summary of qualified data:

Antimony, chromium and selenium data were qualified (U) due to the detection of these elements in laboratory blanks.

Silver data were qualified (UJL) due to a low spike recovery. Silver values may be biased low.

Zinc data were qualified (JK) due to a high relative percent difference for the duplicate result. Bias for zinc data could not be determined.

Manganese data were qualified (JL) due to a high percent difference in the serial dilution result. Manganese values may be biased low.

DATA QUALIFIERS

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J - The associated value is an estimated quantity.

R - The data are unusable. The analyte may or may not be present in the sample.

UJ - The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

PROJECT SPECIFIC DATA QUALIFIERS:

L - Low bias.

H - High bias.

K - Unknown Bias.

Q - Detected concentration is below the method reporting limit / Contract Required Quantitation Limit, but is above the method detection limit.

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC621

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-01

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	1.0	U		MS
7440-39-3	Barium	2.1	~~J~~	Q	MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.22	~~J~~	U	MS
7440-48-4	Cobalt	1.0	U		MS
7440-50-8	Copper	0.23	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	2.4		~~B~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	0.18	~~J~~	Q	MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.28	~~J~~	Q	MS
7440-66-6	Zinc	2.0	~~U~~	~~N~~ UJK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC622

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-02

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	0.28	~~J~~	Q	MS
7440-39-3	Barium	14.8			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	1.6	~~J~~	Q	MS
7440-48-4	Cobalt	0.47	~~J~~	Q	MS
7440-50-8	Copper	1.9	~~J~~	Q	MS
7439-92-1	Lead	0.53	~~J~~	Q	MS
7439-96-5	Manganese	29.3		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	1.3			MS
7782-49-2	Selenium	0.40	~~J~~	U	MS
7440-22-4	Silver	1.0	~~B~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	2.9	~~J~~	Q	MS
7440-66-6	Zinc	4.3		~~*~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC623

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-03

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	1.1	~~J~~	U	MS
7440-38-2	Arsenic	1.4			MS
7440-39-3	Barium	87.0			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.1			MS
7440-47-3	Chromium	0.48	~~J~~	U	MS
7440-48-4	Cobalt	1.2			MS
7440-50-8	Copper	4.6			MS
7439-92-1	Lead	2.5			MS
7439-96-5	Manganese	519		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	14.6			MS
7782-49-2	Selenium	5.2			MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	1.3	~~J~~	Q	MS
7440-66-6	Zinc	282		~~*~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC624

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-04

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.82	~~J~~	U	MS
7440-38-2	Arsenic	1.1			MS
7440-39-3	Barium	50.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.13	~~J~~	Q	MS
7440-47-3	Chromium	0.41	~~J~~	U	MS
7440-48-4	Cobalt	0.29	~~J~~	Q	MS
7440-50-8	Copper	2.2			MS
7439-92-1	Lead	1.1			MS
7439-96-5	Manganese	29.1		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.1			MS
7782-49-2	Selenium	4.4	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~J~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.92	~~J~~	Q	MS
7440-66-6	Zinc	71.7		~~*~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC625

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-05

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.92	~~J~~	U	MS
7440-38-2	Arsenic	1.0			MS
7440-39-3	Barium	45.9			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.11	~~J~~	Q	MS
7440-47-3	Chromium	0.28	~~J~~	U	MS
7440-48-4	Cobalt	0.22	~~J~~	Q	MS
7440-50-8	Copper	1.8	~~J~~	Q	MS
7439-92-1	Lead	0.82	~~J~~	Q	MS
7439-96-5	Manganese	20.7		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.5			MS
7782-49-2	Selenium	4.0	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.68	~~J~~	Q	MS
7440-66-6	Zinc	63.0		~~+~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC626

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-06

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.67	~~J~~	U	MS
7440-38-2	Arsenic	1.0			MS
7440-39-3	Barium	45.9			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.081	~~J~~	Q	MS
7440-47-3	Chromium	0.31	~~J~~	U	MS
7440-48-4	Cobalt	0.20	~~J~~	Q	MS
7440-50-8	Copper	1.7	~~J~~	Q	MS
7439-92-1	Lead	0.60	~~J~~	Q	MS
7439-96-5	Manganese	15.4		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.4			MS
7782-49-2	Selenium	4.1	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.59	~~J~~	Q	MS
7440-66-6	Zinc	55.7		~~*~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC627

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-07

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.74	~~J~~	U	MS
7440-38-2	Arsenic	1.1			MS
7440-39-3	Barium	48.0			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.14	~~J~~	Q	MS
7440-47-3	Chromium	0.38	~~J~~	U	MS
7440-48-4	Cobalt	0.26	~~J~~	Q	MS
7440-50-8	Copper	2.2			MS
7439-92-1	Lead	0.95	~~J~~	Q	MS
7439-96-5	Manganese	25.9		~~J~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.9			MS
7782-49-2	Selenium	4.4	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~J~~	~~J~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.78	~~J~~	Q	MS
7440-66-6	Zinc	68.8		~~J~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC628

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-08

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	1.5	~~J~~	U	MS
7440-38-2	Arsenic	1.5			MS
7440-39-3	Barium	51.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.087	~~J~~	Q	MS
7440-47-3	Chromium	0.62	~~J~~	Q	MS
7440-48-4	Cobalt	0.63	~~J~~	Q	MS
7440-50-8	Copper	2.6			MS
7439-92-1	Lead	1.2			MS
7439-96-5	Manganese	178		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.8			MS
7782-49-2	Selenium	5.4			MS
7440-22-4	Silver	1.0	~~J~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.89	~~J~~	Q	MS
7440-66-6	Zinc	50.8		~~+~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC629

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-09

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.4		U	MS
7440-38-2	Arsenic	1.3			MS
7440-39-3	Barium	49.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	1.0	~~J~~	Q	MS
7440-48-4	Cobalt	0.38	~~J~~	Q	MS
7440-50-8	Copper	1.5	~~J~~	Q	MS
7439-92-1	Lead	0.31	~~J~~	Q	MS
7439-96-5	Manganese	34.6		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.4			MS
7782-49-2	Selenium	5.2			MS
7440-22-4	Silver	1.0	~~J~~	~~J~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.34	~~J~~	Q	MS
7440-66-6	Zinc	28.2		~~*~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC630

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-10

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.84	~~J~~	U	MS
7440-38-2	Arsenic	1.4			MS
7440-39-3	Barium	55.1			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.069	~~J~~	Q	MS
7440-47-3	Chromium	0.91	~~J~~	Q	MS
7440-48-4	Cobalt	0.87	~~J~~	Q	MS
7440-50-8	Copper	2.2			MS
7439-92-1	Lead	0.69	~~J~~	Q	MS
7439-96-5	Manganese	98.6		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.4			MS
7782-49-2	Selenium	4.7	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~J~~	~~N~~ U JL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	1.6	~~J~~	Q	MS
7440-66-6	Zinc	31.1		~~+~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC631

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-11

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.30	~~J~~	U	MS
7440-38-2	Arsenic	1.1			MS
7440-39-3	Barium	68.9			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.39	~~J~~	U	MS
7440-48-4	Cobalt	0.33	~~J~~	Q	MS
7440-50-8	Copper	1.0	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	19.8		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.9			MS
7782-49-2	Selenium	4.3	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.50	~~J~~	Q	MS
7440-66-6	Zinc	14.1		~~*~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC632

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-12

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.48	~~J~~	U	MS
7440-38-2	Arsenic	1.1			MS
7440-39-3	Barium	67.6			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	1.2	~~J~~	Q	MS
7440-48-4	Cobalt	0.80	~~J~~	Q	MS
7440-50-8	Copper	2.0	~~J~~	Q	MS
7439-92-1	Lead	0.57	~~J~~	Q	MS
7439-96-5	Manganese	62.9		~~J~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	5.2			MS
7782-49-2	Selenium	4.1	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~J~~	~~J~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	1.9	~~J~~	Q	MS
7440-66-6	Zinc	22.8		~~J~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC633

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-13

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	1.0	~~J~~	U	MS
7440-38-2	Arsenic	1.4			MS
7440-39-3	Barium	56.3			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.084	~~J~~	Q	MS
7440-47-3	Chromium	0.85	~~J~~	Q	MS
7440-48-4	Cobalt	0.83	~~J~~	Q	MS
7440-50-8	Copper	1.9	~~J~~	Q	MS
7439-92-1	Lead	0.62	~~J~~	Q	MS
7439-96-5	Manganese	89.4		~~E~~ JL	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.6			MS
7782-49-2	Selenium	5.2			MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	1.5	~~J~~	Q	MS
7440-66-6	Zinc	30.4		~~*~~ JK	MS

DM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC634

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Matrix (soil/water): WATER Lab Sample ID: 1002007-14

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	1.0	U		MS
7440-39-3	Barium	10.0	U		MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	2.0	U		MS
7440-48-4	Cobalt	1.0	U		MS
7440-50-8	Copper	2.0	U		MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	1.0	U	~~E~~	MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	1.0	U		MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ UJL	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	5.0	U		MS
7440-66-6	Zinc	1.3	~~J~~	* JK	MS

RM 8-6-10

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: _____ SDG NO.: MJC621

Instrument Type: MS Instrument ID: PEMS Date: 01/15/2010

Preparation Method: HW3

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Antimony	121.00	2	0.140
Arsenic	75.00	1	0.062
Barium	137.00	10	0.130
Beryllium	9.00	1	0.087
Cadmium	111.00	1	0.065
Chromium	52.00	2	0.064
Cobalt	59.00	1	0.087
Copper	63.00	2	0.210
Lead	208.00	1	0.260
Manganese	55.00	1	0.140
Nickel	60.00	1	0.130
Selenium	82.00	5	0.25
Silver	107.00	1	0.029
Thallium	205.00	1	0.028
Vanadium	51.00	5	0.073
Zinc	66.00	2	0.860

Comments: _____

US EPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: _____ SDG NO.: MJC621

Instrument Type: CV Instrument ID: V4 Date: 01/15/2010

Preparation Method: CW1

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Mercury	253.70	0.2	0.065

Comments: _____

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Preparation Method: HW3

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	02/04/2010		100
MJC621	02/04/2010		100
MJC622	02/04/2010		100
MJC623	02/04/2010		100
MJC624	02/04/2010		100
MJC625	02/04/2010		100
MJC626	02/04/2010		100
MJC627	02/04/2010		100
MJC628	02/04/2010		100
MJC629	02/04/2010		100
MJC629D	02/04/2010		100
MJC629S	02/04/2010		100
MJC630	02/04/2010		100
MJC631	02/04/2010		100
MJC632	02/04/2010		100
MJC633	02/04/2010		100
MJC634	02/04/2010		100
PBW	02/04/2010		100

Comments:

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC621

Preparation Method: CW1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	02/04/2010		100
CCB	02/04/2010		100
CCB	02/04/2010		100
CCV	02/04/2010		100
CCV	02/04/2010		100
CCV	02/04/2010		100
CRI	02/04/2010		100
CRI	02/04/2010		100
ICB	02/04/2010		100
ICV	02/04/2010		100
MJC621	02/04/2010		100
MJC622	02/04/2010		100
MJC623	02/04/2010		100
MJC624	02/04/2010		100
MJC625	02/04/2010		100
MJC626	02/04/2010		100
MJC627	02/04/2010		100
MJC628	02/04/2010		100
MJC629	02/04/2010		100
MJC629D	02/04/2010		100
MJC629S	02/04/2010		100
MJC630	02/04/2010		100
MJC631	02/04/2010		100
MJC632	02/04/2010		100
MJC633	02/04/2010		100
MJC634	02/04/2010		100
PBW	02/04/2010		100
S0	02/04/2010		100
S0.2	02/04/2010		100
S0.5	02/04/2010		100
S1	02/04/2010		100
S10	02/04/2010		100
S5	02/04/2010		100

Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

August 3, 2010

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation for Warm House Beach Investigation, Case# 39444, SDG: MJC622, Inorganic Analysis

FROM: Donald Matheny, Chemist DM
Environmental Services Unit, OEA

TO: Kathy Parker, On-Scene Coordinator
Office of Environmental Cleanup (ECL-116)

CC: Amy Dahl, Techlaw Inc.

The data validation of inorganic analyses for the above sample set is complete. Fourteen waters were analyzed for total elements by CompuChem, Cary, NC. The sample numbers for this delivery group are:

MJC621	MJC622	MJC623	MJC624	MJC625	MJC626	MJC627
MJC628	MJC629	MJC630	MJC631	MJC632	MJC633	MJC634

DATA QUALIFICATIONS

The following comments refer to the lab's performance in meeting the specifications outlined in the "CLP Statement of Work (CLP-SOW) for Inorganic Analysis, rev. ILM05.4", the "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" and the judgment of the reviewer. The comments presented herein are based on the information provided for the review.

TIMELINESS - Acceptable

Holding times from the date of collection to the date of digestion and analyses were met for all elements (180 days). Samples were collected on 1/26/10 and 1/27/10. ICP-AES analysis was conducted on 5/13/10.

INSTRUMENT CALIBRATION/VERIFICTION - Acceptable

For ICP-AES, instrument calibration was performed in accordance with method requirements. Recoveries for instrument verification standards (96-108%) met the frequency (10%) and recovery (90-110%) criteria.

ICP INTERFERENCE CHECK SAMPLE (ICS) - Acceptable

The Interference Check Standard met both the frequency (5%) and recovery criteria (80-120%; ± 2xCRQL) for the applicable elements.

LABORATORY CONTROL SAMPLES (LCS) - Acceptable

An aqueous LCS was digested and analyzed. Recoveries (96-113%) were within the control limits (± 20%) for waters.

BLANKS - Acceptable

Laboratory control blanks were prepared and analyzed in accordance with method requirements. Blanks were not detected within a concentration factor (5X) of sample values.

MATRIX SPIKE ANALYSIS - Acceptable

A matrix spike was analyzed for sample MJC629. Recoveries (100-104%) met the criterion (75-125%) for all applicable elements.

DUPLICATE SAMPLE ANALYSIS - Acceptable

A duplicate sample was analyzed for sample MJC629. Relative percent differences (< 1%) met the acceptance criteria (± 20% or ± CRQL) for waters.

SERIAL DILUTION

A serial dilution was analyzed for sample MJC629. Percent differences (≤ 5%) met the acceptance criteria (≤ 10%) for the serial dilution analysis with the exception of potassium (17%). Detected potassium results were qualified (JH) and may be biased high.

ASSESSMENT SUMMARY

Potassium data were qualified (JH) due to a high percent difference for the serial dilution result. Potassium values may be biased high.

DATA QUALIFIERS

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J - The associated value is an estimated quantity.

R - The data are unusable. The analyte may or may not be present in the sample.

UJ - The analyte was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

PROJECT SPECIFIC DATA QUALIFIERS:

L - Low bias.

H - High bias.

K - Unknown Bias.

Q - Detected concentration is below the method reporting limit / Contract Required Quantitation Limit, but is above the method detection limit.

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC621

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-01

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	735			P
7440-70-2	Calcium	2350	~~J~~	Q	P
7439-89-6	Iron	702			P
7439-95-4	Magnesium	1500	~~J~~	Q	P
7440-09-7	Potassium	406	~~J~~	~~E~~ JH	P
7440-23-5	Sodium	5790			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC622

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-02

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	921			P
7440-70-2	Calcium	1820	~~J~~	Q	P
7439-89-6	Iron	965			P
7439-95-4	Magnesium	1190	~~J~~	Q	P
7440-09-7	Potassium	325	~~J~~	~~E~~ JH	P
7440-23-5	Sodium	5090			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC623

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-03

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	401			P
7440-70-2	Calcium	55300			P
7439-89-6	Iron	964			P
7439-95-4	Magnesium	9680			P
7440-09-7	Potassium	16100		~~B~~ JH	P
7440-23-5	Sodium	45200			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC624

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-04

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	207			P
7440-70-2	Calcium	43700			P
7439-89-6	Iron	311			P
7439-95-4	Magnesium	7780			P
7440-09-7	Potassium	11700		~~B~~ JH	P
7440-23-5	Sodium	35500			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC625

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-05

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	169	~~J~~	Q	P
7440-70-2	Calcium	41500			P
7439-89-6	Iron	242			P
7439-95-4	Magnesium	7340			P
7440-09-7	Potassium	10900		~~E~~ JH	P
7440-23-5	Sodium	33500			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC626

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-06

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	131	~~J~~	Q	P
7440-70-2	Calcium	40100			P
7439-89-6	Iron	171			P
7439-95-4	Magnesium	7190			P
7440-09-7	Potassium	10400		~~B~~ JH	P
7440-23-5	Sodium	32600			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC627

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-07

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	175	~~J~~	Q	P
7440-70-2	Calcium	43800			P
7439-89-6	Iron	279			P
7439-95-4	Magnesium	7770			P
7440-09-7	Potassium	11700		~~E~~ 5H	P
7440-23-5	Sodium	35700			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC628

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-08

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	216			P
7440-70-2	Calcium	78600			P
7439-89-6	Iron	1390			P
7439-95-4	Magnesium	11100			P
7440-09-7	Potassium	6680		~~E~~ JH	P
7440-23-5	Sodium	26700			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC629

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-09

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	87.9	~~J~~	Q	P
7440-70-2	Calcium	65500			P
7439-89-6	Iron	310			P
7439-95-4	Magnesium	10800			P
7440-09-7	Potassium	5310		~~E~~ JH	P
7440-23-5	Sodium	24600			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC630

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-10

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	384			P
7440-70-2	Calcium	57500			P
7439-89-6	Iron	940			P
7439-95-4	Magnesium	9860			P
7440-09-7	Potassium	4600	~~J~~	~~E~~ JH	P
7440-23-5	Sodium	22300			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC631

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-11

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	119	~~J~~	Q	P
7440-70-2	Calcium	39100			P
7439-89-6	Iron	191			P
7439-95-4	Magnesium	9830			P
7440-09-7	Potassium	2820	~~J~~	~~B~~ JH	P
7440-23-5	Sodium	19500			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC632

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-12

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	526			P
7440-70-2	Calcium	37800			P
7439-89-6	Iron	877			P
7439-95-4	Magnesium	9470			P
7440-09-7	Potassium	2610	J	~~E~~ JH	P
7440-23-5	Sodium	19300			P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC633

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-13

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	367			P
7440-70-2	Calcium	57100			P
7439-89-6	Iron	924			P
7439-95-4	Magnesium	9940			P
7440-09-7	Potassium	4630	~~J~~	~~E~~ JH	P
7440-23-5	Sodium	22200			P

DM 8-3-2010

DM 6-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC634

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Matrix (soil/water): WATER Lab Sample ID: 1005035-14

Level (low/med): LOW Date Received: 05/07/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-70-2	Calcium	5000	U		P
7439-89-6	Iron	100	U		P
7439-95-4	Magnesium	5000	U		P
7440-09-7	Potassium	5000	U	E	P
7440-23-5	Sodium	5000	U		P

DM 8-3-2010

DM 5-20-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: _____ SDG NO.: MJC622

Instrument Type: P Instrument ID: P3 Date: 01/15/2010

Preparation Method: HW1

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Aluminum	308.22	200	42.1
Calcium	317.93	5000	134.0
Iron	271.44	100	24.1
Magnesium	279.08	5000	16.6
Potassium	766.49	5000	21.5
Sodium	330.23	5000	271

Comments: _____

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC622

Preparation Method: HW1

EPA Sample No.	Preparation Date	Weight (gram)	Volume(mL)
LCSW	05/07/2010		50
MJC621	05/07/2010		50
MJC622	05/07/2010		50
MJC623	05/07/2010		50
MJC624	05/07/2010		50
MJC625	05/07/2010		50
MJC626	05/07/2010		50
MJC627	05/07/2010		50
MJC628	05/07/2010		50
MJC629	05/07/2010		50
MJC629D	05/07/2010		50
MJC629S	05/07/2010		50
MJC630	05/07/2010		50
MJC631	05/07/2010		50
MJC632	05/07/2010		50
MJC633	05/07/2010		50
MJC634	05/07/2010		50
PBW	05/07/2010		50

Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

August 3, 2010

Reply To
Attn. Of: **OEA-095**

MEMORANDUM

SUBJECT: Data Validation for Warm House Beach Investigation, Case# 39444, SDG: MJC635, Inorganic Analysis

FROM: Donald Matheny, Chemist DM
Environmental Services Unit, OEA

TO: Kathy Parker, On-Scene Coordinator
Office of Environmental Cleanup (ECL-116)

CC: Amy Dahl, Techlaw Inc.

The data validation of inorganic analyses for the above sample set is complete. Fourteen waters were analyzed for dissolved elements by CompuChem, Cary, NC. The sample numbers for this delivery group are:

MJC635	MJC638	MJC639	MJC640	MJC641	MJC642	MJC643
MJC644	MJC645	MJC646	MJC647	MJC648	MJC649	MJC650

DATA QUALIFICATIONS

The following comments refer to the lab's performance in meeting the specifications outlined in the "CLP Statement of Work (CLP-SOW) for Inorganic Analysis, rev. ILM05.4", the "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" and the judgment of the reviewer. The comments presented herein are based on the information provided for the review.

TIMELINESS - Acceptable

Holding times from the date of collection to the date of digestion and analyses were met for all elements (180 days, Hg 28 days). Samples were collected on 1/26/10 through 1/29/10. ICP-MS analysis was conducted on 2/18/10. Mercury analysis was conducted on 2/8/10.

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC635

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-01

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	1.0	U		MS
7440-39-3	Barium	10.0	U		MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	2.0	U		MS
7440-48-4	Cobalt	1.0	U		MS
7440-50-8	Copper	0.45	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	1.0	U		MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	0.17	~~J~~	Q	MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	5.0	U		MS
7440-66-6	Zinc	2.9			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC638

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-02

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	0.080	~~J~~	Q	MS
7440-39-3	Barium	14.5			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.12	~~J~~	U	MS
7440-48-4	Cobalt	1.0	U		MS
7440-50-8	Copper	0.93	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	2.6			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	0.80	~~J~~	Q	MS
7782-49-2	Selenium	0.41	~~J~~	U	MS
7440-22-4	Silver	1.0	~~U~~	~~U~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.32	~~J~~	Q	MS
7440-66-6	Zinc	4.0			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC639

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-03

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	0.12	~~J~~	Q	MS
7440-39-3	Barium	9.5	~~J~~	Q	MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.19	~~J~~	U	MS
7440-48-4	Cobalt	1.0	U		MS
7440-50-8	Copper	3.4			MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	5.8			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	0.51	~~J~~	Q	MS
7782-49-2	Selenium	0.31	~~J~~	U	MS
7440-22-4	Silver	1.0	~~J~~	~~U~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.59	~~J~~	Q	MS
7440-66-6	Zinc	3.7			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC640

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-04

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	1.3	~~J~~	U	MS
7440-38-2	Arsenic	1.4			MS
7440-39-3	Barium	64.2			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.18	~~J~~	Q	MS
7440-47-3	Chromium	0.077	~~J~~	U	MS
7440-48-4	Cobalt	0.18	~~J~~	Q	MS
7440-50-8	Copper	1.9	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	21.6			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.8			MS
7782-49-2	Selenium	5.8			MS
7440-22-4	Silver	1.0	~~U~~	~~U~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.14	~~J~~	Q	MS
7440-66-6	Zinc	90.3			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC641

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-05

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.94	~~J~~	U	MS
7440-38-2	Arsenic	1.1			MS
7440-39-3	Barium	49.6			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.097	~~J~~	Q	MS
7440-47-3	Chromium	2.0	U		MS
7440-48-4	Cobalt	0.11	~~J~~	Q	MS
7440-50-8	Copper	1.4	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	3.9			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.3			MS
7782-49-2	Selenium	4.4	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~J~~	~~U~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.22	~~J~~	Q	MS
7440-66-6	Zinc	58.0			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC642

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-06

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.89	~~J~~	U	MS
7440-38-2	Arsenic	1.0			MS
7440-39-3	Barium	46.2			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.082	~~J~~	Q	MS
7440-47-3	Chromium	0.067	~~J~~	U	MS
7440-48-4	Cobalt	0.12	~~J~~	Q	MS
7440-50-8	Copper	1.4	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	1.5			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.1			MS
7782-49-2	Selenium	4.1	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~J~~	~~N~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.22	~~J~~	Q	MS
7440-66-6	Zinc	47.9			MS

TM 8-3-2010

TM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC643

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-07

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.70	~~J~~	U	MS
7440-38-2	Arsenic	1.1			MS
7440-39-3	Barium	44.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.074	~~J~~	Q	MS
7440-47-3	Chromium	2.0	U		MS
7440-48-4	Cobalt	0.097	~~J~~	Q	MS
7440-50-8	Copper	1.3	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	1.1			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	2.9			MS
7782-49-2	Selenium	4.3	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~U~~	~~U~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.21	~~J~~	Q	MS
7440-66-6	Zinc	43.5			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC644

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-08

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.85	~~J~~	U	MS
7440-38-2	Arsenic	0.99	~~J~~	Q	MS
7440-39-3	Barium	46.2			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.084	~~J~~	Q	MS
7440-47-3	Chromium	2.0	U		MS
7440-48-4	Cobalt	0.11	~~J~~	Q	MS
7440-50-8	Copper	1.3	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	3.6			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.1			MS
7782-49-2	Selenium	4.0	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~U~~	~~U~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.19	~~J~~	Q	MS
7440-66-6	Zinc	53.0			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC645

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-09

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	1.4	~~J~~	U	MS
7440-38-2	Arsenic	1.3			MS
7440-39-3	Barium	47.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.074	~~J~~	U	MS
7440-48-4	Cobalt	0.34	~~J~~	Q	MS
7440-50-8	Copper	1.6	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	114			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.3			MS
7782-49-2	Selenium	5.2			MS
7440-22-4	Silver	1.0	~~J~~	~~J~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	5.0	U		MS
7440-66-6	Zinc	35.4			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC646

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-10

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	2.6		U	MS
7440-38-2	Arsenic	1.2			MS
7440-39-3	Barium	50.2			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.083	~~U~~	U	MS
7440-48-4	Cobalt	0.25	~~U~~	Q	MS
7440-50-8	Copper	1.4	~~U~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	14.7			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.0			MS
7782-49-2	Selenium	5.0			MS
7440-22-4	Silver	1.0	~~U~~	~~U~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.10	~~U~~	Q	MS
7440-66-6	Zinc	21.4			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC647

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-11

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.81	~~J~~	U	MS
7440-38-2	Arsenic	1.1			MS
7440-39-3	Barium	50.9			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.13	~~J~~	U	MS
7440-48-4	Cobalt	0.20	~~J~~	Q	MS
7440-50-8	Copper	3.4			MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	2.1			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.3			MS
7782-49-2	Selenium	4.8	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~U~~	~~N~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.080	~~J~~	Q	MS
7440-66-6	Zinc	14.0			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC648

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-12

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.28	~~J~~	U	MS
7440-38-2	Arsenic	1.0			MS
7440-39-3	Barium	64.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.12	~~J~~	U	MS
7440-48-4	Cobalt	0.19	~~J~~	Q	MS
7440-50-8	Copper	1.3	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	2.4			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	4.4			MS
7782-49-2	Selenium	4.4	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~U~~	NR	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.14	~~J~~	Q	MS
7440-66-6	Zinc	12.6			MS

DM 8-3-2010

DM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC649

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-13

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.29	~~J~~	U	MS
7440-38-2	Arsenic	0.98	~~J~~	Q	MS
7440-39-3	Barium	63.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.26	~~J~~	U	MS
7440-48-4	Cobalt	0.18	~~J~~	Q	MS
7440-50-8	Copper	1.1	~~J~~	Q	MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	1.2			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.5			MS
7782-49-2	Selenium	4.2	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~J~~	~~U~~ R	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.20	~~J~~	Q	MS
7440-66-6	Zinc	9.3			MS

DM 8-3-2010

3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MJC650

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Matrix (soil/water): WATER Lab Sample ID: 1002008-14

Level (low/med): LOW Date Received: 02/01/2010

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	0.84	~~J~~	U	MS
7440-38-2	Arsenic	1.2			MS
7440-39-3	Barium	50.0			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	0.11	~~J~~	U	MS
7440-48-4	Cobalt	0.20	~~J~~	Q	MS
7440-50-8	Copper	4.8			MS
7439-92-1	Lead	1.0	U		MS
7439-96-5	Manganese	2.2			MS
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	3.4			MS
7782-49-2	Selenium	4.7	~~J~~	Q	MS
7440-22-4	Silver	1.0	~~U~~	NR	MS
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	0.10	~~J~~	Q	MS
7440-66-6	Zinc	16.2			MS

RM 8-3-2010

RM 3-2-10

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

US EPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: _____ SDG NO.: MJC635

Instrument Type: MS Instrument ID: PEMS Date: 01/15/2010

Preparation Method: HW3

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Antimony	121.00	2	0.140
Arsenic	75.00	1	0.062
Barium	137.00	10	0.130
Beryllium	9.00	1	0.087
Cadmium	111.00	1	0.065
Chromium	52.00	2	0.064
Cobalt	59.00	1	0.087
Copper	63.00	2	0.210
Lead	208.00	1	0.260
Manganese	55.00	1	0.140
Nickel	60.00	1	0.130
Selenium	82.00	5	0.25
Silver	107.00	1	0.029
Thallium	205.00	1	0.028
Vanadium	51.00	5	0.073
Zinc	66.00	2	0.860

Comments: _____

US EPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: _____ SDG NO.: MJC635

Instrument Type: CV Instrument ID: V4 Date: 01/15/2010

Preparation Method: CW1

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wave-Length /Mass	CRQL	MDL
Mercury	253.70	0.2	0.065

Comments: _____

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Preparation Method: HW3

EPA Sample No.	Preparation Date	Weight (gram)	Volume(mL)
LCSW	02/05/2010		100
MJC635	02/05/2010		100
MJC638	02/05/2010		100
MJC639	02/05/2010		100
MJC640	02/05/2010		100
MJC641	02/05/2010		100
MJC642	02/05/2010		100
MJC643	02/05/2010		100
MJC644	02/05/2010		100
MJC645	02/05/2010		100
MJC646	02/05/2010		100
MJC646D	02/05/2010		100
MJC646S	02/05/2010		100
MJC647	02/05/2010		100
MJC648	02/05/2010		100
MJC649	02/05/2010		100
MJC650	02/05/2010		100
PBW	02/05/2010		100

Comments:

US EPA - CLP

12-IN

PREPARATION LOG

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 39444 NRAS No.: SDG NO.: MJC635

Preparation Method: CW1

EPA Sample No.	Preparation Date	Weight (gram)	Volume(mL)
CCB	02/05/2010		100
CCB	02/05/2010		100
CCB	02/05/2010		100
CCV	02/05/2010		100
CCV	02/05/2010		100
CCV	02/05/2010		100
CRI	02/05/2010		100
CRI	02/05/2010		100
ICB	02/05/2010		100
ICV	02/05/2010		100
MJC635	02/05/2010		100
MJC638	02/05/2010		100
MJC639	02/05/2010		100
MJC640	02/05/2010		100
MJC641	02/05/2010		100
MJC642	02/05/2010		100
MJC643	02/05/2010		100
MJC644	02/05/2010		100
MJC645	02/05/2010		100
MJC646	02/05/2010		100
MJC646D	02/05/2010		100
MJC646S	02/05/2010		100
MJC647	02/05/2010		100
MJC648	02/05/2010		100
MJC649	02/05/2010		100
MJC650	02/05/2010		100
PBW	02/05/2010		100
S0	02/05/2010		100
S0.2	02/05/2010		100
S0.5	02/05/2010		100
S1	02/05/2010		100
S10	02/05/2010		100
S5	02/05/2010		100

Comments: