ESAT Controlled Number: ESAT5.1.3.496-pj-23Dec2014

DATE: December 23, 2014

TETRA TECH
Attn: **Mr. Kris Schnoes**
1 South Wacker Drive – 37th Floor
Chicago, IL 60601-4651

Site Name: West Vermont Street Water (IN) – **level 3 data validation**

Case	SDG	Lab	Samples	Matrix
44782	E5AS8	Shealy	3	water

Analysis: **TVOA**

Upon receipt of data, please check each package for completeness and note any missing deliverables below.

Send this form back to Sylvia Griffin, Data Management Coordinator after filling in the blanks below.

Data Received by:_____ Date:_____

PROBLEMS:

Please indicate if data is complete, and note if there are any deliverables missing from the cases noted above.

_____

_____

Received by Data Management Coordinator, CRL for file.

Signature:_____ Date:_____

FROM: **U.S. EPA - Region 5**
Sylvia Griffin
Chicago Regional Laboratory
536 S. Clark, 10th Floor
Chicago, IL 60605

Sent By: Pat A. Joyner
Data Coordinator
ESAT Region 5 - **Techlaw Inc.**

ESAT5.1.5.393
ack
12-19-14

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

DATE:

SUBJECT: Review of Data
Received for Review on: November 19, 2014

FROM: Timothy Prendiville, Supervisor (SR-6J)
Superfund Contract Management Section

TO: Data User: TetraTech
Email address: kevin.scott@tetratech.com

Level 3 Data Validation for the EXES program

We have reviewed the data for the following case:

Site Name: West Vermont Street Water Contamination, IN

Case Number: 44872 SDG Number: E5AS8

Number and Type of Samples: 3 water samples (Trace VOA)

Sample Numbers: E5AS8, E5AW6, E5AW7

Laboratory: Shealy Environmental, Inc. Hrs for Review:

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: SA-5J

Case Number: 44782
Site Name: West Vermont Street Water Contamination

SDG Number: E5AS8
Laboratory: Shealy

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Three (3) preserved water samples labeled E5AS8, E5AW6 and E5AW7 were collected on 10/21/14 and 10/27/14. The samples were received by Shealy Environmental, Inc. (A4) located in West Columbia, SC on 10/25/14 and 10/29/14. All samples arrived intact and at the proper shipping temperature range of 2 - 6°C. The samples were analyzed for only the trace volatile target compounds. All samples were analyzed according to CLP SOW SOM01.2 (10/2006) and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.6.2).

None of the sample in this SDG was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses; however the Samplers provided 9 vials for sample E5AS8. Sample E5AS8 was used for the low level volatile MS / MSD analyses.

Sample E5AW7 was identified as trip blank. None of the samples in this SDG were identified as field duplicates.

Reviewed by: Steffanie Tobin/Techlaw-ESAT
Date: December 18, 2014

Case Number: 44782
Site Name: West Vermont Street Water Contamination

SDG Number: E5AS8
Laboratory: Shealy

1. HOLDING TIME

No problems found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No problems found.

3. CALIBRATION

The following low level volatile samples are associated with opening CCV in which a DMC exceeded percent difference (%D) criteria. Detected and nondetected compounds are not qualified.

E5AW6, E5AW7, VBLKBJ
Benzene-d_8

4. BLANKS

The following trace volatile samples have common contaminant analyte concentrations reported less than 2x the CRQL. The associated storage blank has common contaminant analyte concentration is less than 2x the concentration criteria. Detected compounds are qualified U. Nondetected compounds are not qualified. Reported sample concentrations have been elevated to 2x the CRQL.

Acetone
E5AS8MS, E5AW6, E5AW7

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

The following volatile samples have DMC/SMC recoveries above the upper limit of the criteria window. The compounds were not detected in the sample. Nondetected compounds are not qualified.

E5AW6
Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2,-trifluoroethane, Methyl Acetate, Methylene Chloride, Methyl tert-Butyl Ether, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloroethane, 1,2-Dibromoethane

The following trace volatile samples have one or more DMC/SMC recovery values is less than the primary lower limit but greater than or equal to the expanded lower limit of the criteria window. Detected compounds are qualified J. Nondetected compounds are qualified UJ.

Case Number: 44782
Site Name: West Vermont Street Water Contamination

SDG Number: E5AS8
Laboratory: Shealy

E5AS8

Dichlorodifluoromethane, Chloromethane, Vinyl chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane, Carbon disulfide, Methyl acetate, Methylene chloride, trans-1,2-Dichloroethene, Methyl tert-butyl ether, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Bromochloromethane, Chloroform, 1,1,1-Trichloroethane, Cyclohexane, Carbon tetrachloride, Benzene, 1,2-Dichloroethane, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Bromoform, Isopropylbenzene, 1,1,2,2-Tetrachloroethane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-chloropropane, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

E5AS8MS

Dichlorodifluoromethane, Chloromethane, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1,2-Trichloro-1,2,2-trifluoroethane, Carbon disulfide, Methyl acetate, Methylene chloride, Methyl tert-butyl ether, 1,1-Dichloroethane, Bromochloromethane, Chloroform, 1,1,1-Trichloroethane, Cyclohexane, Carbon tetrachloride, Benzene, 1,2-Dichloroethane, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Bromoform, Isopropylbenzene, 1,1,2,2-Tetrachloroethane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-chloropropane, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

E5AS8RE

Dichlorodifluoromethane, Chloromethane, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethane, Carbon disulfide, Methyl acetate, Methylene chloride, trans-1,2-Dichloroethene, Methyl tert-butyl ether, 1,1-Dichloroethane, cis-1,2-Dichloroethene, Bromochloromethane, Chloroform, 1,1,1-Trichloroethane, Cyclohexane, Carbon tetrachloride, Benzene, 1,2-Dichloroethane, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Bromoform, Isopropylbenzene, 1,1,2,2-Tetrachloroethane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dibromo-3-chloropropane, 1,2,4-Trichlorobenzene, 1,2,3-Trichlorobenzene

Case Number: 44782 SDG Number: E5AS8
Site Name: West Vermont Street Water Contamination Laboratory: Shealy

E5AW7
Cyclohexane, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

None of the sample in this SDG was designated by the samplers to be used for laboratory QC, i.e. MS / MSD analyses; however the Samplers provided 9 vials for sample E5AS8. Sample E5AS8 was used for the low level volatile MS / MSD analyses.

The relative percent difference (RPD) between the following volatile matrix spike and matrix spike duplicate recoveries is outside criteria. Detected compounds are qualified J.

E5AS8MS, E5AS8MSD
1,1-Dichloroethene, Benzene, Trichloroethene, Toluene, Chlorobenzene

The relative percent difference (RPD) between the associated volatile matrix spike and matrix spike duplicate recoveries is outside criteria. The compounds were not detected in the unspiked samples. Non-detects in the unspiked samples (E5AS8 and E5AS8RE) are qualified UJ.

E5AS8, E5AS8RE
1,1-Dichloroethene, Benzene, Trichloroethene, Toluene, Chlorobenzene

The following trace volatile matrix spike/matrix spike duplicate samples have percent recoveries greater than or equal to the expanded lower acceptance limit but less than the primary lower acceptance limit. Detected compounds are qualified J.

E5AS8MS
1,1-Dichloroethene, Benzene, Trichloroethene, Toluene

The associated trace volatile matrix spike/matrix spike duplicate samples have percent recoveries greater than or equal to the expanded lower acceptance limit but less than the primary lower acceptance limit. The compounds were not detected in the unspiked samples. Non-detects in the unspiked samples (E5AS8 and E5AS8RE) are qualified UJ.

E5AS8, E5AS8RE
1,1-Dichloroethene, Benzene, Trichloroethene, Toluene

6B. LABORATORY CONTROL SAMPLE

Not applicable to this analysis.

7. FIELD BLANK AND FIELD DUPLICATE

Sample E5AW7 (WV-TB-01) was identified as trip blank. Toluene was detected at 0.22 ug/L and o-Xylene was detected at 0.14 ug/L in the trip blank. Only sample E5AW6 is associated with this trip blank. None of the samples in this SDG were identified as field duplicates.

Case Number: 44782
Site Name: West Vermont Street Water Contamination

SDG Number: E5AS8
Laboratory: Shealy

8. INTERNAL STANDARDS

The following volatile samples have internal standard area counts that are outside the upper limit of primary criteria. The compounds were not detected in this sample. Nondetected compounds are not qualified, but are ultimately qualified UJ due to out-of-criteria surrogate recoveries.

E5AS8
1,1,1-Trichloroethane, Cyclohexane, Carbon Tetrachloride, Benzene, Trichloroethene, Methylcyclohexane, 1,2-Dichloropropane, Bromodichloromethane, cis-1,3-Dichloropropene, 4-Methyl-2-pentanone, Toluene, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, 2-Hexanone, Dibromochloromethane, 1,2-Dibromoethane, Chlorobenzene, Ethylbenzene, o-Xylenes, m,p-Xylene, Styrene, Isopropylbenzene, 1,1,2,2-Tetrachloroethane

9. COMPOUND IDENTIFICATION

Manual integrations were performed on the following volatile samples because the laboratory software failed to integrate the appropriate peaks.

VSTD005AG, VSTD0.5BV
1,2-Dibromo-3-chloropropane

VSTD010BV
Carbon tetrachloride

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following volatile samples have compound concentrations less than the CRQL. Detected compounds are qualified J.

E5AS8MS
Methyl tert-Butyl Ether

E5AW7
Toluene, o-Xylene

VBLKBJ
Methylene chloride

VHBLK01
Methylene chloride, Acetone

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

Reviewed by: Steffanie Tobin/Techlaw-ESAT
Date: December 18, 2014

Case Number: 44782
Site Name: West Vermont Street Water Contamination

SDG Number: E5AS8
Laboratory: Shealy

12. ADDITIONAL INFORMATION

The Case number is not listed on the COCs received by the laboratory. The sample tags list the case number as 44782. In accordance with previous direction from Region 5, The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples under the scheduled case number 44782.

Reviewed by: Steffanie Tobin/Techlaw-ESAT
Date: December 18, 2014

Case Number: 44782
Site Name: West Vermont Street Water Contamination

SDG Number: E5AS8
Laboratory: Shealy

CADRE Data Qualifier Sheet

Qualifiers	Data Qualifier Definitions
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Reviewed by: Steffanie Tobin/Techlaw-ESAT
Date: December 18, 2014

Sample Summary Report

Case No:	44782	Contract:	EPW11035	SDG No:	E5AS8	Lab Code:	SHEALY
Sample Number:	E5AS8	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	WV-MW-3B-GW	pH:	2	Sample Date:	10/21/2014	Sample Time:	12:00:00
% Moisture :				% Solids :			

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	8.3	J	ug/L	8.3		1.0	Yes	S3VE
Bromomethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,2-Dichloropropane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichloromethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,3-Dichloropropene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: E5AS8MS	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: WV-MW-3B-GW	pH: 2	Sample Date: 10/21/2014	Sample Time: 12:00:00
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Spike	2.6	J	ug/L	2.6		1.0	Yes	S3VE
Benzene	Spike	3.0	J	ug/L	3.0		1.0	Yes	S3VE
Chloromethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	9.0		ug/L	9.0		1.0	Yes	S3VE
Trichloroethene	Spike	3.3	J	ug/L	3.3		1.0	Yes	S3VE
Toluene	Spike	3.4	J	ug/L	3.4		1.0	Yes	S3VE
Bromomethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Spike	3.9	J	ug/L	3.9		1.0	Yes	S3VE
Chloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	10	U	ug/L	1.6	J	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.087	J	ug/L	0.087	J	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichloropropane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichloromethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,3-Dichloropropene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: E5AS8MSD	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: WV-MW-3B-GW	pH: 2	Sample Date: 10/21/2014	Sample Time: 12:00:00
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Spike	3.4	J	ug/L	3.4		1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Spike	3.9	J	ug/L	3.9		1.0	Yes	S3VE
Vinyl chloride	Target	12		ug/L	12		1.0	Yes	S3VE
Trichloroethene	Spike	4.3	J	ug/L	4.3		1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Toluene	Spike	4.5	J	ug/L	4.5		1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Spike	5.2	J	ug/L	5.2		1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Case No:	44782	Contract:	EPW11035	SDG No:	E5AS8	Lab Code:	SHEALY
Sample Number:	E5AS8RE	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	WV-MW-3B-GW	pH:	2	Sample Date:	10/21/2014	Sample Time:	12:00:00
% Moisture :				% Solids :			

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	8.0		ug/L	8.0		1.0	Yes	S3VE
Bromomethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichlorom ethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: E5AW6	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: WV-MW-10-GW	pH: 2	Sample Date: 10/27/2014	Sample Time: 13:57:00
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	10	U	ug/L	1.6	J	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichlorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: E5AW7	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location: WV-TB-01	pH: 2	Sample Date: 10/27/2014	Sample Time: 14:15:00
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	10	U	ug/L	1.3	J	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichlorom ethane	Target	0.50	UJ	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.22	J	ug/L	0.22	J	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.14	J	ug/L	0.14	J	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: VBLKAF	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichlorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: VBLKAQ	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichlorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: VBLKBJ	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.071	J	ug/L	0.071	J	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichlorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethyl tert-butyl ether	Target		U		5.0	U	1.0	Yes	S3VE
1,2,4-Trimethylbenzene	Target		U		5.0	U	1.0	Yes	S3VE
1,3,5-Trimethylbenzene	Target		U		5.0	U	1.0	Yes	S3VE
tert-Amyl methyl ether	Target		U		5.0	U	1.0	Yes	S3VE
tert-Butyl Alcohol	Target		U		10	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: VBLKDP	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichlorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Case No: 44782	Contract: EPW11035	SDG No: E5AS8	Lab Code: SHEALY
Sample Number: VHBLK01	Method: VOA_Trace	Matrix: Water	MA Number: DEFAULT
Sample Location:	pH:	Sample Date:	Sample Time:
% Moisture :		% Solids :	

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoro methane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	1.9	J	ug/L	1.9	J	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.13	J	ug/L	0.13	J	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromet hane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexa ne	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichlorom ethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

National Functional Guidelines Report #09

Lab SHEALY(Shealy Environmental Services, Inc.) **SDG** E5AS8 **Case** 44782 **Contract** EPW11035 **Region** 5 **DDTID** 205696 **SOW** SOM01.2

Tentatively Identified Compounds

NONE FOUND

Regional Transmittal Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Data
Received for Review on 19 Nov 2014

FROM: Timothy Prendiville, Supervisor (**SR-6J**)
Superfund Contract Management Section

TO: Data User: Tetra Tech

We have reviewed the data for the following case:

SITE NAME: West Vermont Street Water Contamination

CASE NUMBER: 44782 SDG NUMBER: E5AS8

Number and Type of Samples: 3 water samples

Sample Numbers: E5AS8 / E5AW6 -W7

Laboratory: Shealey Hrs for Review:

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: **SA-5J**

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number	E5AS8	Case Number	44782	Contract Number	EPW11035
Lab Code	Shealy	SDG Turnaround	21 DAYS	Delivery CLIN(s)	0045

First Sample Received in SDG	E5AS8	Last Sample Received in SDG	E5AW7
First Sample Receipt Date	10/25/2014	Last Sample Receipt Date	10/29/2014

USEPA Sample Numbers in SDG (Listed in Numerical Order)

	CLP Sample ID	Sample Type	Requested Analytical CLIN(s)/SubCLIN(s)	Solicitation Number	MA Number(s)
1	E5AS8	Water	TVOA	N/A	NA
2	E5AW6	Water	TVOA	N/A	NA
3	E5AW7	Water	TVOA	N/A	NA
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15			11/7/14		
16					
17					
18					
19					
20					

Note: *There are a maximum of 20* ***field*** *samples (excluding PE samples) in an SDG. Attach TR/COC Records to this form in alphanumeric order (the order listed above on this form).*

Signature _____ Date 11/7/14

February 2010

E5AS8

E5AS4
~~E5AS4~~

USEPA

DateShipped: 10/24/2014
CarrierName: FedEx
AirbillNo: 899270028171

CHAIN OF CUSTODY RECORD

West Vermont
Contact Name:
Contact Phone:

No: 5-102414-152245-0004

Cooler #:
Lab: Shealy Environmental Services
Lab Phone: 803-791-9700

Lab #	Location	CLP Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	Lab QC
	WV-MW-3B-GW	E5AS8	CLP Volatiles	Ground Water	10/21/2014	12:00	9	40 ml VOA	HCl	
	WV-MW-3A-GW	E5AS9	CLP Volatiles	Ground Water	10/21/2014	13:33	3	40 ml VOA	HCl	N
	WV-MW-7A-GW	E5AT0	CLP Volatiles	Ground Water	10/21/2014	15:00	3	40 ml VOA	HCl	N
	WV-MW-5A-GW	E5AT1	CLP Volatiles	Ground Water	10/22/2014	11:23	3	40 ml VOA	HCl	N
	WV-MW-5B-GW	E5AT2	CLP Volatiles	Ground Water	10/22/2014	13:46	3	40 ml VOA	HCl	N
	WV-MW-5C-GW	E5AT3	CLP Volatiles	Ground Water	10/22/2014	15:51	3	40 ml VOA	HCl	N
	WV-MW-6A-GW	E5AT4	CLP Volatiles	Ground Water	10/23/2014	11:00	9	40 ml VOA	HCl	Y
	WV-MW-6A-GW	E5AT5	CLP Volatiles	Ground Water	10/23/2014	11:00	3	40 ml VOA	HCl	Y
	WV-MW-6B-GW	E5AT6	CLP Volatiles	Ground Water	10/23/2014	13:27	3	40 ml VOA	HCl	N
	WV-MW-9A-GW	E5AT7	CLP Volatiles	Ground Water	10/23/2014	15:08	3	40 ml VOA	HCl	N

Special Instructions:	SAMPLES TRANSFERRED FROM
	CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	~~KA~~ ~~[illegible]~~ TT STAMT	10/24/14 1544			
	ORIGINAL [illegible] 448762 E5AS4				
	Signature				
	~~10/26/14~~			10/25/14 ~~0830~~ 0825 mcm 10/25/14	OK

T=2.8

9 of 34

CSH 32
ESAS4

USEPA

DateShipped: 10/28/2014
CarrierName: FedEx
AirbillNo: 899270028230

CHAIN OF CUSTODY RECORD

Site #: BUJ
Contact Name: Kevin Scott
Contact Phone: 312-201-7739

No: 5-102814-133110-0005
Case #: 44782
Lab: Shealy Environmental Services
Lab Phone: 803-791-9700

Lab #	Location	CLP Sample #	Tag	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	Lab QC
	WV-MW-8A-GW	E5AW3	45020	CLP Volatiles	Ground Water	10/24/2014	11:57	3	40 ml VOA	HCl	N
	WV-MW-8B-GW	E5AW4	45021	CLP Volatiles	Ground Water	10/24/2014	14:04	3	40 ml VOA	HCl	N
	WV-MW-11-GW	E5AW5	45022	CLP Volatiles	Ground Water	10/27/2014	11:38	3	40 ml VOA	HCl	N
	WV-MW-10-GW	E5AW6	45023	CLP Volatiles	Ground Water	10/27/2014	13:57	3	40 ml VOA	HCl	N
	WV-TB-01	E5AW7	45024	CLP Volatiles	Water	10/27/2014	14:15	3	40 ml VOA	HCl	Y

44782
E5AS4

COPY
ORIGINAL DOCUMENT INCLUDED IN CSV

Special Instructions:

10/30/14

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
		10/28/14 1500			
				10/29/14 1035	OK

SDG E5AS4 FINAL sample

T=5.2

10 of 34P

Shealy Environmental Services, Inc.

SDG Narrative
11/17/2014
Case 44782
SDG E5AS8
SOW: SOM01.2
Contract Number: EPW11035

EPA Sample Numbers

EPA Sample Number	Lab Sample ID	TVOA Fraction	DL/RE	pH
E5AS8	PJ25007-001	Yes	Yes	<2
E5AS8MS	PJ25007-001MS	Yes	No	<2
E5AS8MSD	PJ25007-001MD	Yes	No	<2
E5AW6	PJ25007-002	Yes	No	<2
E5AW7	PJ25007-003	Yes	No	<2

Columns	TVOA/TVOA SIM/VOA DB-624, 30m x 0.25mm x 1.4um
VOA Trap	OI #10

TVOA/ TVOA SIM/VOA Equation	Water sample concentration (ug/L) = $\frac{(A_x)(I_s)(DF)}{(A_{is})(\overline{RRF})(V_o)}$ Soil sample concentration (ug/Kg) = $\frac{(A_x)(I_s)(DF)}{(A_{is})(\overline{RRF})(W_s)(D)}$ Where A_x is the area of the characteristic ion (EICP) for the compound to be measured. A_{is} is the area of the characteristic ion (EICP) for the internal standard. I_s is the amount of internal standard added, in ng. $\overline{RRF}$ is the mean relative response factor from the initial calibration. DF is the dilution factor. V_o is total volume of water purged, in mL. Ws is the weight of sample added to the purge tube in g. $D = \frac{100 - \%moisture}{100}$

Sample Receiving

The three (3) water samples in this SDG was received in a sealed shipping container on October 25 and 29, 2014. The cooler temperatures associated with the samples were 2.8 and 5.2°C.

The temperature was determined using a calibrated Fluke 66 IR thermometer.

The following issues are noted:

Issue: The Case number is not listed on the COCs received by the laboratory. The sample tags list the Case number as 44782.

Resolution: In accordance with previous direction from Region 5, The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples under the scheduled Case number. The

resolution may then be applied to the remainder of the samples shipped under the same Case received with a COC that lists an incorrect Case number/the Case number field is left blank.

Issue: The laboratory has received 19 samples for this Case thus far, with samples E5AS4, E5AS8, and E5AT4 having 9 vials each. Please note that one vial for sample E5AS8 was broken in transit however the laboratory still has sufficient volume for analysis. The laboratory assumed that these samples required laboratory QC, therefore they were placed into three different SDGs. Please advise if performing laboratory QC on E5AS4, E5AS8, and E5AT4 is acceptable.

Resolution: Per Region 5, the laboratory should use samples E5AS4, E5AS8, and E5AT4 as laboratory QC and these samples should be noted in the SDG Narrative as such. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

Cooler return information was not provided with the first shipment of this case. It was later provided to the lab.

TVOA Fraction

Sample E5AS8 was reanalyzed due to more than 4 DMC recoveries outside acceptance limits. Both initial and re-analysis are included in the data package.

The peak eluting at ~6.1min on MSD8 in all analyses is Pentafluorobenzene. This is an internal standard compound that is not being used for quantitation. This compound is not being identified as a TIC.

The peak eluting at ~8.6min on MSD8 in all analyses is an extra DMC in the standard that is not being used for quantitation. This compound is not being identified as a TIC.

See the attached Manual Integration Report for a listing of all manual integrations associated with the samples and standards in this SDG. Unless otherwise noted manual integrations were performed due to incorrect auto integration.

As per the SOW, an example calculation is attached for Vinyl Chloride-d_3 in sample E5AS8.

I certify that this Sample Data Package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Robert Zhu
Technical Director
November 17, 2014

MANUAL INTEGRATION REPORT
VOA_TRACE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

EPA SAMPLE NO.	Column 1 DB-624 0.25 (mm)	
VSTD005AG	1,2-Dibromo-3-chloropropane	
VSTD0.5BV	1,2-Dibromo-3-chloropropane	
VSTD010BV	Carbon tetrachloride	

Page: 1 of 1

CASE: **44782**
SDG: **E5AS8**

Example Calculation for the Trace Volatile Fraction

RRF Calculation

RRF=(Ax*Cis)/(Ais*Cx)

Where: Ax=Area of the characteristic ion (EICP) for the compound to be measured
Ais=Area of the characteristic ion (EICP) for the specific internal standard
Cis=Concentration of the internal standard
Cx=Concentration of the compound to be measured

Example: Vinyl Chloride-d_3 from VSTD005AF

Ax=	79221
Ais=	316434
Cis=	125
Cx=	125
RRF=	**0.25036**

Mean RRF from ICAL **0.32386**

Concentration Calculation

Concentration (ug/L)=(Ax*Is*Df)/(Ais*RRF*Vo)

Where: Ax=Area of the characteristic ion (EICP) for the compound to be measured
Ais=Area of the characteristic ion (EICP) for the specific internal standard
Is=Amount of the internal standard added, in nanograms
Mean RRF=Relative response factor from the Initial calibration standard
Vo=Total volume of water purged, in milliliters
Df=Dilution factor

Example: Vinyl Chloride-d_3 from E5AS8

Ax=	86220
Ais=	421486
Is=	125
Mean RRF=	0.32386
Vo=	25
Df=	1

Concentration (ug/L)= **3.158**

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLKAF	102	92	77	91	96	98	92
02	E5AS8MS	68	70 *	64	70	69 *	75 *	66 *
03	E5AS8MSD	94	92	84	97	92	99	85
04	VIBLK90	104	105	81	102	103	113	94
05	VIBLK91	101	93	76	96	98	103	98
06	E5AS8	63 *	54 *	48 *	65	65 *	72 *	60 *
07	VBLKAQ	120	118	90	108	112	112	101
08	E5AS8RE	66	62 *	48 *	61	65 *	74 *	59 *
09	VBLKDP	115	107	88	69	100	97	106
10	VHBLK01	114	104	89	81	106	111	106
11	VBLKBJ	130	122	83	85	106	115	98
12	E5AW6	125	119	84	117	114	130 *	96
13	E5AW7	103	97	67	99	89	102	77
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

	QC LIMITS
VDMC1 (VCL) = Vinyl chloride-d_3	(65-131)
VDMC2 (CLA) = Chloroethane-d_5	(71-131)
VDMC3 (DCE) = 1,1-Dichloroethene-d_2	(55-104)
VDMC4 (BUT) = 2-Butanone-d_5	(49-155)
VDMC5 (CLF) = Chloroform-d	(78-121)
VDMC6 (DCA) = 1,2-Dichloroethane-d_4	(78-129)
VDMC7 (BEN) = Benzene-d_6	(77-124)

Column to be used to flag recovery values
* Values outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT
01	VBLKAF	93	95	95	94		87	96	0
02	E5AS8MS	68 *	68 *	71 *	74		70 *	69 *	9
03	E5AS8MSD	89	88	95	102		90	93	0
04	VIBLK90	94	99	99	96		98	102	0
05	VIBLK91	93	93	89	92		87	102	0
06	E5AS8	62 *	62 *	66 *	63		60 *	63 *	11
07	VBLKAQ	98	104	103	98		100	105	0
08	E5AS8RE	59 *	61 *	67 *	62		60 *	66 *	10
09	VBLKDP	96	101	78	81		83	99	0
10	VHBLK01	96	109	79	74		84	101	0
11	VBLKBJ	92	96	98	98		96	103	0
12	E5AW6	97	104	112	109		102	108	1
13	E5AW7	78 *	83	90	99		86	89	1
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d_6	(79-124)
VDMC9 (TOL) = Toluene-d_8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d_4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d_5	(28-135)
VDMC12 (DXE) = 1,4-Dioxane-d_8	(50-150)
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d_2	(73-125)
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d_4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits
Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

3A - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix Spike - EPA Sample No.: E5AS8 Level: (TRACE or LOW) Trace

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC LIMITS REC.
1,1-Dichloroethene	5.0	0	2.6	51	*	61-145
Trichloroethene	5.0	0	3.3	65	*	71-120
Benzene	5.0	0	3.0	59	*	76-127
Toluene	5.0	0	3.4	68	*	76-125
Chlorobenzene	5.0	0	3.9	78		75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	5.0	3.4	68		28	*	0-14	61-145
Trichloroethene	5.0	4.3	85		26	*	0-14	71-120
Benzene	5.0	3.9	77		27	*	0-11	76-127
Toluene	5.0	4.5	89		27	*	0-13	76-125
Chlorobenzene	5.0	5.2	103		28	*	0-13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC Limits

RPD: 5 out of 5 outside limits

Spike Recovery: 4 out of 10 outside limits

COMMENTS: _____

EPA SAMPLE NO.

VBLKAF

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Lab File ID: 81103C01 Lab Sample ID: PQ59839-001

Instrument ID: MSD8

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 11/03/2014

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1333

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5AS8	PJ25007-001	81103C02	1432
02	E5AS8MS	PJ25007-001MS	81103C03	1500
03	E5AS8MSD	PJ25007-001MD	81103C04	1548
04	VIBLK90	PQ59839-018	81103C16	2120
05	VIBLK91	PQ59839-018A	81103C18	2216
06				
07				
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COMMENTS: _____

EPA SAMPLE NO.

VBLKAQ

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Lab File ID: 81104A04 Lab Sample ID: PQ59915-001

Instrument ID: MSD8

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 11/04/2014

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1050

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5AS8RE	PJ25007-001	81104A05	1133
02				
03				
04				
05				
06				
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08				
09				
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COMMENTS: _____

EPA SAMPLE NO.

VBLKBJ

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Lab File ID: 81106B04 Lab Sample ID: PQ60192-001

Instrument ID: MSD8

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 11/06/2014

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1506

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	E5AW6	PJ25007-003	81106B09	1744
02	E5AW7	PJ25007-004	81106B10	1812
03				
04				
05				
06				
07				
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COMMENTS: _____

EPA SAMPLE NO.

VBLKDP

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Lab File ID: 81111A05 Lab Sample ID: PQ60586-001

Instrument ID: MSD8

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 11/11/2014

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1130

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VHBLK01	PJ25007-002	81111A10a	1356
02				
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COMMENTS: _____

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/02/2014 11/02/2014

EPA Sample No.(VSTD#####): VSTD005AA Date Analyzed: 11/03/2014

Lab File ID (Standard): 81103B03 Time Analyzed: 1010

Instrument ID: MSD8 Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	254907	10.520	336290	6.860	129273	12.540
UPPER LIMIT	356870	10.854	470806	7.186	180983	12.866
LOWER LIMIT	152945	10.194	201774	6.526	77564	12.206
EPA SAMPLE NO.						

IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/02/2014 11/02/2014

EPA Sample No.(VSTD#####): VSTD005AF Date Analyzed: 11/03/2014

Lab File ID (Standard): 81103B06 Time Analyzed: 1242

Instrument ID: MSD8 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	236172	10.520	316434	6.860	119241	12.540
	UPPER LIMIT	330641	10.854	443008	7.186	166938	12.866
	LOWER LIMIT	141704	10.194	189861	6.526	71545	12.206
	EPA SAMPLE NO.						
01	VBLKAF	234823	10.520	315438	6.840	108590	12.54
02	E5AS8MS	322013	10.520	418575	6.860	160855	12.54
03	E5AS8MSD	247112	10.520	318804	6.860	116589	12.54
04	VIBLK90	212077	10.520	273458	6.860	98054	12.54
05	VIBLK91	184456	10.520	263284	6.860	80084	12.54
06	E5AS8	334769 *	10.520	421486	6.860	156752	12.54
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IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/02/2014 11/02/2014

EPA Sample No. (VSTD#####): VSTD005AG Date Analyzed: 11/03/2014

Lab File ID (Standard): 81103C20 Time Analyzed: 2311

Instrument ID: MSD8 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	188301	10.520	256646	6.860	94935	12.540
	UPPER LIMIT	263622	10.854	359305	7.186	132909	12.866
	LOWER LIMIT	112981	10.194	153988	6.526	56961	12.206
	EPA SAMPLE NO.						
01	VBLKAF	234823	10.520	315438	6.840	108590	12.54
02	E5AS8MS	322013	10.520	418575	6.860	160855	12.54
03	E5AS8MSD	247112	10.520	318804	6.860	116589	12.54
04	VIBLK90	212077	10.520	273458	6.860	98054	12.54
05	VIBLK91	184456	10.520	263284	6.860	80084	12.54
06	E5AS8	334769 *	10.520	421486	6.860	156752	12.54
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IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/02/2014 11/02/2014

EPA Sample No.(VSTD#####): VSTD005AQ Date Analyzed: 11/04/2014

Lab File ID (Standard): 81104A03A Time Analyzed: 0956

Instrument ID: MSD8 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	209067	10.520	278859	6.860	111419	12.540
	UPPER LIMIT	292694	10.854	390403	7.186	155987	12.866
	LOWER LIMIT	125441	10.194	167316	6.526	66852	12.206
	EPA SAMPLE NO.						
01	VBLKAQ	190015	10.520	255256	6.860	91753	12.54
02	E5AS8RE	284096	10.520	356442	6.860	137682	12.54
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IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/02/2014 11/02/2014

EPA Sample No.(VSTD#####): VSTD005AT Date Analyzed: 11/04/2014

Lab File ID (Standard): 81104A22 Time Analyzed: 1921

Instrument ID: MSD8 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	168548	10.520	225896	6.860	86088	12.540
	UPPER LIMIT	235968	10.854	316255	7.186	120524	12.866
	LOWER LIMIT	101129	10.194	135538	6.526	51653	12.206
	EPA SAMPLE NO.						
01	VBLKAQ	190015	10.520	255256	6.860	91753	12.54
02	E5AS8RE	284096	10.520	356442	6.860	137682	12.54
03							
04							
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IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/02/2014 11/02/2014

EPA Sample No.(VSTD#####): VSTD005BJ Date Analyzed: 11/06/2014

Lab File ID (Standard): 81106B02 Time Analyzed: 1325

Instrument ID: MSD8 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	176306	10.520	225997	6.860	95754	12.540
	UPPER LIMIT	246829	10.854	316396	7.186	134056	12.866
	LOWER LIMIT	105784	10.194	135599	6.526	57453	12.206
	EPA SAMPLE NO.						
01	VBLKBJ	151127	10.520	215570	6.860	70335	12.54
02	E5AW6	156866	10.520	201566	6.860	72027	12.54
03	E5AW7	212721	10.520	271971	6.860	103767	12.54
04							
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IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/02/2014 11/02/2014

EPA Sample No.(VSTD#####): VSTD005BQ Date Analyzed: 11/06/2014

Lab File ID (Standard): 81106B18 Time Analyzed: 2154

Instrument ID: MSD8 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	196537	10.520	273066	6.860	102825	12.540
	UPPER LIMIT	275152	10.854	382293	7.186	143955	12.866
	LOWER LIMIT	117923	10.194	163840	6.526	61695	12.206
	EPA SAMPLE NO.						
01	VBLKBJ	151127	10.520	215570	6.860	70335	12.54
02	E5AW6	156866	10.520	201566	6.860	72027	12.54
03	E5AW7	212721	10.520	271971	6.860	103767	12.54
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IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/08/2014 11/08/2014

EPA Sample No. (VSTD#####): VSTD005DP Date Analyzed: 11/11/2014

Lab File ID (Standard): 81111A02 Time Analyzed: 0920

Instrument ID: MSD8 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	443104	10.520	606999	6.860	220839	12.540
	UPPER LIMIT	620346	10.854	849799	7.186	309175	12.866
	LOWER LIMIT	265863	10.194	364200	6.526	132504	12.206
	EPA SAMPLE NO.						
01	VBLKDP	347674	10.520	494799	6.860	183982	12.54
02	VHBLK01	398918	10.520	520629	6.860	200529	12.54
03							
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IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 11/08/2014 11/08/2014

EPA Sample No.(VSTD#####): VSTD005DU Date Analyzed: 11/11/2014

Lab File ID (Standard): 81111A23 Time Analyzed: 1956

Instrument ID: MSD8 Heated Purge: (Y/N) N

		IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	352587	10.520	496248	6.860	182405	12.540
	UPPER LIMIT	493622	10.854	694748	7.186	255367	12.866
	LOWER LIMIT	211553	10.194	297749	6.526	109443	12.206
	EPA SAMPLE NO.						
01	VBLKDP	347674	10.520	494799	6.860	183982	12.54
02	VHBLK01	398918	10.520	520629	6.860	200529	12.54
03							
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IS1 (CBZ) = Chlorobenzene-d_5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d_4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AS8

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C02

Level: (TRACE/LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

GC Column: DB-624 ID: 0.25 (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	8.3	
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	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

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AS8

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C02

Level: (TRACE/LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

GC Column: DB-624 ID: 0.25 (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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
E5AS8

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C02

Level: (TRACE or LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

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/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.
E5AS8MS

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001MS

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C03

Level: (TRACE/LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

GC Column: DB-624 ID: 0.25 (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	9.0	
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	2.6	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	10 ~~1.6~~	~~J~~ U
75-15-0	Carbon disulfide	0.50	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	0.087	J
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	3.0	
107-06-2	1,2-Dichloroethane	0.50	U

HB

SR 12/10/14

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AS8MS

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001MS

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C03

Level: (TRACE/LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

GC Column: DB-624 ID: 0.25 (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	3.3	
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	3.4	
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	3.9	
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

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AS8MSD

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001MD

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C04

Level: (TRACE/LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

GC Column: DB-624 ID: 0.25 (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	12	
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	3.4	
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	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	3.9	
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AS8MSD

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001MD

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C04

Level: (TRACE/LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

GC Column: DB-624 ID: 0.25 (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	4.3	
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	4.5	
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	5.2	
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

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AS8RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81104A05

Level: (TRACE/LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/04/2014

GC Column: DB-624 ID: 0.25 (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	8.0	
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	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

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AS8RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81104A05

Level: (TRACE/LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/04/2014

GC Column: DB-624 ID: 0.25 (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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
E5AS8RE

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81104A05

Level: (TRACE or LOW/MED) TRACE Date Received: 10/25/2014

% Moisture: not dec. _____ Date Analyzed: 11/04/2014

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/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.
E5AW6

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B09

Level: (TRACE/LOW/MED) TRACE Date Received: 10/29/2014

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

GC Column: DB-624 ID: 0.25 (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	10 ~~1.6~~	~~J~~ 4
75-15-0	Carbon disulfide	0.50	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

HB

ST 12/10/14

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AW6

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B09

Level: (TRACE/LOW/MED) TRACE Date Received: 10/29/2014

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

GC Column: DB-624 ID: 0.25 (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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
E5AW6

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-003

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B09

Level: (TRACE or LOW/MED) TRACE Date Received: 10/29/2014

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

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/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.
E5AW7

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B10

Level: (TRACE/LOW/MED) TRACE Date Received: 10/29/2014

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

GC Column: DB-624 ID: 0.25 (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	10 ~~1.3~~	~~J~~ U
75-15-0	Carbon disulfide	0.50	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

KB

GT 12/10/14

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E5AW7

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B10

Level: (TRACE/LOW/MED) TRACE Date Received: 10/29/2014

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

GC Column: DB-624 ID: 0.25 (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	0.22	J
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	0.14	J
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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
E5AW7

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B10

Level: (TRACE or LOW/MED) TRACE Date Received: 10/29/2014

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
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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.
VBLKAF

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ59839-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C01

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

GC Column: DB-624 ID: 0.25 (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	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

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKAF

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ59839-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C01

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

GC Column: DB-624 ID: 0.25 (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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKAF

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ59839-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81103C01

Level: (TRACE or LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/03/2014

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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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.
VBLKAQ

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ59915-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81104A04

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/04/2014

GC Column: DB-624 ID: 0.25 (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	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

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKAQ

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ59915-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81104A04

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/04/2014

GC Column: DB-624 ID: 0.25 (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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKAQ

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ59915-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81104A04

Level: (TRACE or LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/04/2014

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
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05					
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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.
VBLKBJ

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ60192-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B04

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

GC Column: DB-624 ID: 0.25 (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	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.071	J
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

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKBJ

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ60192-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B04

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

GC Column: DB-624 ID: 0.25 (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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKBJ

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ60192-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81106B04

Level: (TRACE or LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/06/2014

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/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.
VBLKDP

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ60586-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81111A05

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/11/2014

GC Column: DB-624 ID: 0.25 (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	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

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKDP

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ60586-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81111A05

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/11/2014

GC Column: DB-624 ID: 0.25 (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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKDP

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PQ60586-001

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81111A05

Level: (TRACE or LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/11/2014

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/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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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.
VHBLK01

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81111A10a

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/11/2014

GC Column: DB-624 ID: 0.25 (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	1.9	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.13	J
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

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VHBLK01

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81111A10a

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/11/2014

GC Column: DB-624 ID: 0.25 (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

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VHBLK01

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44782 Mod. Ref No.: _____ SDG No.: E5AS8

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PJ25007-002

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81111A10a

Level: (TRACE or LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/11/2014

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/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.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ~ REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Sample Delivery Group: E5A5A CERCLIS No: IN N000510104 29

Case No: 44782 Site Name/Location: West Vermont Street (IN)

Contractor or EPA Lab: Shealey Data User: Tetra Tech

No. of Samples: 3 Date Sampled or Date Received: 19 Nov 2014

Have Chain-of-Custody records been received? Yes X No_____
Have traffic reports or packing lists been received? Yes X No _____
If no, are traffic reports or packing list numbers written on the Chain-of-Custody Record?
Yes ____ No ____
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____
_____ _____ _____ _____

Are basic data forms in? Yes X No____
No of samples claimed: 3 No. of samples received:_____

Received by: [illegible] Date: 19 Nov 2014

Received by LSSS: [illegible] Date: 1 Dec 2014

Review started: 12-10-2014 Reviewer Signature: Stephanie Tebin

Total time spent on review: 6 hrs Date review completed: 12-18-14

Copied by: A. C. Harvey Date: December 19, 2014

Mailed to user by: [illegible] Date: 23 Dec 2014

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffin, Data Mgmt. Coordinator, Region V, ML-10C

Data received by: _____ Date:_____

Data review received by: _____ Date:_____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] T if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] T if OK
Dioxin data Complete [ ] Suitable for Intended Purpose [ ] T if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] T if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Date:_____

Edit History Report

Case No: 44782 Contract: EPW11035 SDG No: E5AS8 Lab Code: SHEALY

Method: VOA_Trace

Sample	Matrix	Analyte Name	Data Field	Old Value	New Value	User	Edit Date Time	Global
E5AS8MS	Water	Acetone	Validated Result	5.0	10	Steffanie Tobin	12/11/14 10:36 AM	
E5AW6	Water	Acetone	Validated Result	5.0	10	Steffanie Tobin	12/11/14 10:37 AM	
E5AW7	Water	Acetone	Validated Result	5.0	10	Steffanie Tobin	12/11/14 10:37 AM	