

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-58553-1
Client Project/Site: Liberty Oil #38
Revision: 1

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart



Authorized for release by:
7/18/2013 1:43:16 PM

Ozzy Burgos, Project Manager I
ozzy.burgos@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

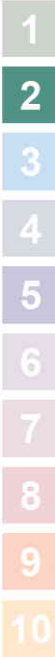


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	14

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-58553-1	MW-1	Water	06/25/13 12:24	06/26/13 13:20
460-58553-2	MW-2	Water	06/25/13 12:41	06/26/13 13:20
460-58553-3	MW-4	Water	06/25/13 14:25	06/26/13 13:20
460-58553-4	MW-5	Water	06/25/13 13:00	06/26/13 13:20
460-58553-5	MW-6	Water	06/25/13 13:15	06/26/13 13:20
460-58553-6	MW-9	Water	06/25/13 13:38	06/26/13 13:20
460-58553-7	MW-10	Water	06/25/13 13:58	06/26/13 13:20

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Job ID: 460-58553-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-58553-1

Comments

No additional comments.

Revised to the MDL.

Receipt

The samples were received on 6/26/2013 1:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7° C.

GC/MS VOA

Method(s) 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-58553-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Benzene and the MSD recovery of 1,2,4-Trimethylbenzene for batch 168486 were outside control limits due to the high concentrations present in the parent sample relative to the spike amounts. The associated laboratory control sample (LCS) recoveries met acceptance criteria.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Field Service / Mobile Lab

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Client Sample ID: MW-1

Lab Sample ID: 460-58553-1

Date Collected: 06/25/13 12:24

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			07/01/13 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	121		67 - 144					07/01/13 17:44	1
1,2-Dichloroethane-d4 (Surr)	88		58 - 144					07/01/13 17:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.14	ug/L			06/28/13 13:28	1
Benzene	ND		1.0	0.080	ug/L			06/28/13 13:28	1
Ethylbenzene	ND		1.0	0.10	ug/L			06/28/13 13:28	1
Toluene	ND		1.0	0.15	ug/L			06/28/13 13:28	1
Xylenes, Total	ND		3.0	0.13	ug/L			06/28/13 13:28	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			06/28/13 13:28	1
Naphthalene	ND		1.0	0.29	ug/L			06/28/13 13:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.13	ug/L			06/28/13 13:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.15	ug/L			06/28/13 13:28	1
Isopropylbenzene	ND		1.0	0.080	ug/L			06/28/13 13:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 130					06/28/13 13:28	1
Bromofluorobenzene	97		70 - 130					06/28/13 13:28	1
Toluene-d8 (Surr)	100		70 - 130					06/28/13 13:28	1
Dibromofluoromethane (Surr)	95		70 - 130					06/28/13 13:28	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/03/13 12:02	07/03/13 13:32	5

Client Sample ID: MW-2

Lab Sample ID: 460-58553-2

Date Collected: 06/25/13 12:41

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			07/01/13 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	122		67 - 144					07/01/13 18:06	1
1,2-Dichloroethane-d4 (Surr)	88		58 - 144					07/01/13 18:06	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.14	ug/L			06/28/13 13:50	1
Benzene	ND		1.0	0.080	ug/L			06/28/13 13:50	1
Ethylbenzene	ND		1.0	0.10	ug/L			06/28/13 13:50	1
Toluene	ND		1.0	0.15	ug/L			06/28/13 13:50	1
Xylenes, Total	ND		3.0	0.13	ug/L			06/28/13 13:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			06/28/13 13:50	1
Naphthalene	ND		1.0	0.29	ug/L			06/28/13 13:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.13	ug/L			06/28/13 13:50	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Client Sample ID: MW-2

Lab Sample ID: 460-58553-2

Date Collected: 06/25/13 12:41

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0	0.15	ug/L			06/28/13 13:50	1
Isopropylbenzene	ND		1.0	0.080	ug/L			06/28/13 13:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 130					06/28/13 13:50	1
Bromofluorobenzene	96		70 - 130					06/28/13 13:50	1
Toluene-d8 (Surr)	98		70 - 130					06/28/13 13:50	1
Dibromofluoromethane (Surr)	94		70 - 130					06/28/13 13:50	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/03/13 12:02	07/03/13 13:40	5

Client Sample ID: MW-4

Lab Sample ID: 460-58553-3

Date Collected: 06/25/13 14:25

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			07/01/13 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	109		67 - 144					07/01/13 18:29	1
1,2-Dichloroethane-d4 (Surr)	71		58 - 144					07/01/13 18:29	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	80		1.0	0.14	ug/L			06/28/13 14:12	1
Benzene	300		1.0	0.080	ug/L			06/28/13 14:12	1
Ethylbenzene	220		1.0	0.10	ug/L			06/28/13 14:12	1
Toluene	19		1.0	0.15	ug/L			06/28/13 14:12	1
Xylenes, Total	52		3.0	0.13	ug/L			06/28/13 14:12	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			06/28/13 14:12	1
Naphthalene	7.0		1.0	0.29	ug/L			06/28/13 14:12	1
1,2,4-Trimethylbenzene	110		1.0	0.13	ug/L			06/28/13 14:12	1
1,3,5-Trimethylbenzene	3.7		1.0	0.15	ug/L			06/28/13 14:12	1
Isopropylbenzene	18		1.0	0.080	ug/L			06/28/13 14:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 130					06/28/13 14:12	1
Bromofluorobenzene	100		70 - 130					06/28/13 14:12	1
Toluene-d8 (Surr)	101		70 - 130					06/28/13 14:12	1
Dibromofluoromethane (Surr)	91		70 - 130					06/28/13 14:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/03/13 12:02	07/03/13 13:44	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Client Sample ID: MW-5

Lab Sample ID: 460-58553-4

Date Collected: 06/25/13 13:00

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			07/01/13 18:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	120		67 - 144					07/01/13 18:52	1
1,2-Dichloroethane-d4 (Surr)	81		58 - 144					07/01/13 18:52	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.14	ug/L			06/28/13 14:34	1
Benzene	ND		1.0	0.080	ug/L			06/28/13 14:34	1
Ethylbenzene	ND		1.0	0.10	ug/L			06/28/13 14:34	1
Toluene	ND		1.0	0.15	ug/L			06/28/13 14:34	1
Xylenes, Total	ND		3.0	0.13	ug/L			06/28/13 14:34	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			06/28/13 14:34	1
Naphthalene	ND		1.0	0.29	ug/L			06/28/13 14:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.13	ug/L			06/28/13 14:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.15	ug/L			06/28/13 14:34	1
Isopropylbenzene	ND		1.0	0.080	ug/L			06/28/13 14:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130					06/28/13 14:34	1
Bromofluorobenzene	100		70 - 130					06/28/13 14:34	1
Toluene-d8 (Surr)	99		70 - 130					06/28/13 14:34	1
Dibromofluoromethane (Surr)	97		70 - 130					06/28/13 14:34	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/03/13 12:02	07/03/13 13:50	5

Client Sample ID: MW-6

Lab Sample ID: 460-58553-5

Date Collected: 06/25/13 13:15

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			07/01/13 19:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	124		67 - 144					07/01/13 19:14	1
1,2-Dichloroethane-d4 (Surr)	85		58 - 144					07/01/13 19:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.14	ug/L			06/28/13 14:56	1
Benzene	ND		1.0	0.080	ug/L			06/28/13 14:56	1
Ethylbenzene	ND		1.0	0.10	ug/L			06/28/13 14:56	1
Toluene	ND		1.0	0.15	ug/L			06/28/13 14:56	1
Xylenes, Total	ND		3.0	0.13	ug/L			06/28/13 14:56	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			06/28/13 14:56	1
Naphthalene	ND		1.0	0.29	ug/L			06/28/13 14:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.13	ug/L			06/28/13 14:56	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Client Sample ID: MW-6

Lab Sample ID: 460-58553-5

Date Collected: 06/25/13 13:15

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0	0.15	ug/L			06/28/13 14:56	1
Isopropylbenzene	ND		1.0	0.080	ug/L			06/28/13 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 130					06/28/13 14:56	1
Bromofluorobenzene	97		70 - 130					06/28/13 14:56	1
Toluene-d8 (Surr)	97		70 - 130					06/28/13 14:56	1
Dibromofluoromethane (Surr)	93		70 - 130					06/28/13 14:56	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	27		1.5		ug/L		07/03/13 12:02	07/03/13 13:53	5

Client Sample ID: MW-9

Lab Sample ID: 460-58553-6

Date Collected: 06/25/13 13:38

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			07/01/13 19:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		67 - 144					07/01/13 19:37	1
1,2-Dichloroethane-d4 (Surr)	76		58 - 144					07/01/13 19:37	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	17		1.0	0.14	ug/L			06/28/13 16:51	1
Benzene	170		1.0	0.080	ug/L			06/28/13 16:51	1
Ethylbenzene	17		1.0	0.10	ug/L			06/28/13 16:51	1
Toluene	1.4		1.0	0.15	ug/L			06/28/13 16:51	1
Xylenes, Total	1.9 J		3.0	0.13	ug/L			06/28/13 16:51	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			06/28/13 16:51	1
Naphthalene	0.67 J		1.0	0.29	ug/L			06/28/13 16:51	1
1,2,4-Trimethylbenzene	0.66 J		1.0	0.13	ug/L			06/28/13 16:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.15	ug/L			06/28/13 16:51	1
Isopropylbenzene	19		1.0	0.080	ug/L			06/28/13 16:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 130					06/28/13 16:51	1
Bromofluorobenzene	97		70 - 130					06/28/13 16:51	1
Toluene-d8 (Surr)	99		70 - 130					06/28/13 16:51	1
Dibromofluoromethane (Surr)	93		70 - 130					06/28/13 16:51	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/03/13 12:02	07/03/13 14:04	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Client Sample ID: MW-10

Lab Sample ID: 460-58553-7

Date Collected: 06/25/13 13:58

Matrix: Water

Date Received: 06/26/13 13:20

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			07/01/13 20:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 144					07/01/13 20:00	1
1,2-Dichloroethane-d4 (Surr)	84		58 - 144					07/01/13 20:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	160		10	1.4	ug/L			07/01/13 19:43	10
Benzene	2800		10	0.80	ug/L			07/01/13 19:43	10
Ethylbenzene	840		10	1.0	ug/L			07/01/13 19:43	10
Toluene	34		10	1.5	ug/L			07/01/13 19:43	10
Xylenes, Total	630		30	1.3	ug/L			07/01/13 19:43	10
1,2-Dichloroethane	ND		10	1.9	ug/L			07/01/13 19:43	10
Naphthalene	210		10	2.9	ug/L			07/01/13 19:43	10
1,2,4-Trimethylbenzene	990		10	1.3	ug/L			07/01/13 19:43	10
1,3,5-Trimethylbenzene	150		10	1.5	ug/L			07/01/13 19:43	10
Isopropylbenzene	90		10	0.80	ug/L			07/01/13 19:43	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 130					07/01/13 19:43	10
Bromofluorobenzene	105		70 - 130					07/01/13 19:43	10
Toluene-d8 (Surr)	104		70 - 130					07/01/13 19:43	10
Dibromofluoromethane (Surr)	92		70 - 130					07/01/13 19:43	10

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/03/13 12:02	07/03/13 14:08	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-13
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	04-30-14
New Jersey	NELAP	2	12028	06-30-14
New York	NELAP	2	11452	04-01-14
Pennsylvania	NELAP	3	68-00522	02-28-14
Rhode Island	State Program	1	LAO00132	12-30-13
USDA	Federal		NJCA-003-08	03-11-14

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-58553-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TestAmerica

CHAIN OF CUS

460-58553 Chain of Custody

1008 W. Ninth Avenue
King of Prussia, PA 19406
(610) 337-9992
FAX (610) 337-9939

THE LEADER IN ENVIRONMENTAL TESTING

Client: <u>Centric Point Tank Services</u>		Bill To: <u>Same</u>		TAT: <input checked="" type="radio"/> STD <input checked="" type="radio"/> 4 DAY <input type="radio"/> 3 DAY <input type="radio"/> 2 DAY <input type="radio"/> 1 DAY <input type="radio"/> 24 HRS	
Address: <u>530 E Benjamin Franklin Hwy</u>		Address:		Received: <input type="checkbox"/> ice <input type="checkbox"/> ambient	
Douglasville GA 30118		State & Program: <u>PAIST</u>		Deliverable Package: <input type="checkbox"/> NO <input type="checkbox"/> YES	
Report to Rachel Burkart Phone #: (404) 335-9977		Phone #: ()		Temp. Upon Receipt: <u>37</u>	
E-mail: <u>ourea@centricpoint.com</u> Fax #: ()		Fax #: ()		If Yes, please explain:	
Project Name: <u>Liberty Oil #38</u>		Project #/PO#: <u>08-12-4292</u>		Project #/PO#: <u>08-12-4292</u>	
Sampler: <u>Rachel Burkart</u>		FIELD ID, LOCATION		ANALYSIS TYPE	
1 MW-1		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1224</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
2 MW-2		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1241</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
3 MW-4		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1425</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
4 MW-5		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1300</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
5 MW-6		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1345</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
6 MW-9		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1338</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
7 MW-10		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1338</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
8		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1338</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
9		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1338</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
10		DATE COLLECTED: <u>4/25/13</u> TIME COLLECTED: <u>1338</u> SAMPLE MATRIX: <u>GW</u>		# of Bottles Preservative Used: <u>3</u> TOTAL # OF BOTTLES: <u>15</u> SAMPLES FIELD FILTERED: <u>YES</u> UNLOADED GASOLINE	
RELINQUISHED		DATE: <u>4/25/13</u> RECEIVED: <u>4/26/13</u> TIME: <u>1300</u>		RELINQUISHED	
RELINQUISHED		DATE: <u>4/25/13</u> RECEIVED: <u>4/26/13</u> TIME: <u>1300</u>		RELINQUISHED	
COMMENTS:		DATE: <u>4/25/13</u> RECEIVED: <u>4/26/13</u> TIME: <u>1300</u>		RELINQUISHED	

5-Day RUSH

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-58553-1

Login Number: 58553

List Source: TestAmerica Edison

List Number: 1

Creator: Visconti, Caitlyn A

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7 IR#5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-63026-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart



Authorized for release by:
9/23/2013 1:34:00 PM

Ozzy Burgos, Project Manager I
ozzy.burgos@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

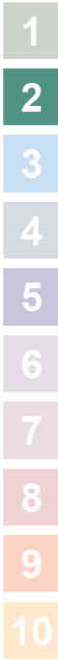


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	15

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-63026-1	MW-1	Water	09/13/13 11:56	09/16/13 10:30
460-63026-2	MW-2	Water	09/13/13 11:32	09/16/13 10:30
460-63026-3	MW-4	Water	09/13/13 13:11	09/16/13 10:30
460-63026-4	MW-5	Water	09/13/13 11:08	09/16/13 10:30
460-63026-5	MW-6	Water	09/13/13 10:50	09/16/13 10:30
460-63026-6	MW-9	Water	09/13/13 12:22	09/16/13 10:30
460-63026-7	MW-10	Water	09/13/13 12:41	09/16/13 10:30

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Job ID: 460-63026-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative 460-63026-1

Comments

No additional comments.

Receipt

The samples were received on 9/16/2013 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0° C.

GC/MS VOA

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW2-02-17 (460-62990-10). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 182118 were outside control limits for multiple compounds. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-16 (460-63026-7), MW-4 (460-63026-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Field Service / Mobile Lab

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Client Sample ID: MW-1

Date Collected: 09/13/13 11:56

Date Received: 09/16/13 10:30

Lab Sample ID: 460-63026-1

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			09/19/13 11:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	87		67 - 144					09/19/13 11:13	1
1,2-Dichloroethane-d4 (Surr)	114		58 - 144					09/19/13 11:13	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/19/13 18:42	1
1,2-Dichloroethane	ND		1.0		ug/L			09/19/13 18:42	1
Ethylbenzene	ND		1.0		ug/L			09/19/13 18:42	1
Isopropylbenzene	ND		1.0		ug/L			09/19/13 18:42	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/19/13 18:42	1
Naphthalene	ND		1.0		ug/L			09/19/13 18:42	1
Toluene	ND		1.0		ug/L			09/19/13 18:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/19/13 18:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/19/13 18:42	1
Xylenes, Total	ND		3.0		ug/L			09/19/13 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130					09/19/13 18:42	1
Bromofluorobenzene	93		70 - 130					09/19/13 18:42	1
Toluene-d8 (Surr)	98		70 - 130					09/19/13 18:42	1
Dibromofluoromethane (Surr)	103		70 - 130					09/19/13 18:42	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/18/13 16:19	09/18/13 22:07	5

Client Sample ID: MW-2

Date Collected: 09/13/13 11:32

Date Received: 09/16/13 10:30

Lab Sample ID: 460-63026-2

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			09/19/13 11:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	83		67 - 144					09/19/13 11:38	1
1,2-Dichloroethane-d4 (Surr)	110		58 - 144					09/19/13 11:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/19/13 19:06	1
1,2-Dichloroethane	ND		1.0		ug/L			09/19/13 19:06	1
Ethylbenzene	ND		1.0		ug/L			09/19/13 19:06	1
Isopropylbenzene	ND		1.0		ug/L			09/19/13 19:06	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/19/13 19:06	1
Naphthalene	ND		1.0		ug/L			09/19/13 19:06	1
Toluene	ND		1.0		ug/L			09/19/13 19:06	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/19/13 19:06	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Client Sample ID: MW-2

Lab Sample ID: 460-63026-2

Date Collected: 09/13/13 11:32

Matrix: Water

Date Received: 09/16/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/19/13 19:06	1
Xylenes, Total	ND		3.0		ug/L			09/19/13 19:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130					09/19/13 19:06	1
Bromofluorobenzene	92		70 - 130					09/19/13 19:06	1
Toluene-d8 (Surr)	98		70 - 130					09/19/13 19:06	1
Dibromofluoromethane (Surr)	102		70 - 130					09/19/13 19:06	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/18/13 16:19	09/18/13 22:11	5

Client Sample ID: MW-4

Lab Sample ID: 460-63026-3

Date Collected: 09/13/13 13:11

Matrix: Water

Date Received: 09/16/13 10:30

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			09/19/13 12:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		67 - 144					09/19/13 12:04	1
1,2-Dichloroethane-d4 (Surr)	93		58 - 144					09/19/13 12:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	230		2.0		ug/L			09/20/13 00:36	2
1,2-Dichloroethane	ND		2.0		ug/L			09/20/13 00:36	2
Ethylbenzene	230		2.0		ug/L			09/20/13 00:36	2
Isopropylbenzene	18		2.0		ug/L			09/20/13 00:36	2
Methyl tert-butyl ether	51		2.0		ug/L			09/20/13 00:36	2
Naphthalene	47		2.0		ug/L			09/20/13 00:36	2
Toluene	170		2.0		ug/L			09/20/13 00:36	2
1,2,4-Trimethylbenzene	350		2.0		ug/L			09/20/13 00:36	2
1,3,5-Trimethylbenzene	84		2.0		ug/L			09/20/13 00:36	2
Xylenes, Total	720		6.0		ug/L			09/20/13 00:36	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130					09/20/13 00:36	2
Bromofluorobenzene	97		70 - 130					09/20/13 00:36	2
Toluene-d8 (Surr)	96		70 - 130					09/20/13 00:36	2
Dibromofluoromethane (Surr)	95		70 - 130					09/20/13 00:36	2

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/18/13 16:19	09/18/13 22:16	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Client Sample ID: MW-5

Lab Sample ID: 460-63026-4

Date Collected: 09/13/13 11:08

Matrix: Water

Date Received: 09/16/13 10:30

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			09/19/13 12:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		67 - 144					09/19/13 12:29	1
1,2-Dichloroethane-d4 (Surr)	112		58 - 144					09/19/13 12:29	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/19/13 23:49	1
1,2-Dichloroethane	ND		1.0		ug/L			09/19/13 23:49	1
Ethylbenzene	ND		1.0		ug/L			09/19/13 23:49	1
Isopropylbenzene	ND		1.0		ug/L			09/19/13 23:49	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/19/13 23:49	1
Naphthalene	ND		1.0		ug/L			09/19/13 23:49	1
Toluene	ND		1.0		ug/L			09/19/13 23:49	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/19/13 23:49	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/19/13 23:49	1
Xylenes, Total	ND		3.0		ug/L			09/19/13 23:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		70 - 130					09/19/13 23:49	1
Bromofluorobenzene	99		70 - 130					09/19/13 23:49	1
Toluene-d8 (Surr)	107		70 - 130					09/19/13 23:49	1
Dibromofluoromethane (Surr)	115		70 - 130					09/19/13 23:49	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/18/13 16:19	09/18/13 23:51	5

Client Sample ID: MW-6

Lab Sample ID: 460-63026-5

Date Collected: 09/13/13 10:50

Matrix: Water

Date Received: 09/16/13 10:30

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			09/19/13 12:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		67 - 144					09/19/13 12:55	1
1,2-Dichloroethane-d4 (Surr)	132		58 - 144					09/19/13 12:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/20/13 00:12	1
1,2-Dichloroethane	ND		1.0		ug/L			09/20/13 00:12	1
Ethylbenzene	ND		1.0		ug/L			09/20/13 00:12	1
Isopropylbenzene	ND		1.0		ug/L			09/20/13 00:12	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/20/13 00:12	1
Naphthalene	ND		1.0		ug/L			09/20/13 00:12	1
Toluene	ND		1.0		ug/L			09/20/13 00:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/20/13 00:12	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Client Sample ID: MW-6

Lab Sample ID: 460-63026-5

Date Collected: 09/13/13 10:50

Matrix: Water

Date Received: 09/16/13 10:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/20/13 00:12	1
Xylenes, Total	ND		3.0		ug/L			09/20/13 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 130					09/20/13 00:12	1
Bromofluorobenzene	94		70 - 130					09/20/13 00:12	1
Toluene-d8 (Surr)	98		70 - 130					09/20/13 00:12	1
Dibromofluoromethane (Surr)	101		70 - 130					09/20/13 00:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	52		1.5		ug/L		09/18/13 16:19	09/18/13 23:55	5

Client Sample ID: MW-9

Lab Sample ID: 460-63026-6

Date Collected: 09/13/13 12:22

Matrix: Water

Date Received: 09/16/13 10:30

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			09/19/13 13:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	117		67 - 144					09/19/13 13:20	1
1,2-Dichloroethane-d4 (Surr)	75		58 - 144					09/19/13 13:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	18		1.0		ug/L			09/20/13 01:23	1
1,2-Dichloroethane	ND		1.0		ug/L			09/20/13 01:23	1
Ethylbenzene	ND		1.0		ug/L			09/20/13 01:23	1
Isopropylbenzene	8.1		1.0		ug/L			09/20/13 01:23	1
Methyl tert-butyl ether	5.1		1.0		ug/L			09/20/13 01:23	1
Naphthalene	1.0		1.0		ug/L			09/20/13 01:23	1
Toluene	ND		1.0		ug/L			09/20/13 01:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/20/13 01:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/20/13 01:23	1
Xylenes, Total	ND		3.0		ug/L			09/20/13 01:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130					09/20/13 01:23	1
Bromofluorobenzene	92		70 - 130					09/20/13 01:23	1
Toluene-d8 (Surr)	96		70 - 130					09/20/13 01:23	1
Dibromofluoromethane (Surr)	98		70 - 130					09/20/13 01:23	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/18/13 16:19	09/18/13 23:34	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Client Sample ID: MW-10

Lab Sample ID: 460-63026-7

Date Collected: 09/13/13 12:41

Matrix: Water

Date Received: 09/16/13 10:30

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			09/19/13 10:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	115		67 - 144					09/19/13 10:47	1
1,2-Dichloroethane-d4 (Surr)	83		58 - 144					09/19/13 10:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2900		10		ug/L			09/20/13 00:59	10
1,2-Dichloroethane	ND		10		ug/L			09/20/13 00:59	10
Ethylbenzene	770		10		ug/L			09/20/13 00:59	10
Isopropylbenzene	68		10		ug/L			09/20/13 00:59	10
Methyl tert-butyl ether	160		10		ug/L			09/20/13 00:59	10
Naphthalene	180		10		ug/L			09/20/13 00:59	10
Toluene	48		10		ug/L			09/20/13 00:59	10
1,2,4-Trimethylbenzene	780		10		ug/L			09/20/13 00:59	10
1,3,5-Trimethylbenzene	170		10		ug/L			09/20/13 00:59	10
Xylenes, Total	750		30		ug/L			09/20/13 00:59	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130					09/20/13 00:59	10
Bromofluorobenzene	93		70 - 130					09/20/13 00:59	10
Toluene-d8 (Surr)	96		70 - 130					09/20/13 00:59	10
Dibromofluoromethane (Surr)	93		70 - 130					09/20/13 00:59	10

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/18/13 16:19	09/18/13 23:39	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-13
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	04-30-14
New Jersey	NELAP	2	12028	06-30-14
New York	NELAP	2	11452	04-01-14
Pennsylvania	NELAP	3	68-00522	02-28-14
Rhode Island	State Program	1	LAO00132	12-30-13
USDA	Federal		NJCA-003-08	03-11-14

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-63026-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

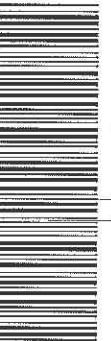
Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TestAmerica

CHAIN OF CUS

THE LEADER IN ENVIRONMENTAL TESTING



460-63026 Chain of Custody

1008 W. Ninth Avenue
King of Prussia, PA 19406
(610) 337-9992
FAX (610) 337-9939

Client: <u>Center for Tank Services</u>		Bill To: <u>Same</u>		TAT: <u>4 DAY</u>		DATE RESULTS NEEDED: <u>24 HRS.</u>	
Address: <u>536 E. Lexington Franklin Hwy</u>		Address:		Received: <input type="checkbox"/> ice <input type="checkbox"/> ambient		DATE RESULTS NEEDED:	
Report to: <u>Donal Ross</u>		State & Program: <u>PA/ST</u>		Deliverable Package: <input type="checkbox"/> NO <input type="checkbox"/> YES		Temp. Upon Receipt: <u>0.0/0.0</u>	
E-mail: <u>donal.ross@centerfortank.com</u>		Phone #: <u>(610) 337-9977</u>		Fax #: <u>(610) 337-9939</u>		If Yes, please explain:	
Project Name: <u>Liberty CI #23</u>		Project #/PO#: <u>08-12-4252</u>		Project #/PO#: <u>08-12-4252</u>		Project #/PO#: <u>08-12-4252</u>	
Sampler: <u>bucket bucket</u>		FIELD ID, LOCATION		DATE COLLECTED		TIME COLLECTED	
1 MW-1		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
2 MW-2		PID: <u>1132</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
3 MW-4		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
4 MW-5		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
5 MW-6		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
6 MW-9		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
7 MW-10		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
8		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
9		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
10		PID: <u>1131</u>		DATE COLLECTED: <u>11/13/13</u>		TIME COLLECTED: <u>11:56</u>	
RELINQUISHED		RECEIVED		RELINQUISHED		RECEIVED	
DATE/TIME: <u>11/13/13</u>		DATE/TIME: <u>11/13/13</u>		DATE/TIME: <u>11/13/13</u>		DATE/TIME: <u>11/13/13</u>	
SIGNATURE: <u>[Signature]</u>		SIGNATURE: <u>[Signature]</u>		SIGNATURE: <u>[Signature]</u>		SIGNATURE: <u>[Signature]</u>	
RECEIVED		RECEIVED		RECEIVED		RECEIVED	
DATE/TIME: <u>11/13/13</u>		DATE/TIME: <u>11/13/13</u>		DATE/TIME: <u>11/13/13</u>		DATE/TIME: <u>11/13/13</u>	
SIGNATURE: <u>[Signature]</u>		SIGNATURE: <u>[Signature]</u>		SIGNATURE: <u>[Signature]</u>		SIGNATURE: <u>[Signature]</u>	
COMMENTS:		COMMENTS:		COMMENTS:		COMMENTS:	
TAL-4124-450 (0509)		TAL-4124-450 (0509)		TAL-4124-450 (0509)		TAL-4124-450 (0509)	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-63026-1

Login Number: 63026

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-68242-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart



Authorized for release by:
12/20/2013 3:37:49 PM

Ozzy Burgos, Project Manager II
(610)337-9992
ozzy.burgos@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

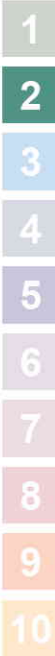


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	15

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-68242-1	MW-1	Water	12/11/13 11:34	12/13/13 09:55
460-68242-2	MW-2	Water	12/11/13 11:50	12/13/13 09:55
460-68242-3	MW-4	Water	12/11/13 13:28	12/13/13 09:55
460-68242-4	MW-5	Water	12/11/13 12:04	12/13/13 09:55
460-68242-5	MW-6	Water	12/11/13 12:18	12/13/13 09:55
460-68242-6	MW-9	Water	12/11/13 12:44	12/13/13 09:55
460-68242-7	MW-10	Water	12/11/13 13:00	12/13/13 09:55

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Job ID: 460-68242-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative 460-68242-1

Comments

No additional comments.

Receipt

The samples were received on 12/13/2013 9:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for batch 198684 recovered outside control limits for the following analyte: 1,2-Dichloroethane. The data have been flagged and reported.

Method(s) 8260B: The matrix spike(MS) recoveries for batch <<198684>> were outside control limits . Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits, except for 1,2-Dichloroethane.

Method(s) 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-68242-7), MW-4 (460-68242-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260B SIM: Internal standard (ISTD) response and surrogate recovery for the following sample was outside control limits: MW-4 (460-68242-3). The sample was re-analyzed with concurring results in batch 198424.

Method(s) 8260B SIM: Surrogate recovery for the following sample was outside control limits: MW-9 (460-68242-6). Evidence of matrix interference is present; the sample was confirmed in batch 198866.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Field Service / Mobile Lab

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Client Sample ID: MW-1

Lab Sample ID: 460-68242-1

Date Collected: 12/11/13 11:34

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			12/18/13 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	72		67 - 144					12/18/13 16:10	1
1,2-Dichloroethane-d4 (Surr)	108		58 - 144					12/18/13 16:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/19/13 10:40	1
1,2-Dichloroethane	ND	*	1.0		ug/L			12/19/13 10:40	1
Ethylbenzene	ND		1.0		ug/L			12/19/13 10:40	1
Isopropylbenzene	ND		1.0		ug/L			12/19/13 10:40	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/19/13 10:40	1
Naphthalene	ND		1.0		ug/L			12/19/13 10:40	1
Toluene	ND		1.0		ug/L			12/19/13 10:40	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/19/13 10:40	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/19/13 10:40	1
Xylenes, Total	ND		3.0		ug/L			12/19/13 10:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		70 - 130					12/19/13 10:40	1
Bromofluorobenzene	97		70 - 130					12/19/13 10:40	1
Toluene-d8 (Surr)	94		70 - 130					12/19/13 10:40	1
Dibromofluoromethane (Surr)	103		70 - 130					12/19/13 10:40	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/13 19:55	12/18/13 23:50	5

Client Sample ID: MW-2

Lab Sample ID: 460-68242-2

Date Collected: 12/11/13 11:50

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			12/18/13 16:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 144					12/18/13 16:36	1
1,2-Dichloroethane-d4 (Surr)	93		58 - 144					12/18/13 16:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/19/13 11:05	1
1,2-Dichloroethane	ND	*	1.0		ug/L			12/19/13 11:05	1
Ethylbenzene	ND		1.0		ug/L			12/19/13 11:05	1
Isopropylbenzene	ND		1.0		ug/L			12/19/13 11:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/19/13 11:05	1
Naphthalene	ND		1.0		ug/L			12/19/13 11:05	1
Toluene	ND		1.0		ug/L			12/19/13 11:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/19/13 11:05	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Client Sample ID: MW-2

Lab Sample ID: 460-68242-2

Date Collected: 12/11/13 11:50

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/19/13 11:05	1
Xylenes, Total	ND		3.0		ug/L			12/19/13 11:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		70 - 130					12/19/13 11:05	1
Bromofluorobenzene	97		70 - 130					12/19/13 11:05	1
Toluene-d8 (Surr)	96		70 - 130					12/19/13 11:05	1
Dibromofluoromethane (Surr)	103		70 - 130					12/19/13 11:05	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/13 19:55	12/18/13 23:58	5

Client Sample ID: MW-4

Lab Sample ID: 460-68242-3

Date Collected: 12/11/13 13:28

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND	*	0.020		ug/L			12/18/13 22:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	36	*X	67 - 144					12/18/13 22:23	1
1,2-Dichloroethane-d4 (Surr)	79		58 - 144					12/18/13 22:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	260		2.0		ug/L			12/19/13 13:13	2
1,2-Dichloroethane	ND	*	2.0		ug/L			12/19/13 13:13	2
Ethylbenzene	160		2.0		ug/L			12/19/13 13:13	2
Isopropylbenzene	13		2.0		ug/L			12/19/13 13:13	2
Methyl tert-butyl ether	49		2.0		ug/L			12/19/13 13:13	2
Naphthalene	29		2.0		ug/L			12/19/13 13:13	2
Toluene	240		2.0		ug/L			12/19/13 13:13	2
1,2,4-Trimethylbenzene	220		2.0		ug/L			12/19/13 13:13	2
1,3,5-Trimethylbenzene	50		2.0		ug/L			12/19/13 13:13	2
Xylenes, Total	420		6.0		ug/L			12/19/13 13:13	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		70 - 130					12/19/13 13:13	2
Bromofluorobenzene	100		70 - 130					12/19/13 13:13	2
Toluene-d8 (Surr)	95		70 - 130					12/19/13 13:13	2
Dibromofluoromethane (Surr)	102		70 - 130					12/19/13 13:13	2

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/13 19:55	12/19/13 00:10	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Client Sample ID: MW-5

Lab Sample ID: 460-68242-4

Date Collected: 12/11/13 12:04

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			12/18/13 17:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	77		67 - 144					12/18/13 17:26	1
1,2-Dichloroethane-d4 (Surr)	101		58 - 144					12/18/13 17:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/19/13 11:31	1
1,2-Dichloroethane	ND	*	1.0		ug/L			12/19/13 11:31	1
Ethylbenzene	ND		1.0		ug/L			12/19/13 11:31	1
Isopropylbenzene	ND		1.0		ug/L			12/19/13 11:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/19/13 11:31	1
Naphthalene	ND		1.0		ug/L			12/19/13 11:31	1
Toluene	ND		1.0		ug/L			12/19/13 11:31	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/19/13 11:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/19/13 11:31	1
Xylenes, Total	ND		3.0		ug/L			12/19/13 11:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		70 - 130					12/19/13 11:31	1
Bromofluorobenzene	96		70 - 130					12/19/13 11:31	1
Toluene-d8 (Surr)	95		70 - 130					12/19/13 11:31	1
Dibromofluoromethane (Surr)	104		70 - 130					12/19/13 11:31	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/13 19:55	12/19/13 00:18	5

Client Sample ID: MW-6

Lab Sample ID: 460-68242-5

Date Collected: 12/11/13 12:18

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			12/18/13 17:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		67 - 144					12/18/13 17:51	1
1,2-Dichloroethane-d4 (Surr)	100		58 - 144					12/18/13 17:51	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/19/13 11:57	1
1,2-Dichloroethane	ND	*	1.0		ug/L			12/19/13 11:57	1
Ethylbenzene	ND		1.0		ug/L			12/19/13 11:57	1
Isopropylbenzene	ND		1.0		ug/L			12/19/13 11:57	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/19/13 11:57	1
Naphthalene	ND		1.0		ug/L			12/19/13 11:57	1
Toluene	ND		1.0		ug/L			12/19/13 11:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/19/13 11:57	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Client Sample ID: MW-6

Lab Sample ID: 460-68242-5

Date Collected: 12/11/13 12:18

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/19/13 11:57	1
Xylenes, Total	ND		3.0		ug/L			12/19/13 11:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		70 - 130					12/19/13 11:57	1
Bromofluorobenzene	97		70 - 130					12/19/13 11:57	1
Toluene-d8 (Surr)	96		70 - 130					12/19/13 11:57	1
Dibromofluoromethane (Surr)	105		70 - 130					12/19/13 11:57	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	35		1.5		ug/L		12/18/13 19:55	12/19/13 00:27	5

Client Sample ID: MW-9

Lab Sample ID: 460-68242-6

Date Collected: 12/11/13 12:44

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			12/19/13 05:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	58	X	67 - 144					12/19/13 05:33	1
1,2-Dichloroethane-d4 (Surr)	61		58 - 144					12/19/13 05:33	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	11		1.0		ug/L			12/19/13 12:22	1
1,2-Dichloroethane	ND	*	1.0		ug/L			12/19/13 12:22	1
Ethylbenzene	ND		1.0		ug/L			12/19/13 12:22	1
Isopropylbenzene	7.9		1.0		ug/L			12/19/13 12:22	1
Methyl tert-butyl ether	2.5		1.0		ug/L			12/19/13 12:22	1
Naphthalene	ND		1.0		ug/L			12/19/13 12:22	1
Toluene	ND		1.0		ug/L			12/19/13 12:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/19/13 12:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/19/13 12:22	1
Xylenes, Total	ND		3.0		ug/L			12/19/13 12:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		70 - 130					12/19/13 12:22	1
Bromofluorobenzene	97		70 - 130					12/19/13 12:22	1
Toluene-d8 (Surr)	95		70 - 130					12/19/13 12:22	1
Dibromofluoromethane (Surr)	103		70 - 130					12/19/13 12:22	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/13 19:55	12/19/13 00:31	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Client Sample ID: MW-10

Lab Sample ID: 460-68242-7

Date Collected: 12/11/13 13:00

Matrix: Water

Date Received: 12/13/13 09:55

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		0.020		ug/L			12/19/13 05:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	117		67 - 144					12/19/13 05:58	1
1,2-Dichloroethane-d4 (Surr)	62		58 - 144					12/19/13 05:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2900		10		ug/L			12/19/13 13:39	10
1,2-Dichloroethane	ND	*	10		ug/L			12/19/13 13:39	10
Ethylbenzene	850		10		ug/L			12/19/13 13:39	10
Isopropylbenzene	70		10		ug/L			12/19/13 13:39	10
Methyl tert-butyl ether	130		10		ug/L			12/19/13 13:39	10
Naphthalene	210		10		ug/L			12/19/13 13:39	10
Toluene	24		10		ug/L			12/19/13 13:39	10
1,2,4-Trimethylbenzene	630		10		ug/L			12/19/13 13:39	10
1,3,5-Trimethylbenzene	20		10		ug/L			12/19/13 13:39	10
Xylenes, Total	370		30		ug/L			12/19/13 13:39	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		70 - 130					12/19/13 13:39	10
Bromofluorobenzene	98		70 - 130					12/19/13 13:39	10
Toluene-d8 (Surr)	96		70 - 130					12/19/13 13:39	10
Dibromofluoromethane (Surr)	101		70 - 130					12/19/13 13:39	10

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/13 19:55	12/19/13 00:39	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-14
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	04-30-14
New Jersey	NELAP	2	12028	06-30-14
New York	NELAP	2	11452	04-01-14
Pennsylvania	NELAP	3	68-00522	02-28-14
Rhode Island	State Program	1	LAO00132	12-30-13 *
USDA	Federal		NJCA-003-08	03-11-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-68242-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TestAmerica

CHAIN OF CUSTODY REPORT

THE LEADER IN ENVIRONMENTAL TESTING

1008 W. Ninth Avenue
King of Prussia, PA 19406
(610) 337-9992
FAX (610) 337-9939

Client: Center Point Tank Services

Bill To: Sams

TAT: STD 5 DAY 4 DAY 3 DAY 2 DAY 1 DAY <24 HRS.

Address: 536 E. Benjamin Franklin Hwy

Address:

Douglasville PA 19518

Terms: Net 30 days

Report to: Center Point Tank

State & Program: PA05T

Deliverable Package: ☐ NO ☐ YES

DATE RESULTS NEEDED: 8/21/13

E-mail: rad@centerpointtank.com

Phone #: (610) 337-9992

If Yes, please explain:

Project Name: Leak 01 #38

Phone #: (610) 337-9992

Temp. Upon Receipt: 41

Project #/PO#: 08-12-4292

Sample: Radial & Leak

Cracked, Broken, Improperly Sealed

LABORATORY ID NUMBER

FIELD ID, LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	# of Bottles Preservative Used							TOTAL # OF BOTTLES	SAMPLES FIELD FILTERED	Unleaded gasoline	Leaded gasoline	ANALYSIS TYPE	SAMPLE CONTROL	LABORATORY ID NUMBER
				MeOH	DI	HCl	HNO3	H2SO4	NaOH	NONE							

1 MW-1 PID: 12/1/13 1134 600 3 1 1 5 4 X X 68242

2 MW-2 PID: 1150 3 1 1 5 X X

3 MW-4 PID: 1328 3 1 1 5 X X

4 MW-5 PID: 1204 3 1 1 5 X X

5 MW-6 PID: 1218 3 1 1 5 X X

6 MW-9 PID: 1244 3 1 1 5 X X

7 MW-10 PID: 1306 3 1 1 5 X X

8 PID:

9 PID:

10 PID:

RELINQUISHED DATE/TIME: 12/1/13 RECEIVED DATE/TIME: 12/1/13 RELINQUISHED DATE/TIME: 12/1/13 RECEIVED DATE/TIME: 12/1/13



460-86242 Chain of Custody

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-68242-1

Login Number: 68242

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 0.0
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-72983-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Margarita Medina

Authorized for release by:
3/28/2014 5:25:28 PM

Margarita Medina, Project Management Assistant I
margarita.medina@testamericainc.com

Designee for

Ozzy Burgos, Project Manager II
(610)337-9992
ozzy.burgos@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	16

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-72983-1	MW-1	Water	03/20/14 11:01	03/21/14 15:20
460-72983-2	MW-2	Water	03/20/14 11:20	03/21/14 15:20
460-72983-3	MW-4	Water	03/20/14 14:03	03/21/14 15:20
460-72983-4	MW-5	Water	03/20/14 11:39	03/21/14 15:20
460-72983-5	MW-6	Water	03/20/14 11:52	03/21/14 15:20
460-72983-6	MW-9	Water	03/20/14 13:10	03/21/14 15:20
460-72983-7	MW-10	Water	03/20/14 13:32	03/21/14 15:20
460-72983-8	Bridge US	Water	03/20/14 12:20	03/21/14 15:20
460-72983-9	Bridge DS	Water	03/20/14 12:35	03/21/14 15:20

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Job ID: 460-72983-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-72983-1

Comments

No additional comments.

Receipt

The samples were received on 3/21/2014 3:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

GC/MS VOA

Method(s) 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-72983-7). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8011: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 100502.

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Client Sample ID: MW-1

Lab Sample ID: 460-72983-1

Date Collected: 03/20/14 11:01

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/26/14 02:16	1
1,2-Dichloroethane	ND		1.0		ug/L			03/26/14 02:16	1
Ethylbenzene	ND		1.0		ug/L			03/26/14 02:16	1
Isopropylbenzene	ND		1.0		ug/L			03/26/14 02:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/26/14 02:16	1
Naphthalene	ND		1.0		ug/L			03/26/14 02:16	1
Toluene	ND		1.0		ug/L			03/26/14 02:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/26/14 02:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/26/14 02:16	1
Xylenes, Total	ND		2.0		ug/L			03/26/14 02:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	114		70 - 130		03/26/14 02:16	1
Dibromofluoromethane (Surr)	104		70 - 130		03/26/14 02:16	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 130		03/26/14 02:16	1
Toluene-d8 (Surr)	92		70 - 130		03/26/14 02:16	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 07:59	03/25/14 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	90		60 - 140	03/25/14 07:59	03/25/14 19:41	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/25/14 11:52	03/25/14 13:37	5

Client Sample ID: MW-2

Lab Sample ID: 460-72983-2

Date Collected: 03/20/14 11:20

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/26/14 02:40	1
1,2-Dichloroethane	ND		1.0		ug/L			03/26/14 02:40	1
Ethylbenzene	ND		1.0		ug/L			03/26/14 02:40	1
Isopropylbenzene	ND		1.0		ug/L			03/26/14 02:40	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/26/14 02:40	1
Naphthalene	ND		1.0		ug/L			03/26/14 02:40	1
Toluene	ND		1.0		ug/L			03/26/14 02:40	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/26/14 02:40	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/26/14 02:40	1
Xylenes, Total	ND		2.0		ug/L			03/26/14 02:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	115		70 - 130		03/26/14 02:40	1
Dibromofluoromethane (Surr)	105		70 - 130		03/26/14 02:40	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 130		03/26/14 02:40	1
Toluene-d8 (Surr)	95		70 - 130		03/26/14 02:40	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Client Sample ID: MW-2

Lab Sample ID: 460-72983-2

Date Collected: 03/20/14 11:20

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 07:59	03/25/14 20:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	89		60 - 140	03/25/14 07:59	03/25/14 20:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/25/14 11:52	03/25/14 13:42	5

Client Sample ID: MW-4

Lab Sample ID: 460-72983-3

Date Collected: 03/20/14 14:03

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	160		1.0		ug/L			03/26/14 20:28	1
1,2-Dichloroethane	ND		1.0		ug/L			03/26/14 20:28	1
Ethylbenzene	160		1.0		ug/L			03/26/14 20:28	1
Isopropylbenzene	11		1.0		ug/L			03/26/14 20:28	1
Methyl tert-butyl ether	40		1.0		ug/L			03/26/14 20:28	1
Naphthalene	17		1.0		ug/L			03/26/14 20:28	1
Toluene	170		1.0		ug/L			03/26/14 20:28	1
1,2,4-Trimethylbenzene	110		1.0		ug/L			03/26/14 20:28	1
1,3,5-Trimethylbenzene	25		1.0		ug/L			03/26/14 20:28	1
Xylenes, Total	350		2.0		ug/L			03/26/14 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	111		70 - 130		03/26/14 20:28	1
Dibromofluoromethane (Surr)	95		70 - 130		03/26/14 20:28	1
1,2-Dichloroethane-d4 (Surr)	84		70 - 130		03/26/14 20:28	1
Toluene-d8 (Surr)	88		70 - 130		03/26/14 20:28	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 07:59	03/25/14 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	88		60 - 140	03/25/14 07:59	03/25/14 20:42	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/25/14 11:52	03/25/14 13:47	5

Client Sample ID: MW-5

Lab Sample ID: 460-72983-4

Date Collected: 03/20/14 11:39

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/26/14 03:04	1
1,2-Dichloroethane	ND		1.0		ug/L			03/26/14 03:04	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Client Sample ID: MW-5

Lab Sample ID: 460-72983-4

Date Collected: 03/20/14 11:39

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0		ug/L			03/26/14 03:04	1
Isopropylbenzene	ND		1.0		ug/L			03/26/14 03:04	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/26/14 03:04	1
Naphthalene	ND		1.0		ug/L			03/26/14 03:04	1
Toluene	ND		1.0		ug/L			03/26/14 03:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/26/14 03:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/26/14 03:04	1
Xylenes, Total	ND		2.0		ug/L			03/26/14 03:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	116		70 - 130		03/26/14 03:04	1
Dibromofluoromethane (Surr)	103		70 - 130		03/26/14 03:04	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 130		03/26/14 03:04	1
Toluene-d8 (Surr)	93		70 - 130		03/26/14 03:04	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 07:59	03/25/14 21:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	97		60 - 140	03/25/14 07:59	03/25/14 21:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/25/14 11:52	03/25/14 13:51	5

Client Sample ID: MW-6

Lab Sample ID: 460-72983-5

Date Collected: 03/20/14 11:52

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/26/14 03:28	1
1,2-Dichloroethane	ND		1.0		ug/L			03/26/14 03:28	1
Ethylbenzene	ND		1.0		ug/L			03/26/14 03:28	1
Isopropylbenzene	ND		1.0		ug/L			03/26/14 03:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/26/14 03:28	1
Naphthalene	ND		1.0		ug/L			03/26/14 03:28	1
Toluene	ND		1.0		ug/L			03/26/14 03:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/26/14 03:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/26/14 03:28	1
Xylenes, Total	ND		2.0		ug/L			03/26/14 03:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	116		70 - 130		03/26/14 03:28	1
Dibromofluoromethane (Surr)	104		70 - 130		03/26/14 03:28	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130		03/26/14 03:28	1
Toluene-d8 (Surr)	95		70 - 130		03/26/14 03:28	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Client Sample ID: MW-6

Lab Sample ID: 460-72983-5

Date Collected: 03/20/14 11:52

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 08:03	03/25/14 21:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	94		60 - 140				03/25/14 08:03	03/25/14 21:42	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	18		1.5		ug/L		03/25/14 11:52	03/25/14 13:56	5

Client Sample ID: MW-9

Lab Sample ID: 460-72983-6

Date Collected: 03/20/14 13:10

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	47		1.0		ug/L			03/26/14 03:52	1
1,2-Dichloroethane	ND		1.0		ug/L			03/26/14 03:52	1
Ethylbenzene	2.2		1.0		ug/L			03/26/14 03:52	1
Isopropylbenzene	8.5		1.0		ug/L			03/26/14 03:52	1
Methyl tert-butyl ether	7.4		1.0		ug/L			03/26/14 03:52	1
Naphthalene	ND		1.0		ug/L			03/26/14 03:52	1
Toluene	ND		1.0		ug/L			03/26/14 03:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/26/14 03:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/26/14 03:52	1
Xylenes, Total	ND		2.0		ug/L			03/26/14 03:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	112		70 - 130					03/26/14 03:52	1
Dibromofluoromethane (Surr)	96		70 - 130					03/26/14 03:52	1
1,2-Dichloroethane-d4 (Surr)	85		70 - 130					03/26/14 03:52	1
Toluene-d8 (Surr)	88		70 - 130					03/26/14 03:52	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 08:03	03/25/14 22:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140				03/25/14 08:03	03/25/14 22:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/25/14 11:52	03/25/14 14:01	5

Client Sample ID: MW-10

Lab Sample ID: 460-72983-7

Date Collected: 03/20/14 13:32

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2000		10		ug/L			03/26/14 05:29	10
1,2-Dichloroethane	ND		10		ug/L			03/26/14 05:29	10

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Client Sample ID: MW-10

Lab Sample ID: 460-72983-7

Date Collected: 03/20/14 13:32

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	610		10		ug/L			03/26/14 05:29	10
Isopropylbenzene	52		10		ug/L			03/26/14 05:29	10
Methyl tert-butyl ether	130		10		ug/L			03/26/14 05:29	10
Naphthalene	120		10		ug/L			03/26/14 05:29	10
Toluene	110		10		ug/L			03/26/14 05:29	10
1,2,4-Trimethylbenzene	440		10		ug/L			03/26/14 05:29	10
1,3,5-Trimethylbenzene	41		10		ug/L			03/26/14 05:29	10
Xylenes, Total	490		20		ug/L			03/26/14 05:29	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	118		70 - 130		03/26/14 05:29	10
Dibromofluoromethane (Surr)	98		70 - 130		03/26/14 05:29	10
1,2-Dichloroethane-d4 (Surr)	89		70 - 130		03/26/14 05:29	10
Toluene-d8 (Surr)	91		70 - 130		03/26/14 05:29	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 08:03	03/25/14 22:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	88		60 - 140	03/25/14 08:03	03/25/14 22:42	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/25/14 11:52	03/25/14 14:06	5

Client Sample ID: Bridge US

Lab Sample ID: 460-72983-8

Date Collected: 03/20/14 12:20

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/26/14 04:16	1
1,2-Dichloroethane	ND		1.0		ug/L			03/26/14 04:16	1
Ethylbenzene	ND		1.0		ug/L			03/26/14 04:16	1
Isopropylbenzene	ND		1.0		ug/L			03/26/14 04:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/26/14 04:16	1
Naphthalene	ND		1.0		ug/L			03/26/14 04:16	1
Toluene	ND		1.0		ug/L			03/26/14 04:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/26/14 04:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/26/14 04:16	1
Xylenes, Total	ND		2.0		ug/L			03/26/14 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 130		03/26/14 04:16	1
Bromofluorobenzene	108		70 - 130		03/26/14 04:16	1
Toluene-d8 (Surr)	86		70 - 130		03/26/14 04:16	1
Dibromofluoromethane (Surr)	98		70 - 130		03/26/14 04:16	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Client Sample ID: Bridge US

Lab Sample ID: 460-72983-8

Date Collected: 03/20/14 12:20

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 08:03	03/26/14 23:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	90		60 - 140				03/25/14 08:03	03/26/14 23:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/25/14 11:52	03/25/14 14:20	5

Client Sample ID: Bridge DS

Lab Sample ID: 460-72983-9

Date Collected: 03/20/14 12:35

Matrix: Water

Date Received: 03/21/14 15:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/26/14 04:41	1
1,2-Dichloroethane	ND		1.0		ug/L			03/26/14 04:41	1
Ethylbenzene	ND		1.0		ug/L			03/26/14 04:41	1
Isopropylbenzene	ND		1.0		ug/L			03/26/14 04:41	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/26/14 04:41	1
Naphthalene	ND		1.0		ug/L			03/26/14 04:41	1
Toluene	ND		1.0		ug/L			03/26/14 04:41	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/26/14 04:41	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/26/14 04:41	1
Xylenes, Total	ND		2.0		ug/L			03/26/14 04:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		70 - 130					03/26/14 04:41	1
Bromofluorobenzene	108		70 - 130					03/26/14 04:41	1
Toluene-d8 (Surr)	86		70 - 130					03/26/14 04:41	1
Dibromofluoromethane (Surr)	96		70 - 130					03/26/14 04:41	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/25/14 08:03	03/26/14 23:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140				03/25/14 08:03	03/26/14 23:42	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/25/14 11:52	03/25/14 14:25	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Laboratory: TestAmerica Edison

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	68-00522	02-28-15

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-14 *

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-72983-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-72983-1

Login Number: 72983

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 1.2
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-72983-1

Login Number: 72983

List Number: 1

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 03/22/14 11:09 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-76787-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
6/4/2014 12:14:50 PM

Jill Miller, Project Manager II
(610)337-9992
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAP and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

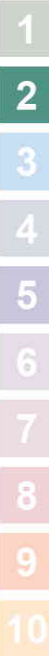


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	16

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-76787-1	MW-1	Water	05/27/14 11:05	05/28/14 13:00
460-76787-2	MW-2	Water	05/27/14 11:23	05/28/14 13:00
460-76787-3	MW-4	Water	05/27/14 13:52	05/28/14 13:00
460-76787-4	MW-5	Water	05/27/14 11:37	05/28/14 13:00
460-76787-5	MW-6	Water	05/27/14 11:55	05/28/14 13:00
460-76787-6	MW-9	Water	05/27/14 12:26	05/28/14 13:00
460-76787-7	MW-10	Water	05/27/14 12:45	05/28/14 13:00
460-76787-8	Bridge US	Water	05/27/14 13:30	05/28/14 13:00
460-76787-9	Bridge DS	Water	05/27/14 13:00	05/28/14 13:00

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Job ID: 460-76787-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative 460-76787-1

Comments

No additional comments.

Receipt

The samples were received on 5/28/2014 1:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C.

GC/MS VOA

Method(s) 8260B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-76787-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Client Sample ID: MW-1

Lab Sample ID: 460-76787-1

Date Collected: 05/27/14 11:05

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			05/30/14 02:09	1
Benzene	ND		1.0		ug/L			05/30/14 02:09	1
Ethylbenzene	ND		1.0		ug/L			05/30/14 02:09	1
Toluene	ND		1.0		ug/L			05/30/14 02:09	1
Xylenes, Total	ND		2.0		ug/L			05/30/14 02:09	1
1,2-Dichloroethane	ND		1.0		ug/L			05/30/14 02:09	1
Naphthalene	ND		1.0		ug/L			05/30/14 02:09	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/30/14 02:09	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/30/14 02:09	1
Isopropylbenzene	ND		1.0		ug/L			05/30/14 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		70 - 130		05/30/14 02:09	1
Bromofluorobenzene	99		64 - 135		05/30/14 02:09	1
Toluene-d8 (Surr)	86		70 - 130		05/30/14 02:09	1
Dibromofluoromethane (Surr)	83		72 - 137		05/30/14 02:09	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 11:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	06/03/14 06:22	06/03/14 11:04	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		05/29/14 18:38	05/29/14 22:14	5

Client Sample ID: MW-2

Lab Sample ID: 460-76787-2

Date Collected: 05/27/14 11:23

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			05/30/14 02:33	1
Benzene	ND		1.0		ug/L			05/30/14 02:33	1
Ethylbenzene	ND		1.0		ug/L			05/30/14 02:33	1
Toluene	ND		1.0		ug/L			05/30/14 02:33	1
Xylenes, Total	ND		2.0		ug/L			05/30/14 02:33	1
1,2-Dichloroethane	ND		1.0		ug/L			05/30/14 02:33	1
Naphthalene	ND		1.0		ug/L			05/30/14 02:33	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/30/14 02:33	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/30/14 02:33	1
Isopropylbenzene	ND		1.0		ug/L			05/30/14 02:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		70 - 130		05/30/14 02:33	1
Bromofluorobenzene	99		64 - 135		05/30/14 02:33	1
Toluene-d8 (Surr)	87		70 - 130		05/30/14 02:33	1
Dibromofluoromethane (Surr)	85		72 - 137		05/30/14 02:33	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Client Sample ID: MW-2

Lab Sample ID: 460-76787-2

Date Collected: 05/27/14 11:23

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 11:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	89		60 - 140	06/03/14 06:22	06/03/14 11:33	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		05/29/14 18:38	05/29/14 22:24	5

Client Sample ID: MW-4

Lab Sample ID: 460-76787-3

Date Collected: 05/27/14 13:52

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	29		1.0		ug/L			05/30/14 02:58	1
Benzene	240		1.0		ug/L			05/30/14 02:58	1
Ethylbenzene	110		1.0		ug/L			05/30/14 02:58	1
Toluene	3.0		1.0		ug/L			05/30/14 02:58	1
Xylenes, Total	46		2.0		ug/L			05/30/14 02:58	1
1,2-Dichloroethane	ND		1.0		ug/L			05/30/14 02:58	1
Naphthalene	7.6		1.0		ug/L			05/30/14 02:58	1
1,2,4-Trimethylbenzene	90		1.0		ug/L			05/30/14 02:58	1
1,3,5-Trimethylbenzene	4.7		1.0		ug/L			05/30/14 02:58	1
Isopropylbenzene	10		1.0		ug/L			05/30/14 02:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		70 - 130		05/30/14 02:58	1
Bromofluorobenzene	99		64 - 135		05/30/14 02:58	1
Toluene-d8 (Surr)	86		70 - 130		05/30/14 02:58	1
Dibromofluoromethane (Surr)	84		72 - 137		05/30/14 02:58	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 12:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	85		60 - 140	06/03/14 06:22	06/03/14 12:03	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		05/29/14 18:38	05/29/14 22:39	5

Client Sample ID: MW-5

Lab Sample ID: 460-76787-4

Date Collected: 05/27/14 11:37

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			05/30/14 03:22	1
Benzene	ND		1.0		ug/L			05/30/14 03:22	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Client Sample ID: MW-5

Lab Sample ID: 460-76787-4

Date Collected: 05/27/14 11:37

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0		ug/L			05/30/14 03:22	1
Toluene	ND		1.0		ug/L			05/30/14 03:22	1
Xylenes, Total	ND		2.0		ug/L			05/30/14 03:22	1
1,2-Dichloroethane	ND		1.0		ug/L			05/30/14 03:22	1
Naphthalene	ND		1.0		ug/L			05/30/14 03:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/30/14 03:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/30/14 03:22	1
Isopropylbenzene	ND		1.0		ug/L			05/30/14 03:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		05/30/14 03:22	1
Bromofluorobenzene	120		64 - 135		05/30/14 03:22	1
Toluene-d8 (Surr)	103		70 - 130		05/30/14 03:22	1
Dibromofluoromethane (Surr)	100		72 - 137		05/30/14 03:22	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	98		60 - 140	06/03/14 06:22	06/03/14 12:32	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		05/29/14 18:38	05/29/14 22:44	5

Client Sample ID: MW-6

Lab Sample ID: 460-76787-5

Date Collected: 05/27/14 11:55

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			05/30/14 17:27	1
Benzene	ND		1.0		ug/L			05/30/14 17:27	1
Ethylbenzene	ND		1.0		ug/L			05/30/14 17:27	1
Toluene	ND		1.0		ug/L			05/30/14 17:27	1
Xylenes, Total	ND		2.0		ug/L			05/30/14 17:27	1
1,2-Dichloroethane	ND		1.0		ug/L			05/30/14 17:27	1
Naphthalene	ND		1.0		ug/L			05/30/14 17:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/30/14 17:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/30/14 17:27	1
Isopropylbenzene	ND		1.0		ug/L			05/30/14 17:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		05/30/14 17:27	1
Bromofluorobenzene	111		64 - 135		05/30/14 17:27	1
Toluene-d8 (Surr)	110		70 - 130		05/30/14 17:27	1
Dibromofluoromethane (Surr)	113		72 - 137		05/30/14 17:27	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Client Sample ID: MW-6

Lab Sample ID: 460-76787-5

Date Collected: 05/27/14 11:55

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 13:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	89		60 - 140	06/03/14 06:22	06/03/14 13:01	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.9		1.5		ug/L		05/29/14 18:38	05/29/14 22:49	5

Client Sample ID: MW-9

Lab Sample ID: 460-76787-6

Date Collected: 05/27/14 12:26

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	8.6		1.0		ug/L			05/30/14 04:12	1
Benzene	65		1.0		ug/L			05/30/14 04:12	1
Ethylbenzene	5.3		1.0		ug/L			05/30/14 04:12	1
Toluene	ND		1.0		ug/L			05/30/14 04:12	1
Xylenes, Total	ND		2.0		ug/L			05/30/14 04:12	1
1,2-Dichloroethane	ND		1.0		ug/L			05/30/14 04:12	1
Naphthalene	ND		1.0		ug/L			05/30/14 04:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/30/14 04:12	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/30/14 04:12	1
Isopropylbenzene	11		1.0		ug/L			05/30/14 04:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		70 - 130		05/30/14 04:12	1
Bromofluorobenzene	97		64 - 135		05/30/14 04:12	1
Toluene-d8 (Surr)	86		70 - 130		05/30/14 04:12	1
Dibromofluoromethane (Surr)	80		72 - 137		05/30/14 04:12	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	06/03/14 06:22	06/03/14 13:31	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		05/29/14 18:38	05/29/14 22:55	5

Client Sample ID: MW-10

Lab Sample ID: 460-76787-7

Date Collected: 05/27/14 12:45

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	74		5.0		ug/L			05/30/14 17:51	5
Benzene	1300		5.0		ug/L			05/30/14 17:51	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Client Sample ID: MW-10

Lab Sample ID: 460-76787-7

Date Collected: 05/27/14 12:45

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	400		5.0		ug/L			05/30/14 17:51	5
Toluene	83		5.0		ug/L			05/30/14 17:51	5
Xylenes, Total	550		10		ug/L			05/30/14 17:51	5
1,2-Dichloroethane	ND		5.0		ug/L			05/30/14 17:51	5
Naphthalene	120		5.0		ug/L			05/30/14 17:51	5
1,2,4-Trimethylbenzene	390		5.0		ug/L			05/30/14 17:51	5
1,3,5-Trimethylbenzene	70		5.0		ug/L			05/30/14 17:51	5
Isopropylbenzene	37		5.0		ug/L			05/30/14 17:51	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130					05/30/14 17:51	5
Bromofluorobenzene	93		64 - 135					05/30/14 17:51	5
Toluene-d8 (Surr)	99		70 - 130					05/30/14 17:51	5
Dibromofluoromethane (Surr)	99		72 - 137					05/30/14 17:51	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 14:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	83		60 - 140				06/03/14 06:22	06/03/14 14:00	1
1,1,1,2-Tetrachloroethane	83		60 - 140				06/03/14 06:22	06/03/14 14:29	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		05/29/14 18:38	05/29/14 23:00	5

Client Sample ID: Bridge US

Lab Sample ID: 460-76787-8

Date Collected: 05/27/14 13:30

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			05/30/14 04:37	1
Benzene	ND		1.0		ug/L			05/30/14 04:37	1
Ethylbenzene	ND		1.0		ug/L			05/30/14 04:37	1
Toluene	ND		1.0		ug/L			05/30/14 04:37	1
Xylenes, Total	ND		2.0		ug/L			05/30/14 04:37	1
1,2-Dichloroethane	ND		1.0		ug/L			05/30/14 04:37	1
Naphthalene	ND		1.0		ug/L			05/30/14 04:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/30/14 04:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/30/14 04:37	1
Isopropylbenzene	ND		1.0		ug/L			05/30/14 04:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		70 - 130					05/30/14 04:37	1
Bromofluorobenzene	100		64 - 135					05/30/14 04:37	1
Toluene-d8 (Surr)	87		70 - 130					05/30/14 04:37	1
Dibromofluoromethane (Surr)	84		72 - 137					05/30/14 04:37	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Client Sample ID: Bridge US

Lab Sample ID: 460-76787-8

Date Collected: 05/27/14 13:30

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 14:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	94		60 - 140				06/03/14 06:22	06/03/14 14:29	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/03/14 08:06	06/03/14 18:41	5

Client Sample ID: Bridge DS

Lab Sample ID: 460-76787-9

Date Collected: 05/27/14 13:00

Matrix: Water

Date Received: 05/28/14 13:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			05/30/14 05:01	1
Benzene	ND		1.0		ug/L			05/30/14 05:01	1
Ethylbenzene	ND		1.0		ug/L			05/30/14 05:01	1
Toluene	ND		1.0		ug/L			05/30/14 05:01	1
Xylenes, Total	ND		2.0		ug/L			05/30/14 05:01	1
1,2-Dichloroethane	ND		1.0		ug/L			05/30/14 05:01	1
Naphthalene	ND		1.0		ug/L			05/30/14 05:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/30/14 05:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/30/14 05:01	1
Isopropylbenzene	ND		1.0		ug/L			05/30/14 05:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		70 - 130					05/30/14 05:01	1
Bromofluorobenzene	102		64 - 135					05/30/14 05:01	1
Toluene-d8 (Surr)	88		70 - 130					05/30/14 05:01	1
Dibromofluoromethane (Surr)	86		72 - 137					05/30/14 05:01	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/03/14 06:22	06/03/14 14:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140				06/03/14 06:22	06/03/14 14:59	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/03/14 08:06	06/03/14 18:52	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Laboratory: TestAmerica Edison

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	68-00522	02-28-15

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14 *
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-14
New Hampshire	NELAP	1	203011	04-04-15
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	03-31-15
North Carolina DENR	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-14 *
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14 *
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-15
Wisconsin	State Program	5	998027800	08-31-14

* Certification renewal pending - certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-76787-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN

480-76787 Chain of Custody



QUEST

0.1 10.3 KOP-1

Page 1 of 1

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

Name (for report and invoice)

Karol Bickart

Samplers Name (Printed)

Karol Bickart

Site/Project Identification

Liberty Oil #38

Company

Counter Port Tank Services

P.O. #

08-12-4292

State (Location of site):

PA

Regulatory Program:

PAUST

Address

336 E. Benjamin Franklin Hwy

City

Douglasville

State

GA

Phone

610 385 4977

Fax

Analysis Turnaround Time

Standard ☒

Rush Citigates Authorized For:

2 Week ☐

1 Week ☒

Other ☐

ANALYSIS REQUESTED (ENTER X BELOW TO INDICATE REQUEST)

Unleaded gasoline

Leaded gasoline

Leaded gasoline

LAB USE ONLY
Project No:

Job No:

Sample Numbers

40787

Sample Identification

Date

Time

Matrix

No. of Cont.

Unleaded gasoline

Leaded gasoline

Leaded gasoline

MD-1

5/27/14

1105

AW

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

MD-2

5/27/14

1123

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

MD-4

5/27/14

1352

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

MD-5

5/27/14

1137

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

MD-6

5/27/14

1155

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

MD-9

5/27/14

1226

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

MD-10

5/27/14

1245

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Bridge US

5/27/14

1350

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Bridge DS

5/27/14

1300

S

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

Job Number:

30

Number of Gobblers

世

IR 6144

THE

Temp. Cooler #1 (Deg. C) (Raw/Corrected)

Temp. Cooler (4 (Deg)C) {Raw/Corrected}

Temp. Cooler+7 (Dog) C (Raw/Corrected)

Tomp: Cooler #2 (Bag C) has no collected

Temp. Coefficient (Deg C) RAW Collected

amp coolers

Temp. Cooler/3 (Deg C) (Raw/Corrected)

Temp. Cooler/Hs (deg C) / Raw/corrected

Temp. Coolers (log c) Kaw/coolers

[illegible]

If pH adjustments are required record the information below.

Sample No(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot# of Preservative:

Expiration Date:

* Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: DTG

Date: 5-28-14

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-76787-1

Login Number: 76787

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 0.3
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-76787-1

Login Number: 76787

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 05/29/14 07:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-83186-1
Client Project/Site: Liberty Oil 38
Revision: 1

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
10/14/2014 3:03:32 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAP and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

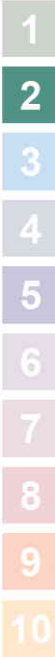


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	16

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-83186-1	MW-1	Water	09/19/14 10:53	09/22/14 14:15
460-83186-2	MW-2	Water	09/19/14 11:16	09/22/14 14:15
460-83186-3	MW-4	Water	09/19/14 13:52	09/22/14 14:15
460-83186-4	MW-6	Water	09/19/14 12:00	09/22/14 14:15
460-83186-5	MW-9	Water	09/19/14 12:44	09/22/14 14:15
460-83186-6	MW-10	Water	09/19/14 13:03	09/22/14 14:15
460-83186-7	MW-5	Water	09/19/14 11:34	09/22/14 14:15
460-83186-8	Bridge US	Water	09/19/14 12:23	09/22/14 14:15
460-83186-9	Bridge DS	Water	09/19/14 13:15	09/22/14 14:15

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Job ID: 460-83186-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-83186-1

Comments

No additional comments.

Receipt

The samples were received on 9/22/2014 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

Revision(1)

The volumes in the preparation batch were entered incorrectly for Method 200.8 Field Filtration. As a result, there was an extra 5x factor on these samples, making the RL 5x higher than it should be.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Client Sample ID: MW-1

Lab Sample ID: 460-83186-1

Date Collected: 09/19/14 10:53

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/14 05:24	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/14 05:24	1
Ethylbenzene	ND		1.0		ug/L			09/23/14 05:24	1
Isopropylbenzene	ND		1.0		ug/L			09/23/14 05:24	1
Naphthalene	ND		1.0		ug/L			09/23/14 05:24	1
Toluene	ND		1.0		ug/L			09/23/14 05:24	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/14 05:24	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/14 05:24	1
Xylenes, Total	ND		2.0		ug/L			09/23/14 05:24	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/14 05:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		64 - 135		09/23/14 05:24	1
Dibromofluoromethane (Surr)	93		72 - 137		09/23/14 05:24	1
1,2-Dichloroethane-d4 (Surr)	86		70 - 130		09/23/14 05:24	1
Toluene-d8 (Surr)	95		70 - 130		09/23/14 05:24	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 09:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	87		60 - 140	09/26/14 07:30	09/26/14 09:38	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/25/14 23:34	09/26/14 07:21	5

Client Sample ID: MW-2

Lab Sample ID: 460-83186-2

Date Collected: 09/19/14 11:16

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/14 05:47	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/14 05:47	1
Ethylbenzene	ND		1.0		ug/L			09/23/14 05:47	1
Isopropylbenzene	ND		1.0		ug/L			09/23/14 05:47	1
Naphthalene	ND		1.0		ug/L			09/23/14 05:47	1
Toluene	ND		1.0		ug/L			09/23/14 05:47	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/14 05:47	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/14 05:47	1
Xylenes, Total	ND		2.0		ug/L			09/23/14 05:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/14 05:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		64 - 135		09/23/14 05:47	1
Dibromofluoromethane (Surr)	93		72 - 137		09/23/14 05:47	1
1,2-Dichloroethane-d4 (Surr)	89		70 - 130		09/23/14 05:47	1
Toluene-d8 (Surr)	94		70 - 130		09/23/14 05:47	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Client Sample ID: MW-2

Lab Sample ID: 460-83186-2

Date Collected: 09/19/14 11:16

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 10:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140				09/26/14 07:30	09/26/14 10:07	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/25/14 23:34	09/26/14 07:27	5

Client Sample ID: MW-4

Lab Sample ID: 460-83186-3

Date Collected: 09/19/14 13:52

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	54		1.0		ug/L			09/23/14 06:12	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/14 06:12	1
Ethylbenzene	89		1.0		ug/L			09/23/14 06:12	1
Isopropylbenzene	12		1.0		ug/L			09/23/14 06:12	1
Naphthalene	16		1.0		ug/L			09/23/14 06:12	1
Toluene	28		1.0		ug/L			09/23/14 06:12	1
1,2,4-Trimethylbenzene	130		1.0		ug/L			09/23/14 06:12	1
1,3,5-Trimethylbenzene	28		1.0		ug/L			09/23/14 06:12	1
Xylenes, Total	130		2.0		ug/L			09/23/14 06:12	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/14 06:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		64 - 135					09/23/14 06:12	1
Dibromofluoromethane (Surr)	93		72 - 137					09/23/14 06:12	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 130					09/23/14 06:12	1
Toluene-d8 (Surr)	93		70 - 130					09/23/14 06:12	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 10:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140				09/26/14 07:30	09/26/14 10:37	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/25/14 23:34	09/26/14 07:32	5

Client Sample ID: MW-6

Lab Sample ID: 460-83186-4

Date Collected: 09/19/14 12:00

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/14 06:35	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/14 06:35	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Client Sample ID: MW-6

Lab Sample ID: 460-83186-4

Date Collected: 09/19/14 12:00

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0		ug/L			09/23/14 06:35	1
Isopropylbenzene	ND		1.0		ug/L			09/23/14 06:35	1
Naphthalene	ND		1.0		ug/L			09/23/14 06:35	1
Toluene	ND		1.0		ug/L			09/23/14 06:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/14 06:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/14 06:35	1
Xylenes, Total	ND		2.0		ug/L			09/23/14 06:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/14 06:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		64 - 135		09/23/14 06:35	1
Dibromofluoromethane (Surr)	92		72 - 137		09/23/14 06:35	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 130		09/23/14 06:35	1
Toluene-d8 (Surr)	96		70 - 130		09/23/14 06:35	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 11:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	100		60 - 140	09/26/14 07:30	09/26/14 11:06	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	13		1.5		ug/L		09/26/14 12:11	09/26/14 20:07	5

Client Sample ID: MW-9

Lab Sample ID: 460-83186-5

Date Collected: 09/19/14 12:44

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.9		1.0		ug/L			09/23/14 06:59	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/14 06:59	1
Ethylbenzene	ND		1.0		ug/L			09/23/14 06:59	1
Isopropylbenzene	5.1		1.0		ug/L			09/23/14 06:59	1
Naphthalene	ND		1.0		ug/L			09/23/14 06:59	1
Toluene	ND		1.0		ug/L			09/23/14 06:59	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/14 06:59	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/14 06:59	1
Xylenes, Total	ND		2.0		ug/L			09/23/14 06:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/14 06:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		64 - 135		09/23/14 06:59	1
Dibromofluoromethane (Surr)	92		72 - 137		09/23/14 06:59	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 130		09/23/14 06:59	1
Toluene-d8 (Surr)	94		70 - 130		09/23/14 06:59	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Client Sample ID: MW-9

Lab Sample ID: 460-83186-5

Date Collected: 09/19/14 12:44

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 11:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	98		60 - 140	09/26/14 07:30	09/26/14 11:37	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/25/14 23:34	09/26/14 07:38	5

Client Sample ID: MW-10

Lab Sample ID: 460-83186-6

Date Collected: 09/19/14 13:03

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2900		10		ug/L			09/24/14 03:22	10
1,2-Dichloroethane	ND		10		ug/L			09/24/14 03:22	10
Ethylbenzene	950		10		ug/L			09/24/14 03:22	10
Isopropylbenzene	98		10		ug/L			09/24/14 03:22	10
Naphthalene	220		10		ug/L			09/24/14 03:22	10
Toluene	94		10		ug/L			09/24/14 03:22	10
1,2,4-Trimethylbenzene	640		10		ug/L			09/24/14 03:22	10
1,3,5-Trimethylbenzene	110		10		ug/L			09/24/14 03:22	10
Xylenes, Total	1000		20		ug/L			09/24/14 03:22	10
Methyl tert-butyl ether	140		10		ug/L			09/24/14 03:22	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	104		64 - 135		09/24/14 03:22	10
Dibromofluoromethane (Surr)	92		72 - 137		09/24/14 03:22	10
1,2-Dichloroethane-d4 (Surr)	89		70 - 130		09/24/14 03:22	10
Toluene-d8 (Surr)	95		70 - 130		09/24/14 03:22	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 12:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	87		60 - 140	09/26/14 07:30	09/26/14 12:07	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/25/14 23:34	09/26/14 08:38	5

Client Sample ID: MW-5

Lab Sample ID: 460-83186-7

Date Collected: 09/19/14 11:34

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/14 15:10	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/14 15:10	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Client Sample ID: MW-5

Lab Sample ID: 460-83186-7

Date Collected: 09/19/14 11:34

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0		ug/L			09/23/14 15:10	1
Isopropylbenzene	ND		1.0		ug/L			09/23/14 15:10	1
Naphthalene	ND		1.0		ug/L			09/23/14 15:10	1
Toluene	ND		1.0		ug/L			09/23/14 15:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/14 15:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/14 15:10	1
Xylenes, Total	ND		2.0		ug/L			09/23/14 15:10	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/14 15:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		64 - 135					09/23/14 15:10	1
Dibromofluoromethane (Surr)	93		72 - 137					09/23/14 15:10	1
1,2-Dichloroethane-d4 (Surr)	87		70 - 130					09/23/14 15:10	1
Toluene-d8 (Surr)	94		70 - 130					09/23/14 15:10	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 12:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	96		60 - 140				09/26/14 07:30	09/26/14 12:37	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/25/14 23:37	09/26/14 08:44	5

Client Sample ID: Bridge US

Lab Sample ID: 460-83186-8

Date Collected: 09/19/14 12:23

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/14 14:46	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/14 14:46	1
Ethylbenzene	ND		1.0		ug/L			09/23/14 14:46	1
Isopropylbenzene	ND		1.0		ug/L			09/23/14 14:46	1
Naphthalene	ND		1.0		ug/L			09/23/14 14:46	1
Toluene	ND		1.0		ug/L			09/23/14 14:46	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/14 14:46	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/14 14:46	1
Xylenes, Total	ND		2.0		ug/L			09/23/14 14:46	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/14 14:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		64 - 135					09/23/14 14:46	1
Dibromofluoromethane (Surr)	92		72 - 137					09/23/14 14:46	1
1,2-Dichloroethane-d4 (Surr)	86		70 - 130					09/23/14 14:46	1
Toluene-d8 (Surr)	94		70 - 130					09/23/14 14:46	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Client Sample ID: Bridge US

Lab Sample ID: 460-83186-8

Date Collected: 09/19/14 12:23

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 13:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140				09/26/14 07:30	09/26/14 13:07	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/26/14 12:11	09/26/14 20:18	5

Client Sample ID: Bridge DS

Lab Sample ID: 460-83186-9

Date Collected: 09/19/14 13:15

Matrix: Water

Date Received: 09/22/14 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/14 14:22	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/14 14:22	1
Ethylbenzene	ND		1.0		ug/L			09/23/14 14:22	1
Isopropylbenzene	ND		1.0		ug/L			09/23/14 14:22	1
Naphthalene	ND		1.0		ug/L			09/23/14 14:22	1
Toluene	ND		1.0		ug/L			09/23/14 14:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/14 14:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/14 14:22	1
Xylenes, Total	ND		2.0		ug/L			09/23/14 14:22	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/14 14:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		64 - 135					09/23/14 14:22	1
Dibromofluoromethane (Surr)	95		72 - 137					09/23/14 14:22	1
1,2-Dichloroethane-d4 (Surr)	88		70 - 130					09/23/14 14:22	1
Toluene-d8 (Surr)	94		70 - 130					09/23/14 14:22	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/26/14 07:30	09/26/14 13:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140				09/26/14 07:30	09/26/14 13:37	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/26/14 12:11	09/26/14 20:23	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-14 *
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-14
New Jersey	NELAP	2	12028	06-30-15
New York	NELAP	2	11452	03-31-15
Pennsylvania	NELAP	3	68-00522	02-28-15
Rhode Island	State Program	1	LAO00132	12-30-14
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15
California	State Program	9	2891	03-31-15
Connecticut	State Program	1	PH-0688	09-30-14 *
Florida	NELAP	4	E871008	06-30-15
Illinois	NELAP	5	002602	06-30-15
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-15
New Hampshire	NELAP	1	203011	04-04-15
New Jersey	NELAP	2	PA005	06-30-15
New York	NELAP	2	11182	03-31-15
North Carolina (WW/SW)	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-15
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	05-31-15
Virginia	NELAP	3	460189	09-14-15
West Virginia DEP	State Program	3	142	01-31-15

* Certification renewal pending - certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-83186-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-83186-1

Login Number: 83186

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 2.0
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-83186-1

Login Number: 83186

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 09/23/14 01:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-83186-1

Login Number: 83186

List Number: 3

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 09/23/14 01:14 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-88413-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Maegen Pane

Authorized for release by:
1/6/2015 9:58:19 AM
Maegen Pane, Project Management Assistant I
(732)549-3900
maegen.pane@testamericainc.com
Designee for
Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	16

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-88413-1	MW-1	Water	12/26/14 10:48	12/29/14 13:40
460-88413-2	MW-2	Water	12/26/14 11:04	12/29/14 13:40
460-88413-3	MW-4	Water	12/26/14 12:58	12/29/14 13:40
460-88413-4	MW-5	Water	12/26/14 11:19	12/29/14 13:40
460-88413-5	MW-6	Water	12/26/14 11:32	12/29/14 13:40
460-88413-6	MW-9	Water	12/26/14 11:54	12/29/14 13:40
460-88413-7	MW-10	Water	12/26/14 12:17	12/29/14 13:40
460-88413-8	Bridge US	Water	12/26/14 13:07	12/29/14 13:40
460-88413-9	Bridge DS	Water	12/26/14 12:40	12/29/14 13:40

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Job ID: 460-88413-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative 460-88413-1

Comments

No additional comments.

Receipt

The samples were received on 12/29/2014 1:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-88413-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Internal standard (ISTD) response for 1,4-Dioxane-d8 for the following matrix spike (MS) was outside acceptance criteria: MW-13 (460-88337-4 MS). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Client Sample ID: MW-1

Lab Sample ID: 460-88413-1

Date Collected: 12/26/14 10:48

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/03/15 03:53	1
1,2-Dichloroethane	ND		1.0		ug/L			01/03/15 03:53	1
Ethylbenzene	ND		1.0		ug/L			01/03/15 03:53	1
Isopropylbenzene	ND		1.0		ug/L			01/03/15 03:53	1
Naphthalene	ND		1.0		ug/L			01/03/15 03:53	1
Toluene	ND		1.0		ug/L			01/03/15 03:53	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/03/15 03:53	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/03/15 03:53	1
Xylenes, Total	ND		2.0		ug/L			01/03/15 03:53	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/03/15 03:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	95		64 - 135		01/03/15 03:53	1
Dibromofluoromethane (Surr)	105		72 - 137		01/03/15 03:53	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		01/03/15 03:53	1
Toluene-d8 (Surr)	91		70 - 130		01/03/15 03:53	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140	01/03/15 13:04	01/03/15 16:55	1
1,1,1,2-Tetrachloroethane	95		60 - 140	01/03/15 13:04	01/03/15 16:55	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		01/04/15 16:07	01/04/15 20:31	5

Client Sample ID: MW-2

Lab Sample ID: 460-88413-2

Date Collected: 12/26/14 11:04

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/03/15 04:17	1
1,2-Dichloroethane	ND		1.0		ug/L			01/03/15 04:17	1
Ethylbenzene	ND		1.0		ug/L			01/03/15 04:17	1
Isopropylbenzene	ND		1.0		ug/L			01/03/15 04:17	1
Naphthalene	ND		1.0		ug/L			01/03/15 04:17	1
Toluene	ND		1.0		ug/L			01/03/15 04:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/03/15 04:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/03/15 04:17	1
Xylenes, Total	ND		2.0		ug/L			01/03/15 04:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/03/15 04:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	97		64 - 135		01/03/15 04:17	1
Dibromofluoromethane (Surr)	106		72 - 137		01/03/15 04:17	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130		01/03/15 04:17	1
Toluene-d8 (Surr)	97		70 - 130		01/03/15 04:17	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Client Sample ID: MW-2

Lab Sample ID: 460-88413-2

Date Collected: 12/26/14 11:04

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 17:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140				01/03/15 13:04	01/03/15 17:25	1
1,1,1,2-Tetrachloroethane	95		60 - 140				01/03/15 13:04	01/03/15 17:25	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		01/04/15 16:07	01/04/15 20:42	5

Client Sample ID: MW-4

Lab Sample ID: 460-88413-3

Date Collected: 12/26/14 12:58

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	160		1.0		ug/L			01/03/15 04:41	1
1,2-Dichloroethane	ND		1.0		ug/L			01/03/15 04:41	1
Ethylbenzene	100		1.0		ug/L			01/03/15 04:41	1
Isopropylbenzene	9.9		1.0		ug/L			01/03/15 04:41	1
Naphthalene	7.6		1.0		ug/L			01/03/15 04:41	1
Toluene	100		1.0		ug/L			01/03/15 04:41	1
1,2,4-Trimethylbenzene	83		1.0		ug/L			01/03/15 04:41	1
1,3,5-Trimethylbenzene	18		1.0		ug/L			01/03/15 04:41	1
Xylenes, Total	170		2.0		ug/L			01/03/15 04:41	1
Methyl tert-butyl ether	28		1.0		ug/L			01/03/15 04:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	86		64 - 135					01/03/15 04:41	1
Dibromofluoromethane (Surr)	87		72 - 137					01/03/15 04:41	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130					01/03/15 04:41	1
Toluene-d8 (Surr)	89		70 - 130					01/03/15 04:41	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	90		60 - 140				01/03/15 13:04	01/03/15 17:54	1
1,1,1,2-Tetrachloroethane	89		60 - 140				01/03/15 13:04	01/03/15 17:54	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		01/04/15 16:07	01/04/15 20:47	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Client Sample ID: MW-5

Lab Sample ID: 460-88413-4

Date Collected: 12/26/14 11:19

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/05/15 09:44	1
1,2-Dichloroethane	ND		1.0		ug/L			01/05/15 09:44	1
Ethylbenzene	ND		1.0		ug/L			01/05/15 09:44	1
Isopropylbenzene	ND		1.0		ug/L			01/05/15 09:44	1
Naphthalene	ND		1.0		ug/L			01/05/15 09:44	1
Toluene	ND		1.0		ug/L			01/05/15 09:44	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/05/15 09:44	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/05/15 09:44	1
Xylenes, Total	ND		2.0		ug/L			01/05/15 09:44	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/05/15 09:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	100		64 - 135		01/05/15 09:44	1
Dibromofluoromethane (Surr)	108		72 - 137		01/05/15 09:44	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130		01/05/15 09:44	1
Toluene-d8 (Surr)	95		70 - 130		01/05/15 09:44	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	97		60 - 140	01/03/15 13:04	01/03/15 18:24	1
1,1,1,2-Tetrachloroethane	101		60 - 140	01/03/15 13:04	01/03/15 18:24	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		01/04/15 16:07	01/04/15 20:53	5

Client Sample ID: MW-6

Lab Sample ID: 460-88413-5

Date Collected: 12/26/14 11:32

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/05/15 09:20	1
1,2-Dichloroethane	ND		1.0		ug/L			01/05/15 09:20	1
Ethylbenzene	ND		1.0		ug/L			01/05/15 09:20	1
Isopropylbenzene	ND		1.0		ug/L			01/05/15 09:20	1
Naphthalene	ND		1.0		ug/L			01/05/15 09:20	1
Toluene	ND		1.0		ug/L			01/05/15 09:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/05/15 09:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/05/15 09:20	1
Xylenes, Total	ND		2.0		ug/L			01/05/15 09:20	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/05/15 09:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		64 - 135		01/05/15 09:20	1
Dibromofluoromethane (Surr)	114		72 - 137		01/05/15 09:20	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 130		01/05/15 09:20	1
Toluene-d8 (Surr)	95		70 - 130		01/05/15 09:20	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Client Sample ID: MW-6

Lab Sample ID: 460-88413-5

Date Collected: 12/26/14 11:32

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 18:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	95		60 - 140				01/03/15 13:04	01/03/15 18:53	1
1,1,1,2-Tetrachloroethane	97		60 - 140				01/03/15 13:04	01/03/15 18:53	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		1.5		ug/L		01/04/15 16:07	01/04/15 18:52	5

Client Sample ID: MW-9

Lab Sample ID: 460-88413-6

Date Collected: 12/26/14 11:54

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.5		1.0		ug/L			01/05/15 10:07	1
1,2-Dichloroethane	ND		1.0		ug/L			01/05/15 10:07	1
Ethylbenzene	ND		1.0		ug/L			01/05/15 10:07	1
Isopropylbenzene	5.0		1.0		ug/L			01/05/15 10:07	1
Naphthalene	ND		1.0		ug/L			01/05/15 10:07	1
Toluene	ND		1.0		ug/L			01/05/15 10:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/05/15 10:07	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/05/15 10:07	1
Xylenes, Total	ND		2.0		ug/L			01/05/15 10:07	1
Methyl tert-butyl ether	3.8		1.0		ug/L			01/05/15 10:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	99		64 - 135					01/05/15 10:07	1
Dibromofluoromethane (Surr)	109		72 - 137					01/05/15 10:07	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130					01/05/15 10:07	1
Toluene-d8 (Surr)	100		70 - 130					01/05/15 10:07	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	95		60 - 140				01/03/15 13:04	01/03/15 19:22	1
1,1,1,2-Tetrachloroethane	98		60 - 140				01/03/15 13:04	01/03/15 19:22	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		01/04/15 16:07	01/04/15 18:58	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Client Sample ID: MW-10

Lab Sample ID: 460-88413-7

Date Collected: 12/26/14 12:17

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1700		5.0		ug/L			01/05/15 11:17	5
1,2-Dichloroethane	ND		5.0		ug/L			01/05/15 11:17	5
Ethylbenzene	660		5.0		ug/L			01/05/15 11:17	5
Isopropylbenzene	71		5.0		ug/L			01/05/15 11:17	5
Naphthalene	84		5.0		ug/L			01/05/15 11:17	5
Toluene	9.6		5.0		ug/L			01/05/15 11:17	5
1,2,4-Trimethylbenzene	350		5.0		ug/L			01/05/15 11:17	5
1,3,5-Trimethylbenzene	11		5.0		ug/L			01/05/15 11:17	5
Xylenes, Total	140		10		ug/L			01/05/15 11:17	5
Methyl tert-butyl ether	89		5.0		ug/L			01/05/15 11:17	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	100		64 - 135		01/05/15 11:17	5
Dibromofluoromethane (Surr)	101		72 - 137		01/05/15 11:17	5
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		01/05/15 11:17	5
Toluene-d8 (Surr)	105		70 - 130		01/05/15 11:17	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	95		60 - 140	01/03/15 13:04	01/03/15 19:52	1
1,1,1,2-Tetrachloroethane	98		60 - 140	01/03/15 13:04	01/03/15 19:52	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		01/04/15 16:07	01/04/15 19:03	5

Client Sample ID: Bridge US

Lab Sample ID: 460-88413-8

Date Collected: 12/26/14 13:07

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/05/15 10:54	1
1,2-Dichloroethane	ND		1.0		ug/L			01/05/15 10:54	1
Ethylbenzene	ND		1.0		ug/L			01/05/15 10:54	1
Isopropylbenzene	ND		1.0		ug/L			01/05/15 10:54	1
Naphthalene	ND		1.0		ug/L			01/05/15 10:54	1
Toluene	ND		1.0		ug/L			01/05/15 10:54	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/05/15 10:54	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/05/15 10:54	1
Xylenes, Total	ND		2.0		ug/L			01/05/15 10:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		64 - 135		01/05/15 10:54	1
Dibromofluoromethane (Surr)	104		72 - 137		01/05/15 10:54	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 130		01/05/15 10:54	1
Toluene-d8 (Surr)	100		70 - 130		01/05/15 10:54	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Client Sample ID: Bridge US

Lab Sample ID: 460-88413-8

Date Collected: 12/26/14 13:07

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 20:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	99		60 - 140				01/03/15 13:04	01/03/15 20:21	1
1,1,1,2-Tetrachloroethane	101		60 - 140				01/03/15 13:04	01/03/15 20:21	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		01/04/15 15:49	01/04/15 19:42	5

Client Sample ID: Bridge DS

Lab Sample ID: 460-88413-9

Date Collected: 12/26/14 12:40

Matrix: Water

Date Received: 12/29/14 13:40

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/05/15 10:31	1
1,2-Dichloroethane	ND		1.0		ug/L			01/05/15 10:31	1
Ethylbenzene	ND		1.0		ug/L			01/05/15 10:31	1
Isopropylbenzene	ND		1.0		ug/L			01/05/15 10:31	1
Naphthalene	ND		1.0		ug/L			01/05/15 10:31	1
Toluene	ND		1.0		ug/L			01/05/15 10:31	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/05/15 10:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/05/15 10:31	1
Xylenes, Total	ND		2.0		ug/L			01/05/15 10:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		64 - 135					01/05/15 10:31	1
Dibromofluoromethane (Surr)	112		72 - 137					01/05/15 10:31	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 130					01/05/15 10:31	1
Toluene-d8 (Surr)	100		70 - 130					01/05/15 10:31	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/03/15 13:04	01/03/15 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	96		60 - 140				01/03/15 13:04	01/03/15 20:51	1
1,1,1,2-Tetrachloroethane	98		60 - 140				01/03/15 13:04	01/03/15 20:51	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		01/04/15 15:49	01/04/15 19:53	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-16
New Jersey	NELAP	2	12028	06-30-15
New York	NELAP	2	11452	03-31-15
Pennsylvania	NELAP	3	68-00522	02-28-15
Rhode Island	State Program	1	LAO00132	12-30-14 *
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15
California	State Program	9	2891	03-31-15
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-15
Illinois	NELAP	5	002602	06-30-15
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-15
New Hampshire	NELAP	1	203011	04-04-15
New Jersey	NELAP	2	PA005	06-30-15
New York	NELAP	2	11182	03-31-15
North Carolina (WW/SW)	State Program	4	434	12-31-15
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-15
Texas	NELAP	6	T104704528	03-31-15
US Fish & Wildlife	Federal		LE94312A-1	11-30-15
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	05-31-15
Virginia	NELAP	3	460189	09-14-15
West Virginia DEP	State Program	3	142	01-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-88413-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

Page 01 of 01

Name (for report and invoice) Rachel Berkart		Samplers Name (Printed) Rachel Berkart		Site/Project Identification Liberhy ci #38	
Company CenterPoint Tank Services		P.O. # 08-12-4292		State (Location of site): NJ: <input type="checkbox"/> NY: <input type="checkbox"/> Other: PA	
Address 536 E. Benjamin Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input checked="" type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: PAUST	
City Darlington		Fax 610 385 4677		LAB USE ONLY Project No: 88413	
Sample Identification		Date	Time	Matrix	No. of Cont.
MW-1		12/24/14	1045	GW	5
MW-2			1104		5
MW-4			1258		5
MW-5			1119		5
MW-6			1132		5
MW-9			1154		5
MW-10			1247		5
Bridge US			1327		5
Bridge DS			1246		5

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

Water: 112 1123112

Soil: _____

Water Metals Filtered (Yes/No)? **Y/N**



480-88413 Chain of Custody

Special Instructions **Please lab filter samples bridge US + bridge DS**

Relinquished by Buller PTH	Company CP75	Date / Time 12/29/14 1340	Received by [Signature]	Company TH
Relinquished by Quilley Muel	Company TH	Date / Time 12/29/14 1515	Received by [Signature]	Company TH
Relinquished by [Signature]	Company TH	Date / Time 12/29/14 1645	Received by 2. J. Muel	Company TH
Relinquished by 2. J. Muel	Company TH	Date / Time 12/29/14 1944	Received by [Signature]	Company TH

Labatory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-88413-1

Login Number: 88413

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 0.0
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-88413-1

Login Number: 88413

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 12/31/14 10:43 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-91724-1
Client Project/Site: Liberty Oil 38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
3/23/2015 1:42:25 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	15

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-91724-1	MW-2	Water	03/13/15 11:52	03/16/15 12:51
460-91724-2	MW-4	Water	03/13/15 14:22	03/16/15 12:51
460-91724-3	MW-6	Water	03/13/15 12:10	03/16/15 12:51
460-91724-4	MW-9	Water	03/13/15 13:02	03/16/15 12:51
460-91724-5	MW-10	Water	03/13/15 13:27	03/16/15 12:51
460-91724-6	Bridge US	Water	03/13/15 14:35	03/16/15 12:51
460-91724-7	Bridge DS	Water	03/13/15 13:56	03/16/15 12:51

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Job ID: 460-91724-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-91724-1

Comments

No additional comments.

Receipt

The samples were received on 3/16/2015 12:51 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-91724-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8011: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate(MS/MSD) associated with batch 135920.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Client Sample ID: MW-2

Date Collected: 03/13/15 11:52

Date Received: 03/16/15 12:51

Lab Sample ID: 460-91724-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/17/15 23:20	1
1,2-Dichloroethane	ND		1.0		ug/L			03/17/15 23:20	1
Ethylbenzene	ND		1.0		ug/L			03/17/15 23:20	1
Isopropylbenzene	ND		1.0		ug/L			03/17/15 23:20	1
Naphthalene	ND		1.0		ug/L			03/17/15 23:20	1
Toluene	ND		1.0		ug/L			03/17/15 23:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/17/15 23:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/17/15 23:20	1
Xylenes, Total	ND		2.0		ug/L			03/17/15 23:20	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/17/15 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	117		64 - 135		03/17/15 23:20	1
Dibromofluoromethane (Surr)	100		72 - 137		03/17/15 23:20	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 130		03/17/15 23:20	1
Toluene-d8 (Surr)	85		70 - 130		03/17/15 23:20	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/19/15 11:11	03/20/15 15:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	87		60 - 140	03/19/15 11:11	03/20/15 15:10	1
1,1,1,2-Tetrachloroethane	88		60 - 140	03/19/15 11:11	03/20/15 15:10	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/19/15 22:51	03/20/15 04:35	5

Client Sample ID: MW-4

Date Collected: 03/13/15 14:22

Date Received: 03/16/15 12:51

Lab Sample ID: 460-91724-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	160		1.0		ug/L			03/17/15 23:45	1
1,2-Dichloroethane	ND		1.0		ug/L			03/17/15 23:45	1
Ethylbenzene	160		1.0		ug/L			03/17/15 23:45	1
Isopropylbenzene	13		1.0		ug/L			03/17/15 23:45	1
Naphthalene	13		1.0		ug/L			03/17/15 23:45	1
Toluene	160		1.0		ug/L			03/17/15 23:45	1
1,2,4-Trimethylbenzene	100		1.0		ug/L			03/17/15 23:45	1
1,3,5-Trimethylbenzene	27		1.0		ug/L			03/17/15 23:45	1
Xylenes, Total	230		2.0		ug/L			03/17/15 23:45	1
Methyl tert-butyl ether	32		1.0		ug/L			03/17/15 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	116		64 - 135		03/17/15 23:45	1
Dibromofluoromethane (Surr)	95		72 - 137		03/17/15 23:45	1
1,2-Dichloroethane-d4 (Surr)	83		70 - 130		03/17/15 23:45	1
Toluene-d8 (Surr)	86		70 - 130		03/17/15 23:45	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Client Sample ID: MW-4

Lab Sample ID: 460-91724-2

Date Collected: 03/13/15 14:22

Matrix: Water

Date Received: 03/16/15 12:51

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/19/15 11:11	03/20/15 15:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	81		60 - 140				03/19/15 11:11	03/20/15 15:40	1
1,1,1,2-Tetrachloroethane	70		60 - 140				03/19/15 11:11	03/20/15 15:40	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/19/15 22:51	03/20/15 04:46	5

Client Sample ID: MW-6

Lab Sample ID: 460-91724-3

Date Collected: 03/13/15 12:10

Matrix: Water

Date Received: 03/16/15 12:51

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/19/15 00:10	1
1,2-Dichloroethane	ND		1.0		ug/L			03/19/15 00:10	1
Ethylbenzene	ND		1.0		ug/L			03/19/15 00:10	1
Isopropylbenzene	ND		1.0		ug/L			03/19/15 00:10	1
Naphthalene	ND		1.0		ug/L			03/19/15 00:10	1
Toluene	ND		1.0		ug/L			03/19/15 00:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/19/15 00:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/19/15 00:10	1
Xylenes, Total	ND		2.0		ug/L			03/19/15 00:10	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/19/15 00:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	121		64 - 135					03/19/15 00:10	1
Dibromofluoromethane (Surr)	102		72 - 137					03/19/15 00:10	1
1,2-Dichloroethane-d4 (Surr)	82		70 - 130					03/19/15 00:10	1
Toluene-d8 (Surr)	84		70 - 130					03/19/15 00:10	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/19/15 11:11	03/20/15 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140				03/19/15 11:11	03/20/15 16:10	1
1,1,1,2-Tetrachloroethane	90		60 - 140				03/19/15 11:11	03/20/15 16:10	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28		1.5		ug/L		03/19/15 22:51	03/20/15 04:51	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Client Sample ID: MW-9

Lab Sample ID: 460-91724-4

Date Collected: 03/13/15 13:02

Matrix: Water

Date Received: 03/16/15 12:51

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	15		1.0		ug/L			03/18/15 00:35	1
1,2-Dichloroethane	ND		1.0		ug/L			03/18/15 00:35	1
Ethylbenzene	ND		1.0		ug/L			03/18/15 00:35	1
Isopropylbenzene	6.4		1.0		ug/L			03/18/15 00:35	1
Naphthalene	ND		1.0		ug/L			03/18/15 00:35	1
Toluene	ND		1.0		ug/L			03/18/15 00:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/18/15 00:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/18/15 00:35	1
Xylenes, Total	ND		2.0		ug/L			03/18/15 00:35	1
Methyl tert-butyl ether	3.8		1.0		ug/L			03/18/15 00:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		64 - 135		03/18/15 00:35	1
Dibromofluoromethane (Surr)	83		72 - 137		03/18/15 00:35	1
1,2-Dichloroethane-d4 (Surr)	71		70 - 130		03/18/15 00:35	1
Toluene-d8 (Surr)	74		70 - 130		03/18/15 00:35	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/19/15 11:11	03/20/15 16:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	85		60 - 140				03/19/15 11:11	03/20/15 16:41	1
1,1,1,2-Tetrachloroethane	80		60 - 140				03/19/15 11:11	03/20/15 16:41	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/19/15 22:51	03/20/15 05:08	5

Client Sample ID: MW-10

Lab Sample ID: 460-91724-5

Date Collected: 03/13/15 13:27

Matrix: Water

Date Received: 03/16/15 12:51

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	630		2.0		ug/L			03/20/15 11:42	2
1,2-Dichloroethane	ND		2.0		ug/L			03/20/15 11:42	2
Ethylbenzene	260		2.0		ug/L			03/20/15 11:42	2
Isopropylbenzene	29		2.0		ug/L			03/20/15 11:42	2
Naphthalene	56		2.0		ug/L			03/20/15 11:42	2
Toluene	25		2.0		ug/L			03/20/15 11:42	2
1,2,4-Trimethylbenzene	170		2.0		ug/L			03/20/15 11:42	2
1,3,5-Trimethylbenzene	20		2.0		ug/L			03/20/15 11:42	2
Xylenes, Total	120		4.0		ug/L			03/20/15 11:42	2
Methyl tert-butyl ether	43		2.0		ug/L			03/20/15 11:42	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	89		64 - 135		03/20/15 11:42	2
Dibromofluoromethane (Surr)	98		72 - 137		03/20/15 11:42	2
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		03/20/15 11:42	2
Toluene-d8 (Surr)	91		70 - 130		03/20/15 11:42	2

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Client Sample ID: MW-10

Lab Sample ID: 460-91724-5

Date Collected: 03/13/15 13:27

Matrix: Water

Date Received: 03/16/15 12:51

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/19/15 11:11	03/20/15 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	84		60 - 140				03/19/15 11:11	03/20/15 17:11	1
1,1,1,2-Tetrachloroethane	82		60 - 140				03/19/15 11:11	03/20/15 17:11	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/19/15 22:51	03/20/15 05:14	5

Client Sample ID: Bridge US

Lab Sample ID: 460-91724-6

Date Collected: 03/13/15 14:35

Matrix: Water

Date Received: 03/16/15 12:51

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/18/15 01:01	1
1,2-Dichloroethane	ND		1.0		ug/L			03/18/15 01:01	1
Ethylbenzene	ND		1.0		ug/L			03/18/15 01:01	1
Isopropylbenzene	ND		1.0		ug/L			03/18/15 01:01	1
Naphthalene	ND		1.0		ug/L			03/18/15 01:01	1
Toluene	ND		1.0		ug/L			03/18/15 01:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/18/15 01:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/18/15 01:01	1
Xylenes, Total	ND		2.0		ug/L			03/18/15 01:01	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/18/15 01:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	117		64 - 135					03/18/15 01:01	1
Dibromofluoromethane (Surr)	98		72 - 137					03/18/15 01:01	1
1,2-Dichloroethane-d4 (Surr)	85		70 - 130					03/18/15 01:01	1
Toluene-d8 (Surr)	86		70 - 130					03/18/15 01:01	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/19/15 11:11	03/20/15 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	87		60 - 140				03/19/15 11:11	03/20/15 17:41	1
1,1,1,2-Tetrachloroethane	87		60 - 140				03/19/15 11:11	03/20/15 17:41	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/19/15 22:51	03/20/15 05:19	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Client Sample ID: Bridge DS

Lab Sample ID: 460-91724-7

Date Collected: 03/13/15 13:56

Matrix: Water

Date Received: 03/16/15 12:51

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/18/15 01:26	1
1,2-Dichloroethane	ND		1.0		ug/L			03/18/15 01:26	1
Ethylbenzene	ND		1.0		ug/L			03/18/15 01:26	1
Isopropylbenzene	ND		1.0		ug/L			03/18/15 01:26	1
Naphthalene	ND		1.0		ug/L			03/18/15 01:26	1
Toluene	ND		1.0		ug/L			03/18/15 01:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/18/15 01:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/18/15 01:26	1
Xylenes, Total	ND		2.0		ug/L			03/18/15 01:26	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/18/15 01:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	117		64 - 135		03/18/15 01:26	1
Dibromofluoromethane (Surr)	101		72 - 137		03/18/15 01:26	1
1,2-Dichloroethane-d4 (Surr)	84		70 - 130		03/18/15 01:26	1
Toluene-d8 (Surr)	86		70 - 130		03/18/15 01:26	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/19/15 11:11	03/20/15 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	89		60 - 140	03/19/15 11:11	03/20/15 18:12	1
1,1,1,2-Tetrachloroethane	81		60 - 140	03/19/15 11:11	03/20/15 18:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/19/15 22:51	03/20/15 05:25	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-16
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-15
New Jersey	NELAP	2	12028	06-30-15
New York	NELAP	2	11452	03-31-15
Pennsylvania	NELAP	3	68-00522	02-28-16
Rhode Island	State Program	1	LAO00132	12-30-14 *
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15
California	State Program	9	2891	03-31-15 *
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-15
Illinois	NELAP	5	002602	06-30-15
Kansas	NELAP	7	E-10350	03-31-15 *
Louisiana	NELAP	6	04041	06-30-15
New Hampshire	NELAP	1	203011	04-04-15 *
New Jersey	NELAP	2	PA005	06-30-15
New York	NELAP	2	11182	03-31-15 *
North Carolina (WW/SW)	State Program	4	434	12-31-15
Pennsylvania	NELAP	3	02-00416	04-30-15 *
South Carolina	State Program	4	89014	04-30-15
Texas	NELAP	6	T104704528	03-31-15 *
US Fish & Wildlife	Federal		LE94312A-1	11-30-15
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	05-31-15
Virginia	NELAP	3	460189	09-14-15
West Virginia DEP	State Program	3	142	01-31-16
Wisconsin	State Program	5	998027800	08-31-15

* Certification renewal pending - certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-91724-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-91724-1

Login Number: 91724

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 0.7
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-91724-1

Login Number: 91724

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 03/17/15 12:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-97169-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
7/8/2015 10:11:27 AM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

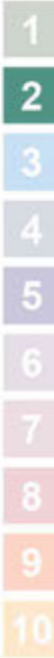


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	15

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-97169-1	MW-1	Water	06/29/15 10:46	06/30/15 12:40
460-97169-2	MW-2	Water	06/29/15 11:09	06/30/15 12:40
460-97169-3	MW-4	Water	06/29/15 12:51	06/30/15 12:40
460-97169-4	MW-5	Water	06/29/15 11:25	06/30/15 12:40
460-97169-5	MW-6	Water	06/29/15 11:37	06/30/15 12:40
460-97169-6	MW-9	Water	06/29/15 12:05	06/30/15 12:40
460-97169-7	MW-10	Water	06/29/15 12:24	06/30/15 12:40

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Job ID: 460-97169-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-97169-1

Comments

No additional comments.

Receipt

The samples were received on 6/30/2015 12:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-97169-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Client Sample ID: MW-1

Date Collected: 06/29/15 10:46

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			07/02/15 18:25	1
1,2-Dichloroethane	ND		1.0		ug/L			07/02/15 18:25	1
Ethylbenzene	ND		1.0		ug/L			07/02/15 18:25	1
Isopropylbenzene	ND		1.0		ug/L			07/02/15 18:25	1
Naphthalene	ND		1.0		ug/L			07/02/15 18:25	1
Toluene	ND		1.0		ug/L			07/02/15 18:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/02/15 18:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/02/15 18:25	1
Xylenes, Total	ND		2.0		ug/L			07/02/15 18:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/02/15 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	87		64 - 135		07/02/15 18:25	1
Dibromofluoromethane (Surr)	95		72 - 137		07/02/15 18:25	1
1,2-Dichloroethane-d4 (Surr)	119		70 - 130		07/02/15 18:25	1
Toluene-d8 (Surr)	111		70 - 130		07/02/15 18:25	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		07/02/15 11:23	07/03/15 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	90		60 - 140	07/02/15 11:23	07/03/15 02:09	1
1,1,1,2-Tetrachloroethane	88		60 - 140	07/02/15 11:23	07/03/15 02:09	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/01/15 00:32	07/01/15 06:27	5

Client Sample ID: MW-2

Date Collected: 06/29/15 11:09

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			07/02/15 18:48	1
1,2-Dichloroethane	ND		1.0		ug/L			07/02/15 18:48	1
Ethylbenzene	ND		1.0		ug/L			07/02/15 18:48	1
Isopropylbenzene	ND		1.0		ug/L			07/02/15 18:48	1
Naphthalene	ND		1.0		ug/L			07/02/15 18:48	1
Toluene	ND		1.0		ug/L			07/02/15 18:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/02/15 18:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/02/15 18:48	1
Xylenes, Total	ND		2.0		ug/L			07/02/15 18:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/02/15 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	87		64 - 135		07/02/15 18:48	1
Dibromofluoromethane (Surr)	96		72 - 137		07/02/15 18:48	1
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		07/02/15 18:48	1
Toluene-d8 (Surr)	111		70 - 130		07/02/15 18:48	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		07/02/15 11:23	07/03/15 02:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140				07/02/15 11:23	07/03/15 02:40	1
1,1,1,2-Tetrachloroethane	95		60 - 140				07/02/15 11:23	07/03/15 02:40	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/01/15 00:32	07/01/15 07:12	5

Client Sample ID: MW-4

Date Collected: 06/29/15 12:51

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	120		1.0		ug/L			07/02/15 19:12	1
1,2-Dichloroethane	ND		1.0		ug/L			07/02/15 19:12	1
Ethylbenzene	130		1.0		ug/L			07/02/15 19:12	1
Isopropylbenzene	12		1.0		ug/L			07/02/15 19:12	1
Naphthalene	6.2		1.0		ug/L			07/02/15 19:12	1
Toluene	17		1.0		ug/L			07/02/15 19:12	1
1,2,4-Trimethylbenzene	34		1.0		ug/L			07/02/15 19:12	1
1,3,5-Trimethylbenzene	1.3		1.0		ug/L			07/02/15 19:12	1
Xylenes, Total	57		2.0		ug/L			07/02/15 19:12	1
Methyl tert-butyl ether	22		1.0		ug/L			07/02/15 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	88		64 - 135					07/02/15 19:12	1
Dibromofluoromethane (Surr)	92		72 - 137					07/02/15 19:12	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130					07/02/15 19:12	1
Toluene-d8 (Surr)	108		70 - 130					07/02/15 19:12	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		07/02/15 11:23	07/03/15 03:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140				07/02/15 11:23	07/03/15 03:11	1
1,1,1,2-Tetrachloroethane	87		60 - 140				07/02/15 11:23	07/03/15 03:11	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/01/15 00:32	07/01/15 07:18	5

Client Sample ID: MW-5

Date Collected: 06/29/15 11:25

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			07/02/15 19:36	1
1,2-Dichloroethane	ND		1.0		ug/L			07/02/15 19:36	1
Ethylbenzene	ND		1.0		ug/L			07/02/15 19:36	1
Isopropylbenzene	ND		1.0		ug/L			07/02/15 19:36	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Client Sample ID: MW-5

Date Collected: 06/29/15 11:25

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			07/02/15 19:36	1
Toluene	ND		1.0		ug/L			07/02/15 19:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/02/15 19:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/02/15 19:36	1
Xylenes, Total	ND		2.0		ug/L			07/02/15 19:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/02/15 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	90		64 - 135		07/02/15 19:36	1
Dibromofluoromethane (Surr)	99		72 - 137		07/02/15 19:36	1
1,2-Dichloroethane-d4 (Surr)	116		70 - 130		07/02/15 19:36	1
Toluene-d8 (Surr)	113		70 - 130		07/02/15 19:36	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		07/02/15 11:23	07/03/15 03:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	96		60 - 140	07/02/15 11:23	07/03/15 03:42	1
1,1,1,2-Tetrachloroethane	96		60 - 140	07/02/15 11:23	07/03/15 03:42	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/01/15 00:32	07/01/15 07:24	5

Client Sample ID: MW-6

Date Collected: 06/29/15 11:37

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			07/02/15 20:00	1
1,2-Dichloroethane	ND		1.0		ug/L			07/02/15 20:00	1
Ethylbenzene	ND		1.0		ug/L			07/02/15 20:00	1
Isopropylbenzene	ND		1.0		ug/L			07/02/15 20:00	1
Naphthalene	ND		1.0		ug/L			07/02/15 20:00	1
Toluene	ND		1.0		ug/L			07/02/15 20:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/02/15 20:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/02/15 20:00	1
Xylenes, Total	ND		2.0		ug/L			07/02/15 20:00	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/02/15 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	89		64 - 135		07/02/15 20:00	1
Dibromofluoromethane (Surr)	98		72 - 137		07/02/15 20:00	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 130		07/02/15 20:00	1
Toluene-d8 (Surr)	110		70 - 130		07/02/15 20:00	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		07/02/15 11:23	07/03/15 04:13	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Client Sample ID: MW-6

Date Collected: 06/29/15 11:37

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	07/02/15 11:23	07/03/15 04:13	1
1,1,1,2-Tetrachloroethane	95		60 - 140	07/02/15 11:23	07/03/15 04:13	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	38		1.5		ug/L		07/01/15 00:32	07/01/15 07:29	5

Client Sample ID: MW-9

Date Collected: 06/29/15 12:05

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	17		1.0		ug/L			07/02/15 20:24	1
1,2-Dichloroethane	ND		1.0		ug/L			07/02/15 20:24	1
Ethylbenzene	ND		1.0		ug/L			07/02/15 20:24	1
Isopropylbenzene	8.9		1.0		ug/L			07/02/15 20:24	1
Naphthalene	ND		1.0		ug/L			07/02/15 20:24	1
Toluene	ND		1.0		ug/L			07/02/15 20:24	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/02/15 20:24	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/02/15 20:24	1
Xylenes, Total	ND		2.0		ug/L			07/02/15 20:24	1
Methyl tert-butyl ether	8.8		1.0		ug/L			07/02/15 20:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	88		64 - 135		07/02/15 20:24	1
Dibromofluoromethane (Surr)	97		72 - 137		07/02/15 20:24	1
1,2-Dichloroethane-d4 (Surr)	121		70 - 130		07/02/15 20:24	1
Toluene-d8 (Surr)	107		70 - 130		07/02/15 20:24	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		07/02/15 11:23	07/03/15 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	90		60 - 140	07/02/15 11:23	07/03/15 04:44	1
1,1,1,2-Tetrachloroethane	89		60 - 140	07/02/15 11:23	07/03/15 04:44	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/01/15 00:32	07/01/15 07:35	5

Client Sample ID: MW-10

Date Collected: 06/29/15 12:24

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2200		10		ug/L			07/02/15 20:48	10
1,2-Dichloroethane	ND		10		ug/L			07/02/15 20:48	10
Ethylbenzene	670		10		ug/L			07/02/15 20:48	10
Isopropylbenzene	60		10		ug/L			07/02/15 20:48	10

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Client Sample ID: MW-10

Date Collected: 06/29/15 12:24

Date Received: 06/30/15 12:40

Lab Sample ID: 460-97169-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	83		10		ug/L			07/02/15 20:48	10
Toluene	18		10		ug/L			07/02/15 20:48	10
1,2,4-Trimethylbenzene	460		10		ug/L			07/02/15 20:48	10
1,3,5-Trimethylbenzene	ND		10		ug/L			07/02/15 20:48	10
Xylenes, Total	340		20		ug/L			07/02/15 20:48	10
Methyl tert-butyl ether	110		10		ug/L			07/02/15 20:48	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	87		64 - 135		07/02/15 20:48	10
Dibromofluoromethane (Surr)	92		72 - 137		07/02/15 20:48	10
1,2-Dichloroethane-d4 (Surr)	112		70 - 130		07/02/15 20:48	10
Toluene-d8 (Surr)	111		70 - 130		07/02/15 20:48	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		07/02/15 11:23	07/03/15 05:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	77		60 - 140	07/02/15 11:23	07/03/15 05:15	1
1,1,1,2-Tetrachloroethane	87		60 - 140	07/02/15 11:23	07/03/15 05:15	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		07/01/15 00:32	07/01/15 07:41	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-16
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-15
New Jersey	NELAP	2	12028	06-30-15 *
New York	NELAP	2	11452	03-31-16
Pennsylvania	NELAP	3	68-00522	02-28-16
Rhode Island	State Program	1	LAO00132	12-30-15
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15 *
California	State Program	9	2891	03-31-16
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-16
Illinois	NELAP	5	002602	06-30-16
Kansas	NELAP	7	E-10350	07-31-15
Louisiana	NELAP	6	04041	06-30-16
New Hampshire	NELAP	1	203011	04-04-16
New Jersey	NELAP	2	PA005	09-30-15
New York	NELAP	2	11182	03-31-16
North Carolina (WW/SW)	State Program	4	434	12-31-15
Pennsylvania	NELAP	3	02-00416	04-30-16
South Carolina	State Program	4	89014	06-30-15 *
Texas	NELAP	6	T104704528	03-31-16
US Fish & Wildlife	Federal		LE94312A-1	11-30-15
USDA	Federal		P-Soil-01	05-23-16
Utah	NELAP	8	STLP	05-31-16
Virginia	NELAP	3	460189	09-14-15
West Virginia DEP	State Program	3	142	01-31-16
Wisconsin	State Program	5	998027800	08-31-15

* Certification renewal pending - certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-97169-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

CHAIN OF CUSTODY REPORT

1008 W. Ninth Avenue
King of Prussia, PA 19406
(610) 337-9992
FAX (610) 337-9939

7/8/2015

97169

KOP-1

7/8/2015

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-97169-1

Login Number: 97169

List Source: TestAmerica Edison

List Number: 1

Creator: Keehn, Jeffrey S

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	1.8/2.2c IR#KOP-1
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-97169-1

Login Number: 97169

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 07/01/15 02:28 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-101443-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
9/26/2015 12:33:29 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

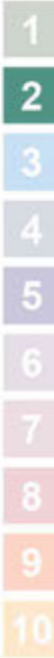


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	10
Method Summary	11
Chain of Custody	12
Receipt Checklists	15

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-101443-1	MW-1	Water	09/18/15 11:56	09/21/15 10:42
460-101443-2	MW-2	Water	09/18/15 12:05	09/21/15 10:42
460-101443-3	MW-4	Water	09/18/15 12:46	09/21/15 10:42
460-101443-4	MW-5	Water	09/18/15 12:19	09/21/15 10:42
460-101443-5	MW-9	Water	09/18/15 13:19	09/21/15 10:42
460-101443-6	MW-10	Water	09/18/15 13:38	09/21/15 10:42

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Job ID: 460-101443-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-101443-1

Comments

No additional comments.

Receipt

The samples were received on 9/21/2015 10:42 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-101443-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Client Sample ID: MW-1

Date Collected: 09/18/15 11:56

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/15 17:38	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/15 17:38	1
Ethylbenzene	ND		1.0		ug/L			09/23/15 17:38	1
Isopropylbenzene	ND		1.0		ug/L			09/23/15 17:38	1
Naphthalene	ND		1.0		ug/L			09/23/15 17:38	1
Toluene	ND		1.0		ug/L			09/23/15 17:38	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/15 17:38	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/15 17:38	1
Xylenes, Total	ND		2.0		ug/L			09/23/15 17:38	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/15 17:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	101		70 - 131		09/23/15 17:38	1
Dibromofluoromethane (Surr)	101		72 - 136		09/23/15 17:38	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 137		09/23/15 17:38	1
Toluene-d8 (Surr)	99		74 - 120		09/23/15 17:38	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/24/15 14:16	09/25/15 07:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	94		60 - 140	09/24/15 14:16	09/25/15 07:01	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/24/15 17:57	09/25/15 00:34	5

Client Sample ID: MW-2

Date Collected: 09/18/15 12:05

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/15 18:04	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/15 18:04	1
Ethylbenzene	ND		1.0		ug/L			09/23/15 18:04	1
Isopropylbenzene	1.8		1.0		ug/L			09/23/15 18:04	1
Naphthalene	ND		1.0		ug/L			09/23/15 18:04	1
Toluene	ND		1.0		ug/L			09/23/15 18:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/15 18:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/15 18:04	1
Xylenes, Total	ND		2.0		ug/L			09/23/15 18:04	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/15 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		70 - 131		09/23/15 18:04	1
Dibromofluoromethane (Surr)	101		72 - 136		09/23/15 18:04	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 137		09/23/15 18:04	1
Toluene-d8 (Surr)	102		74 - 120		09/23/15 18:04	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Client Sample ID: MW-2

Date Collected: 09/18/15 12:05

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-2

Matrix: Water

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/24/15 14:16	09/25/15 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	09/24/15 14:16	09/25/15 07:31	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/24/15 17:57	09/25/15 00:45	5

Client Sample ID: MW-4

Date Collected: 09/18/15 12:46

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	42		1.0		ug/L			09/23/15 18:30	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/15 18:30	1
Ethylbenzene	44		1.0		ug/L			09/23/15 18:30	1
Isopropylbenzene	8.3		1.0		ug/L			09/23/15 18:30	1
Naphthalene	6.7		1.0		ug/L			09/23/15 18:30	1
Toluene	15		1.0		ug/L			09/23/15 18:30	1
1,2,4-Trimethylbenzene	52		1.0		ug/L			09/23/15 18:30	1
1,3,5-Trimethylbenzene	11		1.0		ug/L			09/23/15 18:30	1
Xylenes, Total	58		2.0		ug/L			09/23/15 18:30	1
Methyl tert-butyl ether	19		1.0		ug/L			09/23/15 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		70 - 131		09/23/15 18:30	1
Dibromofluoromethane (Surr)	104		72 - 136		09/23/15 18:30	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 137		09/23/15 18:30	1
Toluene-d8 (Surr)	100		74 - 120		09/23/15 18:30	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/24/15 14:16	09/25/15 08:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	101		60 - 140	09/24/15 14:16	09/25/15 08:02	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/24/15 17:57	09/25/15 00:51	5

Client Sample ID: MW-5

Date Collected: 09/18/15 12:19

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/23/15 18:56	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/15 18:56	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Client Sample ID: MW-5

Date Collected: 09/18/15 12:19

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0		ug/L			09/23/15 18:56	1
Isopropylbenzene	ND		1.0		ug/L			09/23/15 18:56	1
Naphthalene	ND		1.0		ug/L			09/23/15 18:56	1
Toluene	ND		1.0		ug/L			09/23/15 18:56	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/15 18:56	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/15 18:56	1
Xylenes, Total	ND		2.0		ug/L			09/23/15 18:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/23/15 18:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	99		70 - 131		09/23/15 18:56	1
Dibromofluoromethane (Surr)	102		72 - 136		09/23/15 18:56	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 137		09/23/15 18:56	1
Toluene-d8 (Surr)	101		74 - 120		09/23/15 18:56	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/24/15 14:16	09/25/15 08:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140	09/24/15 14:16	09/25/15 08:32	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/24/15 17:57	09/25/15 00:57	5

Client Sample ID: MW-9

Date Collected: 09/18/15 13:19

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.5		1.0		ug/L			09/23/15 19:21	1
1,2-Dichloroethane	ND		1.0		ug/L			09/23/15 19:21	1
Ethylbenzene	ND		1.0		ug/L			09/23/15 19:21	1
Isopropylbenzene	4.6		1.0		ug/L			09/23/15 19:21	1
Naphthalene	ND		1.0		ug/L			09/23/15 19:21	1
Toluene	ND		1.0		ug/L			09/23/15 19:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/23/15 19:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/23/15 19:21	1
Xylenes, Total	ND		2.0		ug/L			09/23/15 19:21	1
Methyl tert-butyl ether	2.5		1.0		ug/L			09/23/15 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	101		70 - 131		09/23/15 19:21	1
Dibromofluoromethane (Surr)	99		72 - 136		09/23/15 19:21	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 137		09/23/15 19:21	1
Toluene-d8 (Surr)	100		74 - 120		09/23/15 19:21	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Client Sample ID: MW-9

Date Collected: 09/18/15 13:19

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-5

Matrix: Water

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/24/15 14:16	09/25/15 09:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	95		60 - 140	09/24/15 14:16	09/25/15 09:03	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/24/15 17:57	09/24/15 23:43	5

Client Sample ID: MW-10

Date Collected: 09/18/15 13:38

Date Received: 09/21/15 10:42

Lab Sample ID: 460-101443-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2100		10		ug/L			09/23/15 19:47	10
1,2-Dichloroethane	ND		10		ug/L			09/23/15 19:47	10
Ethylbenzene	490		10		ug/L			09/23/15 19:47	10
Isopropylbenzene	64		10		ug/L			09/23/15 19:47	10
Naphthalene	120		10		ug/L			09/23/15 19:47	10
Toluene	51		10		ug/L			09/23/15 19:47	10
1,2,4-Trimethylbenzene	170		10		ug/L			09/23/15 19:47	10
1,3,5-Trimethylbenzene	45		10		ug/L			09/23/15 19:47	10
Xylenes, Total	220		20		ug/L			09/23/15 19:47	10
Methyl tert-butyl ether	100		10		ug/L			09/23/15 19:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		70 - 131		09/23/15 19:47	10
Dibromofluoromethane (Surr)	99		72 - 136		09/23/15 19:47	10
1,2-Dichloroethane-d4 (Surr)	101		70 - 137		09/23/15 19:47	10
Toluene-d8 (Surr)	101		74 - 120		09/23/15 19:47	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/24/15 14:16	09/25/15 09:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	90		60 - 140	09/24/15 14:16	09/25/15 09:34	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/24/15 17:57	09/24/15 23:49	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-16
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-15
New Jersey	NELAP	2	12028	06-30-15 *
New York	NELAP	2	11452	03-31-16
Pennsylvania	NELAP	3	68-00522	02-28-16
Rhode Island	State Program	1	LAO00132	12-30-15
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-16
California	State Program	9	2891	03-31-16
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-16
Illinois	NELAP	5	200005	06-30-16
Kansas	NELAP	7	E-10350	09-30-15
Louisiana	NELAP	6	04041	06-30-16
New Hampshire	NELAP	1	2030	04-04-16
New Jersey	NELAP	2	PA005	09-30-15
New York	NELAP	2	11182	03-31-16
North Carolina (WW/SW)	State Program	4	434	12-31-15
Pennsylvania	NELAP	3	02-00416	04-30-16
South Carolina	State Program	4	89014	04-30-16
Texas	NELAP	6	T104704528-15-2	03-31-16
US Fish & Wildlife	Federal		LE94312A-1	11-30-15
USDA	Federal		P-Soil-01	05-23-16
Utah	NELAP	8	PA001462015-4	05-31-16
Virginia	NELAP	3	460189	09-14-16
West Virginia DEP	State Program	3	142	01-31-16
Wisconsin	State Program	5	998027800	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-101443-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

1
2
3
4
5
6
7
8
9
10

Page of

9/26/2015

Page of

460-101443 Chain of Custody

460-101 443 Chain of Custody

Water Metals Filtered (Yes/No)? **X**

Relinquished by	Company	Date / Time	Received by	Company
Relinquished by 1) <i>[Signature]</i>	Company CPT	Date / Time 9/21/15 1042	Received by 1) <i>[Signature]</i>	Company <i>[Signature]</i>
Relinquished by 2) <i>[Signature]</i>	Company JANOR	Date / Time 9/21/15 420	Received by 2) <i>[Signature]</i>	Company <i>[Signature]</i>
Relinquished by 3) <i>[Signature]</i>	Company <i>[Signature]</i>	Date / Time 9/21/15 610	Received by 3) <i>[Signature]</i>	Company JA
Relinquished by 4) <i>[Signature]</i>	Company S.A.	Date / Time 9/21/15	Received by 4) <i>[Signature]</i>	Company JA

TAL - 0016 (0814)

**TestAmerica Edison
Receipt Temperature and pH Log****Job Number:**

10443

Number of subjects:

Dr. Gupta

20

Cooler Temperatures

[illegible][illegible]

If pH adjustments are required record the information below:

Sample Note(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot# of Preservative(s):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.
Samples for metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-101443-1

Login Number: 101443

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-101443-1

Login Number: 101443

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 09/22/15 12:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-106279-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
12/21/2015 3:55:50 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

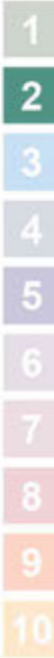


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	16

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-106279-1	MW-1	Water	12/11/15 10:19	12/15/15 13:15
460-106279-2	MW-2	Water	12/11/15 10:41	12/15/15 13:15
460-106279-3	MW-4	Water	12/11/15 12:21	12/15/15 13:15
460-106279-4	MW-5	Water	12/11/15 10:56	12/15/15 13:15
460-106279-5	MW-6	Water	12/11/15 11:11	12/15/15 13:15
460-106279-6	MW-9	Water	12/11/15 11:34	12/15/15 13:15
460-106279-7	MW-10	Water	12/11/15 11:53	12/15/15 13:15

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Job ID: 460-106279-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-106279-1

Comments

No additional comments.

Receipt

The samples were received on 12/15/2015 1:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-106279-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Client Sample ID: MW-1

Date Collected: 12/11/15 10:19

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/18/15 16:17	1
1,2-Dichloroethane	ND		1.0		ug/L			12/18/15 16:17	1
Ethylbenzene	ND		1.0		ug/L			12/18/15 16:17	1
Isopropylbenzene	ND		1.0		ug/L			12/18/15 16:17	1
Naphthalene	ND		1.0		ug/L			12/18/15 16:17	1
Toluene	ND		1.0		ug/L			12/18/15 16:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/18/15 16:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/18/15 16:17	1
Xylenes, Total	ND		2.0		ug/L			12/18/15 16:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/18/15 16:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	93		70 - 131		12/18/15 16:17	1
Dibromofluoromethane (Surr)	98		72 - 136		12/18/15 16:17	1
1,2-Dichloroethane-d4 (Surr)	109		70 - 137		12/18/15 16:17	1
Toluene-d8 (Surr)	95		74 - 120		12/18/15 16:17	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/15 10:48	12/17/15 15:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	108		60 - 140	12/17/15 10:48	12/17/15 15:03	1
1,1,1,2-Tetrachloroethane	102		60 - 140	12/17/15 10:48	12/17/15 15:03	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/15 02:06	12/18/15 07:49	5

Client Sample ID: MW-2

Date Collected: 12/11/15 10:41

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/18/15 16:43	1
1,2-Dichloroethane	ND		1.0		ug/L			12/18/15 16:43	1
Ethylbenzene	ND		1.0		ug/L			12/18/15 16:43	1
Isopropylbenzene	ND		1.0		ug/L			12/18/15 16:43	1
Naphthalene	ND		1.0		ug/L			12/18/15 16:43	1
Toluene	ND		1.0		ug/L			12/18/15 16:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/18/15 16:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/18/15 16:43	1
Xylenes, Total	ND		2.0		ug/L			12/18/15 16:43	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/18/15 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	96		70 - 131		12/18/15 16:43	1
Dibromofluoromethane (Surr)	99		72 - 136		12/18/15 16:43	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 137		12/18/15 16:43	1
Toluene-d8 (Surr)	96		74 - 120		12/18/15 16:43	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/15 10:48	12/17/15 15:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	108		60 - 140				12/17/15 10:48	12/17/15 15:34	1
1,1,1,2-Tetrachloroethane	102		60 - 140				12/17/15 10:48	12/17/15 15:34	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/15 02:06	12/18/15 08:00	5

Client Sample ID: MW-4

Date Collected: 12/11/15 12:21

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	270		1.0		ug/L			12/18/15 17:09	1
1,2-Dichloroethane	ND		1.0		ug/L			12/18/15 17:09	1
Ethylbenzene	140		1.0		ug/L			12/18/15 17:09	1
Isopropylbenzene	16		1.0		ug/L			12/18/15 17:09	1
Naphthalene	19		1.0		ug/L			12/18/15 17:09	1
Toluene	190		1.0		ug/L			12/18/15 17:09	1
1,2,4-Trimethylbenzene	80		1.0		ug/L			12/18/15 17:09	1
1,3,5-Trimethylbenzene	17		1.0		ug/L			12/18/15 17:09	1
Xylenes, Total	250		2.0		ug/L			12/18/15 17:09	1
Methyl tert-butyl ether	28		1.0		ug/L			12/18/15 17:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	94		70 - 131					12/18/15 17:09	1
Dibromofluoromethane (Surr)	99		72 - 136					12/18/15 17:09	1
1,2-Dichloroethane-d4 (Surr)	119		70 - 137					12/18/15 17:09	1
Toluene-d8 (Surr)	97		74 - 120					12/18/15 17:09	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/15 10:48	12/17/15 16:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	106		60 - 140				12/17/15 10:48	12/17/15 16:04	1
1,1,1,2-Tetrachloroethane	93		60 - 140				12/17/15 10:48	12/17/15 16:04	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/15 02:06	12/18/15 08:06	5

Client Sample ID: MW-5

Date Collected: 12/11/15 10:56

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/19/15 08:51	1
1,2-Dichloroethane	ND		1.0		ug/L			12/19/15 08:51	1
Ethylbenzene	ND		1.0		ug/L			12/19/15 08:51	1
Isopropylbenzene	ND		1.0		ug/L			12/19/15 08:51	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Client Sample ID: MW-5

Date Collected: 12/11/15 10:56

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			12/19/15 08:51	1
Toluene	ND		1.0		ug/L			12/19/15 08:51	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/19/15 08:51	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/19/15 08:51	1
Xylenes, Total	ND		2.0		ug/L			12/19/15 08:51	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/19/15 08:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	95		70 - 131		12/19/15 08:51	1
Dibromofluoromethane (Surr)	99		72 - 136		12/19/15 08:51	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 137		12/19/15 08:51	1
Toluene-d8 (Surr)	97		74 - 120		12/19/15 08:51	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/15 10:48	12/17/15 16:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	107		60 - 140	12/17/15 10:48	12/17/15 16:34	1
1,1,1,2-Tetrachloroethane	100		60 - 140	12/17/15 10:48	12/17/15 16:34	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/15 02:06	12/18/15 08:12	5

Client Sample ID: MW-6

Date Collected: 12/11/15 11:11

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/18/15 18:01	1
1,2-Dichloroethane	ND		1.0		ug/L			12/18/15 18:01	1
Ethylbenzene	ND		1.0		ug/L			12/18/15 18:01	1
Isopropylbenzene	ND		1.0		ug/L			12/18/15 18:01	1
Naphthalene	ND		1.0		ug/L			12/18/15 18:01	1
Toluene	ND		1.0		ug/L			12/18/15 18:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/18/15 18:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/18/15 18:01	1
Xylenes, Total	ND		2.0		ug/L			12/18/15 18:01	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/18/15 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	97		70 - 131		12/18/15 18:01	1
Dibromofluoromethane (Surr)	100		72 - 136		12/18/15 18:01	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 137		12/18/15 18:01	1
Toluene-d8 (Surr)	96		74 - 120		12/18/15 18:01	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/15 10:48	12/17/15 17:04	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Client Sample ID: MW-6

Date Collected: 12/11/15 11:11

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	113		60 - 140	12/17/15 10:48	12/17/15 17:04	1
1,1,1,2-Tetrachloroethane	104		60 - 140	12/17/15 10:48	12/17/15 17:04	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	39		1.5		ug/L		12/18/15 02:06	12/18/15 08:28	5

Client Sample ID: MW-9

Date Collected: 12/11/15 11:34

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.5		1.0		ug/L			12/18/15 18:27	1
1,2-Dichloroethane	ND		1.0		ug/L			12/18/15 18:27	1
Ethylbenzene	ND		1.0		ug/L			12/18/15 18:27	1
Isopropylbenzene	4.0		1.0		ug/L			12/18/15 18:27	1
Naphthalene	ND		1.0		ug/L			12/18/15 18:27	1
Toluene	ND		1.0		ug/L			12/18/15 18:27	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/18/15 18:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/18/15 18:27	1
Xylenes, Total	ND		2.0		ug/L			12/18/15 18:27	1
Methyl tert-butyl ether	2.2		1.0		ug/L			12/18/15 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	95		70 - 131		12/18/15 18:27	1
Dibromofluoromethane (Surr)	102		72 - 136		12/18/15 18:27	1
1,2-Dichloroethane-d4 (Surr)	117		70 - 137		12/18/15 18:27	1
Toluene-d8 (Surr)	96		74 - 120		12/18/15 18:27	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/15 10:48	12/17/15 17:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	111		60 - 140	12/17/15 10:48	12/17/15 17:35	1
1,1,1,2-Tetrachloroethane	106		60 - 140	12/17/15 10:48	12/17/15 17:35	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/15 02:06	12/18/15 08:34	5

Client Sample ID: MW-10

Date Collected: 12/11/15 11:53

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1000		10		ug/L			12/18/15 18:54	10
1,2-Dichloroethane	ND		10		ug/L			12/18/15 18:54	10
Ethylbenzene	300		10		ug/L			12/18/15 18:54	10
Isopropylbenzene	43		10		ug/L			12/18/15 18:54	10

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Client Sample ID: MW-10

Date Collected: 12/11/15 11:53

Date Received: 12/15/15 13:15

Lab Sample ID: 460-106279-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	39		10		ug/L			12/18/15 18:54	10
Toluene	ND		10		ug/L			12/18/15 18:54	10
1,2,4-Trimethylbenzene	69		10		ug/L			12/18/15 18:54	10
1,3,5-Trimethylbenzene	ND		10		ug/L			12/18/15 18:54	10
Xylenes, Total	37		20		ug/L			12/18/15 18:54	10
Methyl tert-butyl ether	54		10		ug/L			12/18/15 18:54	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	96		70 - 131		12/18/15 18:54	10
Dibromofluoromethane (Surr)	99		72 - 136		12/18/15 18:54	10
1,2-Dichloroethane-d4 (Surr)	114		70 - 137		12/18/15 18:54	10
Toluene-d8 (Surr)	98		74 - 120		12/18/15 18:54	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/15 10:48	12/17/15 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	107		60 - 140	12/17/15 10:48	12/17/15 18:05	1
1,1,1,2-Tetrachloroethane	103		60 - 140	12/17/15 10:48	12/17/15 18:05	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/18/15 02:06	12/18/15 08:40	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-16
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-15
New Jersey	NELAP	2	12028	06-30-16
New York	NELAP	2	11452	03-31-16
Pennsylvania	NELAP	3	68-00522	02-28-16
Rhode Island	State Program	1	LAO00132	12-30-15
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-16
California	State Program	9	2891	03-31-16
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-16
Illinois	NELAP	5	200005	06-30-16
Kansas	NELAP	7	E-10350	01-31-16 *
Louisiana	NELAP	6	04041	06-30-16
New Hampshire	NELAP	1	2030	04-04-16
New Jersey	NELAP	2	PA005	06-30-16
New York	NELAP	2	11182	03-31-16
North Carolina (WW/SW)	State Program	4	434	12-31-15 *
Pennsylvania	NELAP	3	02-00416	04-30-16
South Carolina	State Program	4	89014	04-30-16
Texas	NELAP	6	T104704528-15-2	03-31-16
USDA	Federal		P-Soil-01	05-23-16
Utah	NELAP	8	PA001462015-4	05-31-16
Virginia	NELAP	3	460189	09-14-16
West Virginia DEP	State Program	3	142	01-31-16
Wisconsin	State Program	5	998027800	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-106279-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

Name (for report and invoice) Rachel Rivkat		Samplers Name (Printed) Rachel Rivkat		Site/Project Identification Liberty 01 #38	
Company Center Point Task Services		P.O. # 08-12-4292		State (Location of site): NJ <input type="checkbox"/> NY <input type="checkbox"/> Other: PA	
Address 536 E. Livingston Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: PA-05T	
City Douglasville		State GA		LAB USE ONLY Job No: 106279 Project No:	
Phone 610 385 4977		Fax		Sample Numbers	

Sample Identification	Date	Time	Matrix	No. of Cont.	Unleaded gasoline	Leaded gasoline
MW-1	12/11/15	10:49	GW	5	X	X
MW-2		10:41		5	X	X
MW-4		12:21		5	X	X
MW-5		10:54		5	X	X
MW-6		11:11		5	X	X
MW-9		11:34		5	X	X
MW-10		11:53		5	X	X

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

Soil: 21 Water: 14

460-106279 Chain of Custody

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company	Water Metals Filtered (Yes/No)?
<i>[Signature]</i>	CPIS	12/15/15 13:21	<i>[Signature]</i>	TAS	
Relinquished by Quincy Hume	Company TAS	Date / Time 12/15/15 16:30	Received by Quincy Hume	Company TAS	
Relinquished by Quincy Hume	Company TAS	Date / Time 12/15/15 18:10	Received by <i>[Signature]</i>	Company TAS	
Relinquished by Quincy Hume	Company TAS	Date / Time 12/15/15 18:40	Received by <i>[Signature]</i>	Company TAS	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 576)

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



460-106279 Chain of Custody

Client Information (Sub Contract Lab)		Sampler:		Lab PM:	
Client Contact:		Miller, Jill K		E-Mail:	
Shipping/Receiving		jill.miller@testamericainc.com			
Company:		TestAmerica Laboratories, Inc.		Analysis Requested	
Address:		301 Alpha Drive, RIDC Park,			
City:		Pittsburgh			
State, Zip:		PA, 15238			
Phone:		412-963-7058(Tel) 412-963-2468(Fax)			
Email:					
Project Name:		Liberty Oil #38			
Site:		SSOWE:			
Due Date Requested:		12/21/2015			
TAT Requested (days):					
PO #:					
WO #:					
Project #:		46011357			
Site:					
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Minerals, Residuals, Grease/Oil, etc.)
MW-1 (460-106279-1)	12/11/15	10:19 Eastern		Water	
MW-2 (460-106279-2)	12/11/15	10:41 Eastern		Water	
MW-4 (460-106279-3)	12/11/15	12:21 Eastern		Water	
MW-5 (460-106279-4)	12/11/15	10:58 Eastern		Water	
MW-6 (460-106279-5)	12/11/15	11:11 Eastern		Water	
MW-9 (460-106279-6)	12/11/15	11:34 Eastern		Water	
MW-10 (460-106279-7)	12/11/15	11:53 Eastern		Water	
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:					
Relinquished by:		Date:	Time:	Method of Shipment:	
Custody Seal No.:		Date/Time:	12/15/15 1450	Company:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seal Intact:		Cooler Temperature(s) °C and Other Remarks:			
Δ Yes Δ No					

DOC No:

460-43947.1

Page:

Page 1 of 1

Job #:

460-106279-1

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO₄
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
Other:

M - Hexane
N - None
O - AsHNaO₂
P - Na₂O₄S
Q - Na₂SO₃
R - Na₂S₂O₃
S - H₂SO₄
T - TSP Dodecylhydrazine
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Special Instructions/Note:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months

Special Instructions/QC Requirements:

Relinquished by:

Relinquished by: *Jill Miller*
Date/Time: 12/16/15 1700
Company: TAP

Relinquished by:

Date/Time:

Company:

Relinquished by:

Date/Time:

Company:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-106279-1

Login Number: 106279

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR kOP#1
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-106279-1

Login Number: 106279

List Number: 2

Creator: Walnoha, Tyler C

List Source: TestAmerica Pittsburgh

List Creation: 12/16/15 04:57 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-111936-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
4/26/2016 3:46:07 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

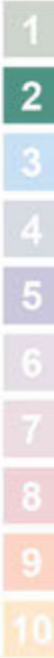


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	17

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-111936-1	MW-1	Water	04/08/16 10:56	04/11/16 12:26
460-111936-2	MW-2	Water	04/08/16 11:18	04/11/16 12:26
460-111936-3	MW-3	Water	04/08/16 14:05	04/11/16 12:26
460-111936-4	MW-4	Water	04/08/16 13:39	04/11/16 12:26
460-111936-5	MW-5	Water	04/08/16 11:34	04/11/16 12:26
460-111936-6	MW-6	Water	04/08/16 11:55	04/11/16 12:26
460-111936-7	MW-9	Water	04/08/16 12:49	04/11/16 12:26
460-111936-8	MW-10	Water	04/08/16 13:11	04/11/16 12:26
460-111936-9	MW-11	Water	04/08/16 12:12	04/11/16 12:26

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Job ID: 460-111936-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-111936-1

Comments

No additional comments.

Receipt

The samples were received on 4/11/2016 12:26 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-111936-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-4 (460-111936-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Client Sample ID: MW-1

Date Collected: 04/08/16 10:56

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/13/16 22:35	1
1,2-Dichloroethane	ND		1.0		ug/L			04/13/16 22:35	1
Ethylbenzene	ND		1.0		ug/L			04/13/16 22:35	1
Isopropylbenzene	ND		1.0		ug/L			04/13/16 22:35	1
Naphthalene	ND		1.0		ug/L			04/13/16 22:35	1
Toluene	ND		1.0		ug/L			04/13/16 22:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/13/16 22:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/13/16 22:35	1
Xylenes, Total	ND		2.0		ug/L			04/13/16 22:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/13/16 22:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	89		70 - 131		04/13/16 22:35	1
Dibromofluoromethane (Surr)	106		72 - 136		04/13/16 22:35	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 137		04/13/16 22:35	1
Toluene-d8 (Surr)	97		74 - 120		04/13/16 22:35	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/14/16 22:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	100		60 - 140	04/14/16 09:54	04/14/16 22:08	1
1,1,1,2-Tetrachloroethane	101		60 - 140	04/14/16 09:54	04/14/16 22:08	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/23/16 17:01	04/26/16 01:04	5

Client Sample ID: MW-2

Date Collected: 04/08/16 11:18

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/13/16 22:58	1
1,2-Dichloroethane	ND		1.0		ug/L			04/13/16 22:58	1
Ethylbenzene	ND		1.0		ug/L			04/13/16 22:58	1
Isopropylbenzene	ND		1.0		ug/L			04/13/16 22:58	1
Naphthalene	ND		1.0		ug/L			04/13/16 22:58	1
Toluene	ND		1.0		ug/L			04/13/16 22:58	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/13/16 22:58	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/13/16 22:58	1
Xylenes, Total	ND		2.0		ug/L			04/13/16 22:58	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/13/16 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	92		70 - 131		04/13/16 22:58	1
Dibromofluoromethane (Surr)	111		72 - 136		04/13/16 22:58	1
1,2-Dichloroethane-d4 (Surr)	109		70 - 137		04/13/16 22:58	1
Toluene-d8 (Surr)	105		74 - 120		04/13/16 22:58	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/14/16 22:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	99		60 - 140				04/14/16 09:54	04/14/16 22:34	1
1,1,1,2-Tetrachloroethane	100		60 - 140				04/14/16 09:54	04/14/16 22:34	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/23/16 17:01	04/26/16 01:16	5

Client Sample ID: MW-3

Date Collected: 04/08/16 14:05

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	100		1.0		ug/L			04/13/16 23:22	1
1,2-Dichloroethane	ND		1.0		ug/L			04/13/16 23:22	1
Ethylbenzene	85		1.0		ug/L			04/13/16 23:22	1
Isopropylbenzene	21		1.0		ug/L			04/13/16 23:22	1
Naphthalene	11		1.0		ug/L			04/13/16 23:22	1
Toluene	8.4		1.0		ug/L			04/13/16 23:22	1
1,2,4-Trimethylbenzene	91		1.0		ug/L			04/13/16 23:22	1
1,3,5-Trimethylbenzene	6.1		1.0		ug/L			04/13/16 23:22	1
Xylenes, Total	29		2.0		ug/L			04/13/16 23:22	1
Methyl tert-butyl ether	13		1.0		ug/L			04/13/16 23:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	100		70 - 131					04/13/16 23:22	1
Dibromofluoromethane (Surr)	106		72 - 136					04/13/16 23:22	1
1,2-Dichloroethane-d4 (Surr)	107		70 - 137					04/13/16 23:22	1
Toluene-d8 (Surr)	102		74 - 120					04/13/16 23:22	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/14/16 22:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	104		60 - 140				04/14/16 09:54	04/14/16 22:59	1
1,1,1,2-Tetrachloroethane	102		60 - 140				04/14/16 09:54	04/14/16 22:59	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/23/16 17:01	04/26/16 01:39	5

Client Sample ID: MW-4

Date Collected: 04/08/16 13:39

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	260		2.0		ug/L			04/14/16 13:24	2
1,2-Dichloroethane	ND		2.0		ug/L			04/14/16 13:24	2
Ethylbenzene	190		2.0		ug/L			04/14/16 13:24	2
Isopropylbenzene	13		2.0		ug/L			04/14/16 13:24	2

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Client Sample ID: MW-4

Date Collected: 04/08/16 13:39

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	13		2.0		ug/L			04/14/16 13:24	2
Toluene	54		2.0		ug/L			04/14/16 13:24	2
1,2,4-Trimethylbenzene	31		2.0		ug/L			04/14/16 13:24	2
1,3,5-Trimethylbenzene	5.0		2.0		ug/L			04/14/16 13:24	2
Xylenes, Total	110		4.0		ug/L			04/14/16 13:24	2
Methyl tert-butyl ether	29		2.0		ug/L			04/14/16 13:24	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	106		70 - 131		04/14/16 13:24	2
Dibromofluoromethane (Surr)	113		72 - 136		04/14/16 13:24	2
1,2-Dichloroethane-d4 (Surr)	109		70 - 137		04/14/16 13:24	2
Toluene-d8 (Surr)	99		74 - 120		04/14/16 13:24	2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/14/16 23:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	110		60 - 140	04/14/16 09:54	04/14/16 23:25	1
1,1,1,2-Tetrachloroethane	106		60 - 140	04/14/16 09:54	04/14/16 23:25	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/23/16 17:01	04/26/16 01:45	5

Client Sample ID: MW-5

Date Collected: 04/08/16 11:34

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/14/16 11:26	1
1,2-Dichloroethane	ND		1.0		ug/L			04/14/16 11:26	1
Ethylbenzene	ND		1.0		ug/L			04/14/16 11:26	1
Isopropylbenzene	ND		1.0		ug/L			04/14/16 11:26	1
Naphthalene	ND		1.0		ug/L			04/14/16 11:26	1
Toluene	ND		1.0		ug/L			04/14/16 11:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/14/16 11:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/14/16 11:26	1
Xylenes, Total	ND		2.0		ug/L			04/14/16 11:26	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/14/16 11:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	110		70 - 131		04/14/16 11:26	1
Dibromofluoromethane (Surr)	120		72 - 136		04/14/16 11:26	1
1,2-Dichloroethane-d4 (Surr)	118		70 - 137		04/14/16 11:26	1
Toluene-d8 (Surr)	110		74 - 120		04/14/16 11:26	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/14/16 23:50	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Client Sample ID: MW-5

Date Collected: 04/08/16 11:34

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	102		60 - 140	04/14/16 09:54	04/14/16 23:50	1
1,1,1,2-Tetrachloroethane	101		60 - 140	04/14/16 09:54	04/14/16 23:50	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/23/16 17:01	04/26/16 01:51	5

Client Sample ID: MW-6

Date Collected: 04/08/16 11:55

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/14/16 11:03	1
1,2-Dichloroethane	ND		1.0		ug/L			04/14/16 11:03	1
Ethylbenzene	ND		1.0		ug/L			04/14/16 11:03	1
Isopropylbenzene	ND		1.0		ug/L			04/14/16 11:03	1
Naphthalene	ND		1.0		ug/L			04/14/16 11:03	1
Toluene	ND		1.0		ug/L			04/14/16 11:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/14/16 11:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/14/16 11:03	1
Xylenes, Total	ND		2.0		ug/L			04/14/16 11:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/14/16 11:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	107		70 - 131		04/14/16 11:03	1
Dibromofluoromethane (Surr)	119		72 - 136		04/14/16 11:03	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 137		04/14/16 11:03	1
Toluene-d8 (Surr)	114		74 - 120		04/14/16 11:03	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/15/16 00:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	100		60 - 140	04/14/16 09:54	04/15/16 00:16	1
1,1,1,2-Tetrachloroethane	100		60 - 140	04/14/16 09:54	04/15/16 00:16	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		1.5		ug/L		04/23/16 17:01	04/26/16 01:56	5

Client Sample ID: MW-9

Date Collected: 04/08/16 12:49

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.0		1.0		ug/L			04/14/16 00:55	1
1,2-Dichloroethane	ND		1.0		ug/L			04/14/16 00:55	1
Ethylbenzene	ND		1.0		ug/L			04/14/16 00:55	1
Isopropylbenzene	4.3		1.0		ug/L			04/14/16 00:55	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Client Sample ID: MW-9

Date Collected: 04/08/16 12:49

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			04/14/16 00:55	1
Toluene	ND		1.0		ug/L			04/14/16 00:55	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/14/16 00:55	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/14/16 00:55	1
Xylenes, Total	ND		2.0		ug/L			04/14/16 00:55	1
Methyl tert-butyl ether	4.9		1.0		ug/L			04/14/16 00:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	101		70 - 131		04/14/16 00:55	1
Dibromofluoromethane (Surr)	114		72 - 136		04/14/16 00:55	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 137		04/14/16 00:55	1
Toluene-d8 (Surr)	99		74 - 120		04/14/16 00:55	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/15/16 00:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	98		60 - 140				04/14/16 09:54	04/15/16 00:42	1
1,1,1,2-Tetrachloroethane	98		60 - 140				04/14/16 09:54	04/15/16 00:42	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/23/16 17:01	04/26/16 02:02	5

Client Sample ID: MW-10

Date Collected: 04/08/16 13:11

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1300		10		ug/L			04/14/16 04:26	10
1,2-Dichloroethane	ND		10		ug/L			04/14/16 04:26	10
Ethylbenzene	280		10		ug/L			04/14/16 04:26	10
Isopropylbenzene	30		10		ug/L			04/14/16 04:26	10
Naphthalene	30		10		ug/L			04/14/16 04:26	10
Toluene	38		10		ug/L			04/14/16 04:26	10
1,2,4-Trimethylbenzene	58		10		ug/L			04/14/16 04:26	10
1,3,5-Trimethylbenzene	13		10		ug/L			04/14/16 04:26	10
Xylenes, Total	150		20		ug/L			04/14/16 04:26	10
Methyl tert-butyl ether	77		10		ug/L			04/14/16 04:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	105		70 - 131		04/14/16 04:26	10
Dibromofluoromethane (Surr)	105		72 - 136		04/14/16 04:26	10
1,2-Dichloroethane-d4 (Surr)	104		70 - 137		04/14/16 04:26	10
Toluene-d8 (Surr)	105		74 - 120		04/14/16 04:26	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/15/16 01:08	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Client Sample ID: MW-10

Date Collected: 04/08/16 13:11

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	104		60 - 140	04/14/16 09:54	04/15/16 01:08	1
1,1,1,2-Tetrachloroethane	105		60 - 140	04/14/16 09:54	04/15/16 01:08	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/23/16 17:01	04/26/16 02:08	5

Client Sample ID: MW-11

Date Collected: 04/08/16 12:12

Date Received: 04/11/16 12:26

Lab Sample ID: 460-111936-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/14/16 01:18	1
1,2-Dichloroethane	ND		1.0		ug/L			04/14/16 01:18	1
Ethylbenzene	ND		1.0		ug/L			04/14/16 01:18	1
Isopropylbenzene	ND		1.0		ug/L			04/14/16 01:18	1
Naphthalene	ND		1.0		ug/L			04/14/16 01:18	1
Toluene	ND		1.0		ug/L			04/14/16 01:18	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/14/16 01:18	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/14/16 01:18	1
Xylenes, Total	ND		2.0		ug/L			04/14/16 01:18	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/14/16 01:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	92		70 - 131		04/14/16 01:18	1
Dibromofluoromethane (Surr)	103		72 - 136		04/14/16 01:18	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 137		04/14/16 01:18	1
Toluene-d8 (Surr)	90		74 - 120		04/14/16 01:18	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/14/16 09:54	04/15/16 01:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	105		60 - 140	04/14/16 09:54	04/15/16 01:33	1
1,1,1,2-Tetrachloroethane	105		60 - 140	04/14/16 09:54	04/15/16 01:33	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/23/16 17:03	04/26/16 02:14	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-16
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-15 *
New Jersey	NELAP	2	12028	06-30-16
New York	NELAP	2	11452	03-31-17
Pennsylvania	NELAP	3	68-00522	02-28-17
Rhode Island	State Program	1	LAO00132	12-30-16 *
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-16
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-16
Illinois	NELAP	5	200005	06-30-16
Kansas	NELAP	7	E-10350	05-31-16
Louisiana	NELAP	6	04041	06-30-16
New Hampshire	NELAP	1	2030	04-04-17
New Jersey	NELAP	2	PA005	06-30-16
New York	NELAP	2	11182	03-31-17
North Carolina (WW/SW)	State Program	4	434	12-31-16
Pennsylvania	NELAP	3	02-00416	04-30-16
South Carolina	State Program	4	89014	04-30-16 *
Texas	NELAP	6	T104704528-15-2	03-31-17
US Fish & Wildlife	Federal		LE94312A-1	10-31-16
USDA	Federal		P-Soil-01	05-23-16 *
Utah	NELAP	8	PA001462015-4	05-31-16
Virginia	NELAP	3	460189	09-14-16
West Virginia DEP	State Program	3	142	01-31-17
Wisconsin	State Program	5	998027800	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-111936-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

Page 1 of 1

Name (for report and invoice) Rachel Berkart		Sample Name (Printed) Rachel Berkart		Site/Project Identification Liberty 01438		
Company Contri Part Tank Services		P.O. # 08-12-4292		State (Location of site): NJ: <input type="checkbox"/> NY: <input type="checkbox"/> Other: PA		
Address 530 E. Benjamin Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: HAUST		
City Douglasville		State GA		LAB USE ONLY Job No: 111936 Project No:		
Phone 610 385 4977		Fax		Sample Numbers		
Sample Identification	Date	Time	Matrix	No. of Cont.	Unleaded gasoline	Leaded gasoline
MW-1	9/8/16	1056	GW	6	X	X
MW-2		1114		6	X	X
MW-3		1405		6	X	X
MW-4		1339		6	X	X
MW-5		1134		6	X	X
MW-6		1155		6	X	X
MW-9		1249		6	X	X
MW-10		1311		6	X	X
MW-11		1212		6	X	X

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

Water: 1/2 1/4

460-111936 Chain of Custody

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by Rachel Berkart	Company CPS	Date / Time 9/16/16 1226	Received by [Signature]	Company TA
Relinquished by [Signature]	Company TA	Date / Time 9/16/16 1740	Received by [Signature]	Company TA
Relinquished by [Signature]	Company TA	Date / Time 9/16/16 1920	Received by [Signature]	Company Edison
Relinquished by [Signature]	Company TA	Date / Time 9/16/16 1920	Received by [Signature]	Company Edison

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132),
Massachusetts (M-NJ312), North Carolina (No. 578)

Job Number:

111936

Number of Colors:

i

IR Gun #

1:20P.1

Cooler Temperatures

CONNECTED			RAW			CONNECTED			RAW			CONNECTED		
Cooler #1:	4.0 °C	4.4 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C	Cooler #10:	°C	°C	Cooler #13:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C	Cooler #11:	°C	°C	Cooler #14:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C	Cooler #12:	°C	°C	Cooler #15:	°C	°C

[illegible]

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot# of Preservative(s):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

ORIGIN ID: KPOA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1010 WEST 9TH AVE
SUITE 50
KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 11APR16
ACTWGT: 38.00 LB
CAD: 8490299/INET3730

BILL RECIPIENT

TO: **SAMPLE RECEIPT**
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7058

REF:

DEPT:



Uncorrected temp
Thermometer ID

S.L. °C
AB

CF *D* Initials

PT-WR-SR-001 effective 7/26/13

7760 7742 7208

EV AGCA

STANDARD OVERNIGHT

15238
PA-US PIT

Part # 155297-435 RT2 12/15



460-111936 Waybill

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-111936-1

Login Number: 111936

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 4.4
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-111936-1

Login Number: 111936

List Number: 2

Creator: Butcher, Ryan M

List Source: TestAmerica Pittsburgh

List Creation: 04/12/16 12:07 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-115549-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
6/27/2016 8:21:37 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

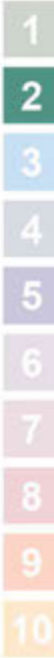


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	18

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-115549-1	MW-1	Water	06/15/16 10:39	06/17/16 11:11
460-115549-2	MW-2	Water	06/15/16 10:57	06/17/16 11:11
460-115549-3	MW-3	Water	06/15/16 13:27	06/17/16 11:11
460-115549-4	MW-4	Water	06/15/16 13:01	06/17/16 11:11
460-115549-5	MW-5	Water	06/15/16 11:30	06/17/16 11:11
460-115549-6	MW-9	Water	06/15/16 12:21	06/17/16 11:11
460-115549-7	MW-10	Water	06/15/16 12:38	06/17/16 11:11
460-115549-8	MW-11	Water	06/15/16 11:50	06/17/16 11:11

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Job ID: 460-115549-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-115549-1

Comments

No additional comments.

Receipt

The samples were received on 6/17/2016 11:11 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-115549-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Client Sample ID: MW-1

Date Collected: 06/15/16 10:39

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			06/22/16 19:10	1
1,2-Dichloroethane	ND		1.0		ug/L			06/22/16 19:10	1
Ethylbenzene	ND		1.0		ug/L			06/22/16 19:10	1
Isopropylbenzene	ND		1.0		ug/L			06/22/16 19:10	1
Naphthalene	ND		1.0		ug/L			06/22/16 19:10	1
Toluene	ND		1.0		ug/L			06/22/16 19:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/22/16 19:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/22/16 19:10	1
Xylenes, Total	ND		2.0		ug/L			06/22/16 19:10	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/22/16 19:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	85		70 - 131		06/22/16 19:10	1
Dibromofluoromethane (Surr)	107		72 - 136		06/22/16 19:10	1
1,2-Dichloroethane-d4 (Surr)	115		70 - 137		06/22/16 19:10	1
Toluene-d8 (Surr)	97		74 - 120		06/22/16 19:10	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/19/16 11:15	06/19/16 21:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140	06/19/16 11:15	06/19/16 21:45	1
1,1,1,2-Tetrachloroethane	94		60 - 140	06/19/16 11:15	06/19/16 21:45	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/21/16 14:23	06/26/16 10:15	5

Client Sample ID: MW-2

Date Collected: 06/15/16 10:57

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			06/22/16 19:36	1
1,2-Dichloroethane	ND		1.0		ug/L			06/22/16 19:36	1
Ethylbenzene	ND		1.0		ug/L			06/22/16 19:36	1
Isopropylbenzene	1.4		1.0		ug/L			06/22/16 19:36	1
Naphthalene	ND		1.0		ug/L			06/22/16 19:36	1
Toluene	ND		1.0		ug/L			06/22/16 19:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/22/16 19:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/22/16 19:36	1
Xylenes, Total	ND		2.0		ug/L			06/22/16 19:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/22/16 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	92		70 - 131		06/22/16 19:36	1
Dibromofluoromethane (Surr)	100		72 - 136		06/22/16 19:36	1
1,2-Dichloroethane-d4 (Surr)	114		70 - 137		06/22/16 19:36	1
Toluene-d8 (Surr)	105		74 - 120		06/22/16 19:36	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/19/16 11:15	06/19/16 22:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140				06/19/16 11:15	06/19/16 22:11	1
1,1,1,2-Tetrachloroethane	95		60 - 140				06/19/16 11:15	06/19/16 22:11	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/21/16 14:23	06/26/16 10:21	5

Client Sample ID: MW-3

Date Collected: 06/15/16 13:27

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	13		1.0		ug/L			06/22/16 20:02	1
1,2-Dichloroethane	ND		1.0		ug/L			06/22/16 20:02	1
Ethylbenzene	1.7		1.0		ug/L			06/22/16 20:02	1
Isopropylbenzene	1.3		1.0		ug/L			06/22/16 20:02	1
Naphthalene	ND		1.0		ug/L			06/22/16 20:02	1
Toluene	ND		1.0		ug/L			06/22/16 20:02	1
1,2,4-Trimethylbenzene	1.4		1.0		ug/L			06/22/16 20:02	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/22/16 20:02	1
Xylenes, Total	2.4		2.0		ug/L			06/22/16 20:02	1
Methyl tert-butyl ether	2.1		1.0		ug/L			06/22/16 20:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	86		70 - 131					06/22/16 20:02	1
Dibromofluoromethane (Surr)	99		72 - 136					06/22/16 20:02	1
1,2-Dichloroethane-d4 (Surr)	116		70 - 137					06/22/16 20:02	1
Toluene-d8 (Surr)	104		74 - 120					06/22/16 20:02	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/19/16 11:15	06/19/16 22:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	92		60 - 140				06/19/16 11:15	06/19/16 22:36	1
1,1,1,2-Tetrachloroethane	93		60 - 140				06/19/16 11:15	06/19/16 22:36	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/21/16 14:23	06/26/16 10:26	5

Client Sample ID: MW-4

Date Collected: 06/15/16 13:01

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	71		1.0		ug/L			06/23/16 08:04	1
1,2-Dichloroethane	ND		1.0		ug/L			06/23/16 08:04	1
Ethylbenzene	39		1.0		ug/L			06/23/16 08:04	1
Isopropylbenzene	6.9		1.0		ug/L			06/23/16 08:04	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Client Sample ID: MW-4

Date Collected: 06/15/16 13:01

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	2.9		1.0		ug/L			06/23/16 08:04	1
Toluene	10		1.0		ug/L			06/23/16 08:04	1
1,2,4-Trimethylbenzene	19		1.0		ug/L			06/23/16 08:04	1
1,3,5-Trimethylbenzene	2.9		1.0		ug/L			06/23/16 08:04	1
Xylenes, Total	45		2.0		ug/L			06/23/16 08:04	1
Methyl tert-butyl ether	34		1.0		ug/L			06/23/16 08:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	90		70 - 131		06/23/16 08:04	1
Dibromofluoromethane (Surr)	99		72 - 136		06/23/16 08:04	1
1,2-Dichloroethane-d4 (Surr)	121		70 - 137		06/23/16 08:04	1
Toluene-d8 (Surr)	104		74 - 120		06/23/16 08:04	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/19/16 11:15	06/19/16 23:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	06/19/16 11:15	06/19/16 23:02	1
1,1,1,2-Tetrachloroethane	93		60 - 140	06/19/16 11:15	06/19/16 23:02	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/21/16 14:23	06/26/16 10:32	5

Client Sample ID: MW-5

Date Collected: 06/15/16 11:30

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			06/22/16 20:28	1
1,2-Dichloroethane	ND		1.0		ug/L			06/22/16 20:28	1
Ethylbenzene	ND		1.0		ug/L			06/22/16 20:28	1
Isopropylbenzene	ND		1.0		ug/L			06/22/16 20:28	1
Naphthalene	ND		1.0		ug/L			06/22/16 20:28	1
Toluene	ND		1.0		ug/L			06/22/16 20:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/22/16 20:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/22/16 20:28	1
Xylenes, Total	ND		2.0		ug/L			06/22/16 20:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/22/16 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	85		70 - 131		06/22/16 20:28	1
Dibromofluoromethane (Surr)	103		72 - 136		06/22/16 20:28	1
1,2-Dichloroethane-d4 (Surr)	122		70 - 137		06/22/16 20:28	1
Toluene-d8 (Surr)	101		74 - 120		06/22/16 20:28	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/19/16 11:15	06/19/16 23:28	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Client Sample ID: MW-5

Date Collected: 06/15/16 11:30

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	95		60 - 140	06/19/16 11:15	06/19/16 23:28	1
1,1,1,2-Tetrachloroethane	97		60 - 140	06/19/16 11:15	06/19/16 23:28	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/21/16 14:23	06/26/16 10:38	5

Client Sample ID: MW-9

Date Collected: 06/15/16 12:21

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6.0		1.0		ug/L			06/22/16 20:53	1
1,2-Dichloroethane	ND		1.0		ug/L			06/22/16 20:53	1
Ethylbenzene	ND		1.0		ug/L			06/22/16 20:53	1
Isopropylbenzene	6.6		1.0		ug/L			06/22/16 20:53	1
Naphthalene	ND		1.0		ug/L			06/22/16 20:53	1
Toluene	ND		1.0		ug/L			06/22/16 20:53	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/22/16 20:53	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/22/16 20:53	1
Xylenes, Total	ND		2.0		ug/L			06/22/16 20:53	1
Methyl tert-butyl ether	5.1		1.0		ug/L			06/22/16 20:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	87		70 - 131		06/22/16 20:53	1
Dibromofluoromethane (Surr)	103		72 - 136		06/22/16 20:53	1
1,2-Dichloroethane-d4 (Surr)	127		70 - 137		06/22/16 20:53	1
Toluene-d8 (Surr)	104		74 - 120		06/22/16 20:53	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/19/16 11:15	06/19/16 23:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	06/19/16 11:15	06/19/16 23:54	1
1,1,1,2-Tetrachloroethane	97		60 - 140	06/19/16 11:15	06/19/16 23:54	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/21/16 14:23	06/26/16 10:43	5

Client Sample ID: MW-10

Date Collected: 06/15/16 12:38

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2200		10		ug/L			06/22/16 21:45	10
1,2-Dichloroethane	ND		10		ug/L			06/22/16 21:45	10
Ethylbenzene	530		10		ug/L			06/22/16 21:45	10
Isopropylbenzene	60		10		ug/L			06/22/16 21:45	10

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Client Sample ID: MW-10

Date Collected: 06/15/16 12:38

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	80		10		ug/L			06/22/16 21:45	10
Toluene	50		10		ug/L			06/22/16 21:45	10
1,2,4-Trimethylbenzene	170		10		ug/L			06/22/16 21:45	10
1,3,5-Trimethylbenzene	29		10		ug/L			06/22/16 21:45	10
Xylenes, Total	260		20		ug/L			06/22/16 21:45	10
Methyl tert-butyl ether	130		10		ug/L			06/22/16 21:45	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	91		70 - 131		06/22/16 21:45	10
Dibromofluoromethane (Surr)	100		72 - 136		06/22/16 21:45	10
1,2-Dichloroethane-d4 (Surr)	121		70 - 137		06/22/16 21:45	10
Toluene-d8 (Surr)	107		74 - 120		06/22/16 21:45	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/19/16 11:15	06/20/16 00:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	90		60 - 140	06/19/16 11:15	06/20/16 00:20	1
1,1,1,2-Tetrachloroethane	93		60 - 140	06/19/16 11:15	06/20/16 00:20	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/21/16 14:23	06/26/16 10:55	5

Client Sample ID: MW-11

Date Collected: 06/15/16 11:50

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			06/22/16 21:19	1
1,2-Dichloroethane	ND		1.0		ug/L			06/22/16 21:19	1
Ethylbenzene	ND		1.0		ug/L			06/22/16 21:19	1
Isopropylbenzene	ND		1.0		ug/L			06/22/16 21:19	1
Naphthalene	ND		1.0		ug/L			06/22/16 21:19	1
Toluene	ND		1.0		ug/L			06/22/16 21:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/22/16 21:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			06/22/16 21:19	1
Xylenes, Total	ND		2.0		ug/L			06/22/16 21:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/22/16 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	89		70 - 131		06/22/16 21:19	1
Dibromofluoromethane (Surr)	101		72 - 136		06/22/16 21:19	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 137		06/22/16 21:19	1
Toluene-d8 (Surr)	103		74 - 120		06/22/16 21:19	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/19/16 11:15	06/20/16 00:46	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Client Sample ID: MW-11

Date Collected: 06/15/16 11:50

Date Received: 06/17/16 11:11

Lab Sample ID: 460-115549-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140	06/19/16 11:15	06/20/16 00:46	1
1,1,1,2-Tetrachloroethane	94		60 - 140	06/19/16 11:15	06/20/16 00:46	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/21/16 14:23	06/22/16 03:29	5

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	68-00522	02-28-17

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,3,5-Trimethylbenzene

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-17

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-115549-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

Name (for report and invoice)
Rachel Bakart

Samplers Name (Printed)
Rachel Bakart

Site/Project Identification
Liberty 01 #38

Company
Carter Rent Truck Services

P.O. #
08-12-4232

State (Location of site): NJ: ☐ NY: ☐ Other: **PA**

Address
536 E. Kingston Franklin Hwy

Analysis Turnaround Time
Standard ☒ Rush Charges Authorized For:
2 Week ☐ 1 Week ☐ Other ☐

Regulatory Program: **PAH 5T**

City
Duquesville

LAB USE ONLY
Project No:
115549

Phone
610 385 4677

Fax

Job No:
115549

Sample Identification

Date

Time

Matrix

No. of Cont.

ANALYSIS REQUESTED (ENTER % BELOW TO INDICATE RESULTS)

LAB USE ONLY
Project No:

Sample Numbers

MW-1

6/15/16

10:39

GL

6

X

X

X

X

X

X

X

X

X

X

MW-2

6/15/16

10:57

GL

6

X

X

X

X

X

X

X

X

X

X

MW-3

6/15/16

13:27

GL

6

X

X

X

X

X

X

X

X

X

X

MW-4

6/15/16

13:01

GL

6

X

X

X

X

X

X

X

X

X

X

MW-5

6/15/16

11:40

GL

6

X

X

X

X

X

X

X

X

X

X

MW-9

6/15/16

12:21

GL

6

X

X

X

X

X

X

X

X

X

X

MW-16

6/15/16

12:38

GL

6

X

X

X

X

X

X

X

X

X

X

MW-11

6/15/16

11:50

GL

6

X

X

X

X

X

X

X

X

X

X

Preservation Used: 1 = ICE, 2 = HCl, 3 = H₂SO₄, 4 = HNO₃, 5 = NaOH

6 = Other, 7 = Other

Soil:

Water:

1/2

1/2

1/2

1/2

1/2

1/2

1/2

1/2

1/2

1/2

1/2

1/2

1/2

1/2

Special Instructions: please lab filter for metals

Water Metals Filtered (Yes/No)? **no**

Relinquished by

Pat Corleo

Company

OPTS

Date / Time

6/17/16 11:11

Received by

1)

Company

PTA

Date / Time

6/17/16 1:30

Received by

2)

Relinquished by

PTA

Company

PTA

Date / Time

6/17/16 1:30

Received by

3)

Company

PTA

Date / Time

6/17/16 1:30

Received by

4)

Relinquished by

PTA

Company

PTA

Date / Time

6/17/16 1:30

Received by

5)

Company

PTA

Date / Time

6/17/16 1:30

Received by

6)

Relinquished by

PTA

Company

PTA

Date / Time

6/17/16 1:30

Received by

7)

Company

PTA

Date / Time

6/17/16 1:30

Received by

8)

Relinquished by

PTA

Company

PTA

Date / Time

6/17/16 1:30

Received by

9)

Company

PTA

Date / Time

6/17/16 1:30

Received by

10)

Laboratory Certifications: New Jersey (12023), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

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

TAL - 0016 (07/15)

Job Number:

115599

Number of Coolers:

IR Gun #

Ref: 15

Cooler Temperatures

[illegible][illegible]

Sample No(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot # of Preservative(s):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.



480-115549 Waybill

ORIGIN ID: KPDA (810) 337-9892
SAMPLE RECEIPT
TEST AMERICA
1010 WEST 9TH AVE
SUITE 50
KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 17JUN16
ACTWGT: 61.00 LB
CAD: 8490299/1NET3730

BILL RECIPIENT

TO SAMPLE RECEIPT
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7059

REF:

DEPT:



FedEx
Express



J1610160205010V

TR 0217 765 5168 9775

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 AGCA

15238
PA-US PIT

Post # 1692974-436 RT12 0217

Uncorrected temp
Thermometer ID

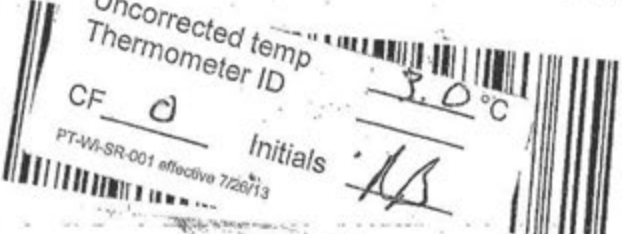
CF d

Initials

3.0 °C

AS

PT-WI-SR-001 effective 7/26/13



Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-115549-1

Login Number: 115549

List Source: TestAmerica Edison

List Number: 1

Creator: Keehn, Jeffrey S

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-115549-1

Login Number: 115549

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 06/18/16 10:16 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-120896-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
10/8/2016 6:43:33 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

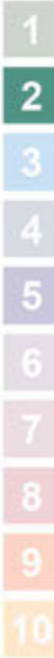


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	11
Method Summary	12
Chain of Custody	13
Receipt Checklists	16

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-120896-1	MW-1	Water	09/22/16 10:37	09/27/16 10:46
460-120896-2	MW-2	Water	09/22/16 10:55	09/27/16 10:46
460-120896-3	MW-3	Water	09/22/16 13:44	09/27/16 10:46
460-120896-4	MW-7	Water	09/22/16 14:07	09/27/16 10:46
460-120896-5	MW-8	Water	09/22/16 14:33	09/27/16 10:46
460-120896-6	MW-9	Water	09/22/16 12:58	09/27/16 10:46
460-120896-7	MW-11	Water	09/22/16 12:06	09/27/16 10:46

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Job ID: 460-120896-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-120896-1

Comments

No additional comments.

Receipt

The samples were received on 9/27/2016 10:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-7 (460-120896-4) and MW-8 (460-120896-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Client Sample ID: MW-1

Date Collected: 09/22/16 10:37

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/30/16 08:16	1
1,2-Dichloroethane	ND		1.0		ug/L			09/30/16 08:16	1
Ethylbenzene	ND		1.0		ug/L			09/30/16 08:16	1
Isopropylbenzene	ND		1.0		ug/L			09/30/16 08:16	1
Naphthalene	ND		1.0		ug/L			09/30/16 08:16	1
Toluene	ND		1.0		ug/L			09/30/16 08:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/30/16 08:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/30/16 08:16	1
Xylenes, Total	ND		2.0		ug/L			09/30/16 08:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/30/16 08:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	109		77 - 124		09/30/16 08:16	1
Dibromofluoromethane (Surr)	106		72 - 131		09/30/16 08:16	1
1,2-Dichloroethane-d4 (Surr)	112		74 - 132		09/30/16 08:16	1
Toluene-d8 (Surr)	114		80 - 120		09/30/16 08:16	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		10/01/16 12:35	10/02/16 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	98		60 - 140	10/01/16 12:35	10/02/16 04:44	1
1,1,1,2-Tetrachloroethane	96		60 - 140	10/01/16 12:35	10/02/16 04:44	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		10/07/16 21:06	10/08/16 06:18	5

Client Sample ID: MW-2

Date Collected: 09/22/16 10:55

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/30/16 08:39	1
1,2-Dichloroethane	ND		1.0		ug/L			09/30/16 08:39	1
Ethylbenzene	ND		1.0		ug/L			09/30/16 08:39	1
Isopropylbenzene	ND		1.0		ug/L			09/30/16 08:39	1
Naphthalene	ND		1.0		ug/L			09/30/16 08:39	1
Toluene	ND		1.0		ug/L			09/30/16 08:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/30/16 08:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/30/16 08:39	1
Xylenes, Total	ND		2.0		ug/L			09/30/16 08:39	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/30/16 08:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	110		77 - 124		09/30/16 08:39	1
Dibromofluoromethane (Surr)	101		72 - 131		09/30/16 08:39	1
1,2-Dichloroethane-d4 (Surr)	106		74 - 132		09/30/16 08:39	1
Toluene-d8 (Surr)	112		80 - 120		09/30/16 08:39	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		10/01/16 12:35	10/02/16 05:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	96		60 - 140				10/01/16 12:35	10/02/16 05:10	1
1,1,1,2-Tetrachloroethane	94		60 - 140				10/01/16 12:35	10/02/16 05:10	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		10/07/16 21:06	10/08/16 06:27	5

Client Sample ID: MW-3

Date Collected: 09/22/16 13:44

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/30/16 09:02	1
1,2-Dichloroethane	ND		1.0		ug/L			09/30/16 09:02	1
Ethylbenzene	ND		1.0		ug/L			09/30/16 09:02	1
Isopropylbenzene	ND		1.0		ug/L			09/30/16 09:02	1
Naphthalene	ND		1.0		ug/L			09/30/16 09:02	1
Toluene	ND		1.0		ug/L			09/30/16 09:02	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/30/16 09:02	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/30/16 09:02	1
Xylenes, Total	ND		2.0		ug/L			09/30/16 09:02	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/30/16 09:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	112		77 - 124					09/30/16 09:02	1
Dibromofluoromethane (Surr)	107		72 - 131					09/30/16 09:02	1
1,2-Dichloroethane-d4 (Surr)	110		74 - 132					09/30/16 09:02	1
Toluene-d8 (Surr)	114		80 - 120					09/30/16 09:02	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		10/01/16 12:35	10/02/16 05:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	97		60 - 140				10/01/16 12:35	10/02/16 05:36	1
1,1,1,2-Tetrachloroethane	94		60 - 140				10/01/16 12:35	10/02/16 05:36	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		10/07/16 21:06	10/08/16 06:36	5

Client Sample ID: MW-7

Date Collected: 09/22/16 14:07

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	590		5.0		ug/L			10/01/16 10:26	5
1,2-Dichloroethane	ND		5.0		ug/L			10/01/16 10:26	5
Ethylbenzene	380		5.0		ug/L			10/01/16 10:26	5
Isopropylbenzene	33		5.0		ug/L			10/01/16 10:26	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Client Sample ID: MW-7

Date Collected: 09/22/16 14:07

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	120		5.0		ug/L			10/01/16 10:26	5
Toluene	140		5.0		ug/L			10/01/16 10:26	5
1,2,4-Trimethylbenzene	340		5.0		ug/L			10/01/16 10:26	5
1,3,5-Trimethylbenzene	82		5.0		ug/L			10/01/16 10:26	5
Xylenes, Total	460		10		ug/L			10/01/16 10:26	5
Methyl tert-butyl ether	50		5.0		ug/L			10/01/16 10:26	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	95		77 - 124		10/01/16 10:26	5
Dibromofluoromethane (Surr)	86		72 - 131		10/01/16 10:26	5
1,2-Dichloroethane-d4 (Surr)	89		74 - 132		10/01/16 10:26	5
Toluene-d8 (Surr)	92		80 - 120		10/01/16 10:26	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		10/01/16 12:35	10/02/16 06:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	110		60 - 140	10/01/16 12:35	10/02/16 06:02	1
1,1,1,2-Tetrachloroethane	98		60 - 140	10/01/16 12:35	10/02/16 06:02	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		10/07/16 21:06	10/08/16 06:56	5

Client Sample ID: MW-8

Date Collected: 09/22/16 14:33

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	230		5.0		ug/L			10/01/16 10:02	5
1,2-Dichloroethane	ND		5.0		ug/L			10/01/16 10:02	5
Ethylbenzene	380		5.0		ug/L			10/01/16 10:02	5
Isopropylbenzene	60		5.0		ug/L			10/01/16 10:02	5
Naphthalene	110		5.0		ug/L			10/01/16 10:02	5
Toluene	20		5.0		ug/L			10/01/16 10:02	5
1,2,4-Trimethylbenzene	840		5.0		ug/L			10/01/16 10:02	5
1,3,5-Trimethylbenzene	240		5.0		ug/L			10/01/16 10:02	5
Xylenes, Total	670		10		ug/L			10/01/16 10:02	5
Methyl tert-butyl ether	ND		5.0		ug/L			10/01/16 10:02	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		77 - 124		10/01/16 10:02	5
Dibromofluoromethane (Surr)	91		72 - 131		10/01/16 10:02	5
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		10/01/16 10:02	5
Toluene-d8 (Surr)	92		80 - 120		10/01/16 10:02	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		10/01/16 12:35	10/02/16 06:28	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Client Sample ID: MW-8

Date Collected: 09/22/16 14:33

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	100		60 - 140	10/01/16 12:35	10/02/16 06:28	1
1,1,1,2-Tetrachloroethane	100		60 - 140	10/01/16 12:35	10/02/16 06:28	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		10/07/16 21:06	10/08/16 07:01	5

Client Sample ID: MW-9

Date Collected: 09/22/16 12:58

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.0		1.0		ug/L			10/01/16 09:39	1
1,2-Dichloroethane	ND		1.0		ug/L			10/01/16 09:39	1
Ethylbenzene	ND		1.0		ug/L			10/01/16 09:39	1
Isopropylbenzene	2.9		1.0		ug/L			10/01/16 09:39	1
Naphthalene	ND		1.0		ug/L			10/01/16 09:39	1
Toluene	ND		1.0		ug/L			10/01/16 09:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/01/16 09:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/01/16 09:39	1
Xylenes, Total	ND		2.0		ug/L			10/01/16 09:39	1
Methyl tert-butyl ether	1.6		1.0		ug/L			10/01/16 09:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	90		77 - 124		10/01/16 09:39	1
Dibromofluoromethane (Surr)	88		72 - 131		10/01/16 09:39	1
1,2-Dichloroethane-d4 (Surr)	88		74 - 132		10/01/16 09:39	1
Toluene-d8 (Surr)	91		80 - 120		10/01/16 09:39	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		10/01/16 12:35	10/02/16 06:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	101		60 - 140	10/01/16 12:35	10/02/16 06:54	1
1,1,1,2-Tetrachloroethane	100		60 - 140	10/01/16 12:35	10/02/16 06:54	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		10/07/16 21:06	10/08/16 07:06	5

Client Sample ID: MW-11

Date Collected: 09/22/16 12:06

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			10/01/16 09:16	1
1,2-Dichloroethane	ND		1.0		ug/L			10/01/16 09:16	1
Ethylbenzene	ND		1.0		ug/L			10/01/16 09:16	1
Isopropylbenzene	ND		1.0		ug/L			10/01/16 09:16	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Client Sample ID: MW-11

Date Collected: 09/22/16 12:06

Date Received: 09/27/16 10:46

Lab Sample ID: 460-120896-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			10/01/16 09:16	1
Toluene	ND		1.0		ug/L			10/01/16 09:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			10/01/16 09:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			10/01/16 09:16	1
Xylenes, Total	ND		2.0		ug/L			10/01/16 09:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			10/01/16 09:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	90		77 - 124		10/01/16 09:16	1
Dibromofluoromethane (Surr)	89		72 - 131		10/01/16 09:16	1
1,2-Dichloroethane-d4 (Surr)	87		74 - 132		10/01/16 09:16	1
Toluene-d8 (Surr)	92		80 - 120		10/01/16 09:16	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		10/01/16 12:35	10/02/16 07:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	101		60 - 140	10/01/16 12:35	10/02/16 07:20	1
1,1,1,2-Tetrachloroethane	102		60 - 140	10/01/16 12:35	10/02/16 07:20	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		10/07/16 21:06	10/08/16 07:10	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-16
New Jersey	NELAP	2	12028	06-30-17
New York	NELAP	2	11452	03-31-17
Pennsylvania	NELAP	3	68-00522	02-28-17
Rhode Island	State Program	1	LAO00132	12-30-16
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-17
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-17
Illinois	NELAP	5	200005	06-30-17
Kansas	NELAP	7	E-10350	01-31-17
Louisiana	NELAP	6	04041	06-30-17
New Hampshire	NELAP	1	2030	04-04-17
New Jersey	NELAP	2	PA005	06-30-17
New York	NELAP	2	11182	03-31-17
North Carolina (WW/SW)	State Program	4	434	12-31-16
Pennsylvania	NELAP	3	02-00416	04-30-17
South Carolina	State Program	4	89014	04-30-17
Texas	NELAP	6	T104704528-15-2	03-31-17
US Fish & Wildlife	Federal		LE94312A-1	10-31-16
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-17
Virginia	NELAP	3	460189	09-14-17
West Virginia DEP	State Program	3	142	01-31-17
Wisconsin	State Program	5	998027800	08-31-17

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-120896-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

11/0.8
KCP

Page 1 of 1

Name (for report and invoice) Rachel Burkart		Samplers Name (Printed) Rachel Burkart		Site/Project Identification Liberty 01 #38	
Company Center Point Tank Services Inc.		P.O.# 08-12-4292		State (Location of site): NJ: <input checked="" type="checkbox"/> NY: <input type="checkbox"/> Other: PA	
Address 536 E. Ben. Franklin Hwy City Douglasville, PA 19378 State PA		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input checked="" type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: PA-437 DKQP: <input type="checkbox"/>	
Phone 610 385 4977		Fax —		LAB USE ONLY Project No: Job No: 120896 Sample Numbers	

Sample Identification	Date	Time	Matrix	No. of Cont.	unleaded gasoline	leaded gasoline
MW-1	7/22/16	1037	GW	6	X	X
MW-2	↓	1055	↓	6	X	X
MW-3	↓	1344	↓	6	X	X
MW-7	↓	1407	↓	6	X	X
MW-8	↓	1433	↓	6	X	X
MW-9	↓	1258	↓	6	X	X
MW-11	↓	1206	↓	6	X	X

460-120896 Chain of Custody

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

Sol:
Water: **1/2 1/3**

Special Instructions

Water Metals Filtered (Yes/No)? **NO**

Relinquished by	Company	Date / Time	Received by	Company
1) [Signature]	CPT	9/27/16 1046	1) [Signature]	TS
2) [Signature]	TAHOP	9/27/16 1445	2) [Signature]	TAHOP
3) [Signature]	TAHOP	9/27/16	3) [Signature]	TA 9/27/16 1220
4) [Signature]	TA	9/27/16	4) [Signature]	TA 9/27/16 1930

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

TAL - 0016 (02/15)

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

Page ____ of ____

120896

[illegible]

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____

Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____

Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

EDS-WI-038, Rev 4, 05/09/2014

Initials: OG

Date: 9/27



Chain of Custody Record

Client Information (Sub Contract Lab) Client Contact: Miller, Jill K Shipping/Receiving: jill.miller@testamerica.com Company: TestAmerica Laboratories, Inc. Address: 301 Alpha Drive, RIDC Park, Pittsburgh, PA, 15238 Phone: 412-963-7058(Tel) 412-963-2468(Fax) Email: Project Name: Liberty Oil #33 Site:		Sampler: Miller, Jill K Lab PM: Phone: E-Mail:		COC No: 460-46678-1 Page: Page 1 of 1 Job #: 460-120896-1	
Due Date Requested: 10/3/2016 TAT Requested (days):		Analysis Requested			
PO #: WO #: Project #: 46011357 Site: SSOYH		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ascorbic Acid H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
Sample Identification - Client ID (Lab ID)		Special Instructions/Note:			
MW-1 (460-120896-1) MW-2 (460-120896-2) MW-3 (460-120896-3) MW-7 (460-120896-4) MW-8 (460-120896-5) MW-9 (460-120896-6) MW-11 (460-120896-7)		Total Number of containers: 2 2 2 2 2 2 2			
Sample Date 9/22/16 9/22/16 9/22/16 9/22/16 9/22/16 9/22/16 9/22/16		Field Filtered Sample (Yes or No) X X X X X X X			
Sample Time 10:37 Eastern 10:55 Eastern 13:44 Eastern 14:07 Eastern 14:33 Eastern 12:58 Eastern 12:06 Eastern		Perform MS/MSD (Yes or No) X X X X X X X			
Sample Type (C=Comp, G=Grab) Preservation Code:		Matrix (Water, Brine, Oil, etc.) Water Water Water Water Water Water Water			
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by:		Special Instructions/QC Requirements:			
Relinquished by:		Method of Shipment:			
Relinquished by:		Received by:			
Relinquished by:		Received by:			
Relinquished by:		Received by:			
Custody Seal Intact:		Cooler Temperature(s) To and Other Remarks:			

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-120896-1

Login Number: 120896

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 0.8
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-120896-1

Login Number: 120896

List Number: 2

Creator: Say, Thomas C

List Source: TestAmerica Pittsburgh

List Creation: 09/28/16 06:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-125465-1
Client Project/Site: Liberty 38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
12/27/2016 8:15:33 AM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAP and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

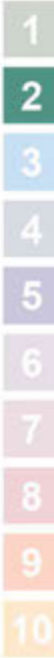


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	19

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-125465-1	MW-1	Water	12/14/16 10:37	12/15/16 13:15
460-125465-2	MW-2	Water	12/14/16 10:56	12/15/16 13:15
460-125465-3	MW-3	Water	12/14/16 13:32	12/15/16 13:15
460-125465-4	MW-4	Water	12/14/16 13:04	12/15/16 13:15
460-125465-5	MW-5	Water	12/14/16 11:11	12/15/16 13:15
460-125465-6	MW-6	Water	12/14/16 11:50	12/15/16 13:15
460-125465-7	MW-9	Water	12/14/16 12:18	12/15/16 13:15
460-125465-8	MW-10	Water	12/14/16 12:36	12/15/16 13:15
460-125465-9	MW-11	Water	12/14/16 11:36	12/15/16 13:15

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Job ID: 460-125465-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-125465-1

Comments

No additional comments.

Receipt

The samples were received on 12/15/2016 1:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.2° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-125465-8). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Client Sample ID: MW-1

Date Collected: 12/14/16 10:37

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/23/16 16:56	1
1,2-Dichloroethane	ND		1.0		ug/L			12/23/16 16:56	1
Ethylbenzene	ND		1.0		ug/L			12/23/16 16:56	1
Isopropylbenzene	ND		1.0		ug/L			12/23/16 16:56	1
Naphthalene	ND		1.0		ug/L			12/23/16 16:56	1
Toluene	ND		1.0		ug/L			12/23/16 16:56	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/23/16 16:56	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/23/16 16:56	1
Xylenes, Total	ND		2.0		ug/L			12/23/16 16:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/23/16 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		77 - 124		12/23/16 16:56	1
Dibromofluoromethane (Surr)	102		72 - 131		12/23/16 16:56	1
1,2-Dichloroethane-d4 (Surr)	97		74 - 132		12/23/16 16:56	1
Toluene-d8 (Surr)	99		80 - 120		12/23/16 16:56	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/18/16 23:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	84		60 - 140	12/17/16 12:49	12/18/16 23:47	1
1,1,1,2-Tetrachloroethane	84		60 - 140	12/17/16 12:49	12/18/16 23:47	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/21/16 11:39	12/21/16 13:48	5

Client Sample ID: MW-2

Date Collected: 12/14/16 10:56

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/23/16 17:22	1
1,2-Dichloroethane	ND		1.0		ug/L			12/23/16 17:22	1
Ethylbenzene	ND		1.0		ug/L			12/23/16 17:22	1
Isopropylbenzene	ND		1.0		ug/L			12/23/16 17:22	1
Naphthalene	ND		1.0		ug/L			12/23/16 17:22	1
Toluene	ND		1.0		ug/L			12/23/16 17:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/23/16 17:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/23/16 17:22	1
Xylenes, Total	ND		2.0		ug/L			12/23/16 17:22	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/23/16 17:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	104		77 - 124		12/23/16 17:22	1
Dibromofluoromethane (Surr)	103		72 - 131		12/23/16 17:22	1
1,2-Dichloroethane-d4 (Surr)	99		74 - 132		12/23/16 17:22	1
Toluene-d8 (Surr)	101		80 - 120		12/23/16 17:22	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/19/16 00:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	81		60 - 140				12/17/16 12:49	12/19/16 00:11	1
1,1,1,2-Tetrachloroethane	80		60 - 140				12/17/16 12:49	12/19/16 00:11	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/21/16 11:39	12/21/16 13:53	5

Client Sample ID: MW-3

Date Collected: 12/14/16 13:32

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/23/16 17:48	1
1,2-Dichloroethane	ND		1.0		ug/L			12/23/16 17:48	1
Ethylbenzene	ND		1.0		ug/L			12/23/16 17:48	1
Isopropylbenzene	ND		1.0		ug/L			12/23/16 17:48	1
Naphthalene	ND		1.0		ug/L			12/23/16 17:48	1
Toluene	ND		1.0		ug/L			12/23/16 17:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/23/16 17:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/23/16 17:48	1
Xylenes, Total	ND		2.0		ug/L			12/23/16 17:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/23/16 17:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		77 - 124					12/23/16 17:48	1
Dibromofluoromethane (Surr)	105		72 - 131					12/23/16 17:48	1
1,2-Dichloroethane-d4 (Surr)	100		74 - 132					12/23/16 17:48	1
Toluene-d8 (Surr)	99		80 - 120					12/23/16 17:48	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/19/16 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	85		60 - 140				12/17/16 12:49	12/19/16 00:36	1
1,1,1,2-Tetrachloroethane	85		60 - 140				12/17/16 12:49	12/19/16 00:36	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/21/16 11:39	12/21/16 13:56	5

Client Sample ID: MW-4

Date Collected: 12/14/16 13:04

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	97		1.0		ug/L			12/23/16 18:14	1
1,2-Dichloroethane	ND		1.0		ug/L			12/23/16 18:14	1
Ethylbenzene	50		1.0		ug/L			12/23/16 18:14	1
Isopropylbenzene	14		1.0		ug/L			12/23/16 18:14	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Client Sample ID: MW-4

Date Collected: 12/14/16 13:04

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	21		1.0		ug/L			12/23/16 18:14	1
Toluene	75		1.0		ug/L			12/23/16 18:14	1
1,2,4-Trimethylbenzene	67		1.0		ug/L			12/23/16 18:14	1
1,3,5-Trimethylbenzene	18		1.0		ug/L			12/23/16 18:14	1
Xylenes, Total	150		2.0		ug/L			12/23/16 18:14	1
Methyl tert-butyl ether	12		1.0		ug/L			12/23/16 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124		12/23/16 18:14	1
Dibromofluoromethane (Surr)	101		72 - 131		12/23/16 18:14	1
1,2-Dichloroethane-d4 (Surr)	99		74 - 132		12/23/16 18:14	1
Toluene-d8 (Surr)	103		80 - 120		12/23/16 18:14	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/19/16 01:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	87		60 - 140	12/17/16 12:49	12/19/16 01:00	1
1,1,1,2-Tetrachloroethane	81		60 - 140	12/17/16 12:49	12/19/16 01:00	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/21/16 11:39	12/21/16 13:58	5

Client Sample ID: MW-5

Date Collected: 12/14/16 11:11

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/24/16 02:17	1
1,2-Dichloroethane	ND		1.0		ug/L			12/24/16 02:17	1
Ethylbenzene	ND		1.0		ug/L			12/24/16 02:17	1
Isopropylbenzene	ND		1.0		ug/L			12/24/16 02:17	1
Naphthalene	ND		1.0		ug/L			12/24/16 02:17	1
Toluene	ND		1.0		ug/L			12/24/16 02:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/24/16 02:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/24/16 02:17	1
Xylenes, Total	ND		2.0		ug/L			12/24/16 02:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/24/16 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124		12/24/16 02:17	1
Dibromofluoromethane (Surr)	103		72 - 131		12/24/16 02:17	1
1,2-Dichloroethane-d4 (Surr)	101		74 - 132		12/24/16 02:17	1
Toluene-d8 (Surr)	101		80 - 120		12/24/16 02:17	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/19/16 01:24	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Client Sample ID: MW-5

Date Collected: 12/14/16 11:11

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	87		60 - 140	12/17/16 12:49	12/19/16 01:24	1
1,1,1,2-Tetrachloroethane	86		60 - 140	12/17/16 12:49	12/19/16 01:24	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/21/16 11:39	12/21/16 14:07	5

Client Sample ID: MW-6

Date Collected: 12/14/16 11:50

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/23/16 19:06	1
1,2-Dichloroethane	ND		1.0		ug/L			12/23/16 19:06	1
Ethylbenzene	ND		1.0		ug/L			12/23/16 19:06	1
Isopropylbenzene	ND		1.0		ug/L			12/23/16 19:06	1
Naphthalene	ND		1.0		ug/L			12/23/16 19:06	1
Toluene	ND		1.0		ug/L			12/23/16 19:06	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/23/16 19:06	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/23/16 19:06	1
Xylenes, Total	ND		2.0		ug/L			12/23/16 19:06	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/23/16 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	105		77 - 124		12/23/16 19:06	1
Dibromofluoromethane (Surr)	105		72 - 131		12/23/16 19:06	1
1,2-Dichloroethane-d4 (Surr)	99		74 - 132		12/23/16 19:06	1
Toluene-d8 (Surr)	101		80 - 120		12/23/16 19:06	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/19/16 01:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	84		60 - 140	12/17/16 12:49	12/19/16 01:49	1
1,1,1,2-Tetrachloroethane	83		60 - 140	12/17/16 12:49	12/19/16 01:49	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	40		1.5		ug/L		12/21/16 11:39	12/21/16 14:10	5

Client Sample ID: MW-9

Date Collected: 12/14/16 12:18

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.7		1.0		ug/L			12/23/16 19:32	1
1,2-Dichloroethane	ND		1.0		ug/L			12/23/16 19:32	1
Ethylbenzene	ND		1.0		ug/L			12/23/16 19:32	1
Isopropylbenzene	2.4		1.0		ug/L			12/23/16 19:32	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Client Sample ID: MW-9

Date Collected: 12/14/16 12:18

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			12/23/16 19:32	1
Toluene	ND		1.0		ug/L			12/23/16 19:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/23/16 19:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/23/16 19:32	1
Xylenes, Total	ND		2.0		ug/L			12/23/16 19:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/23/16 19:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124		12/23/16 19:32	1
Dibromofluoromethane (Surr)	104		72 - 131		12/23/16 19:32	1
1,2-Dichloroethane-d4 (Surr)	101		74 - 132		12/23/16 19:32	1
Toluene-d8 (Surr)	101		80 - 120		12/23/16 19:32	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/19/16 02:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	84		60 - 140	12/17/16 12:49	12/19/16 02:13	1
1,1,1,2-Tetrachloroethane	83		60 - 140	12/17/16 12:49	12/19/16 02:13	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/21/16 11:40	12/21/16 14:12	5

Client Sample ID: MW-10

Date Collected: 12/14/16 12:36

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3300		10		ug/L			12/23/16 16:05	10
1,2-Dichloroethane	ND		10		ug/L			12/23/16 16:05	10
Ethylbenzene	530		10		ug/L			12/23/16 16:05	10
Isopropylbenzene	55		10		ug/L			12/23/16 16:05	10
Naphthalene	27		10		ug/L			12/23/16 16:05	10
Toluene	31		10		ug/L			12/23/16 16:05	10
1,2,4-Trimethylbenzene	34		10		ug/L			12/23/16 16:05	10
1,3,5-Trimethylbenzene	ND		10		ug/L			12/23/16 16:05	10
Xylenes, Total	120		20		ug/L			12/23/16 16:05	10
Methyl tert-butyl ether	95		10		ug/L			12/23/16 16:05	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	104		77 - 124		12/23/16 16:05	10
Dibromofluoromethane (Surr)	102		72 - 131		12/23/16 16:05	10
1,2-Dichloroethane-d4 (Surr)	98		74 - 132		12/23/16 16:05	10
Toluene-d8 (Surr)	102		80 - 120		12/23/16 16:05	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/19/16 02:37	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Client Sample ID: MW-10

Date Collected: 12/14/16 12:36

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	89		60 - 140	12/17/16 12:49	12/19/16 02:37	1
1,1,1,2-Tetrachloroethane	87		60 - 140	12/17/16 12:49	12/19/16 02:37	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/21/16 11:40	12/21/16 14:14	5

Client Sample ID: MW-11

Date Collected: 12/14/16 11:36

Date Received: 12/15/16 13:15

Lab Sample ID: 460-125465-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			12/23/16 19:57	1
1,2-Dichloroethane	ND		1.0		ug/L			12/23/16 19:57	1
Ethylbenzene	ND		1.0		ug/L			12/23/16 19:57	1
Isopropylbenzene	ND		1.0		ug/L			12/23/16 19:57	1
Naphthalene	ND		1.0		ug/L			12/23/16 19:57	1
Toluene	ND		1.0		ug/L			12/23/16 19:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			12/23/16 19:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			12/23/16 19:57	1
Xylenes, Total	ND		2.0		ug/L			12/23/16 19:57	1
Methyl tert-butyl ether	ND		1.0		ug/L			12/23/16 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	104		77 - 124		12/23/16 19:57	1
Dibromofluoromethane (Surr)	106		72 - 131		12/23/16 19:57	1
1,2-Dichloroethane-d4 (Surr)	101		74 - 132		12/23/16 19:57	1
Toluene-d8 (Surr)	102		80 - 120		12/23/16 19:57	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		12/17/16 12:49	12/19/16 03:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	88		60 - 140	12/17/16 12:49	12/19/16 03:02	1
1,1,1,2-Tetrachloroethane	87		60 - 140	12/17/16 12:49	12/19/16 03:02	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/21/16 11:40	12/21/16 14:17	5

TestAmerica Edison

Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Laboratory: TestAmerica Edison

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-16
New Jersey	NELAP	2	12028	06-30-17
New York	NELAP	2	11452	03-31-17
Pennsylvania	NELAP	3	68-00522	02-28-17
Rhode Island	State Program	1	LAO00132	12-30-16
USDA	Federal		NJCA-003-08	04-04-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-17
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-17
Illinois	NELAP	5	200005	06-30-17
Kansas	NELAP	7	E-10350	01-31-17
Louisiana	NELAP	6	04041	06-30-17
New Hampshire	NELAP	1	2030	04-04-17
New Jersey	NELAP	2	PA005	06-30-17
New York	NELAP	2	11182	03-31-17
North Carolina (WW/SW)	State Program	4	434	12-31-16 *
Pennsylvania	NELAP	3	02-00416	04-30-17
South Carolina	State Program	4	89014	04-30-17
Texas	NELAP	6	T104704528-15-2	03-31-17
US Fish & Wildlife	Federal		LE94312A-1	10-31-17
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-17
Virginia	NELAP	3	460189	09-14-17
West Virginia DEP	State Program	3	142	01-31-17
Wisconsin	State Program	5	998027800	08-31-17

* Certification renewal pending - certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty 38

TestAmerica Job ID: 460-125465-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica


THE LEADER IN ENVIRONMENTAL TESTING

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Page 1 of 1

Name (for report and invoice) Rachel Berkart		Samplers Name (Printed) Rachel Berkart		Site/Project Identification Liberty 38	
Company CenterPoint Tank Services		P.O. # 08-12-4292		State (Location of site): NJ: <input type="checkbox"/> NY: <input type="checkbox"/> Other: PA	
Address 330 E. Benjamin Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: PAUST	
City Doylsville State PA		Phone 610 365 4977 Fax		LAB USE ONLY Job No: 125465 Project No:	
Sample Identification	Date	Time	Matrix	No. of Cont.	ANALYSIS REQUESTED (ENTER % BELOW TO INDICATE REQUEST)
MW-1	12/11/14	1037	GW	6	unleaded gasoline <input checked="" type="checkbox"/> leaded gasoline <input checked="" type="checkbox"/>
MW-2		1050		6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
MW-3		1332		6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
MW-4		1304		6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
MW-5		1111		6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
MW-6		1150		6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
MW-9		1218		6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
MW-10		1236		6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
MW-11		1136		6	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH		Soil:		Water: 1/2 1/2	
6 = Other _____, 7 = Other _____					



460-125465 Chain of Custody

Relinquished by	Company	Date / Time	Received by	Company	Water Metals Filtered (Yes/No)?
Verdine	CenterPoint Tank	12/15/14 1315	[Signature]	TH	N
Quidley Moore	TH	12/15/14	[Signature]	TH	
Adelle	TH	12/15 2000	[Signature]	TH	

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

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

TAL-0016 (07/15)



460-125465 Waybill

ORIGIN ID: KPDA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1010 WEST 9TH AVE
SUITE 500
KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 15DEC16
ACTWGT: 32.00 LB
CAD: 8490299/INET379

BILL RECIPIENT

TO: **SAMPLE RECEIPT**
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7058

REF:

INV:

PO:

DEPT:



F

TRKH 7779 6612 4260
0201

FRI - 16 DEC
STANDARD OVER

EV AGCA

1

Uncorrected temp
Thermometer ID

3.9 °C
9

CF 0 Initials TS

PT-WI-SR-001 effective 7/26/13

Chain of Custody Record

TestAmerica

TELEPHONE: 800-ENVIRONMENTAL TESTING



Client Information (Sub Contract Lab)		Sampler:		Lab PM:	
Client Contact:		Miller, Jill K		E-Mail:	
Shipping/Receiving		jill.miller@testamericainc.com		460-125465 Chain of Custody	
Company:		TestAmerica Laboratories, Inc.		Page 1 of 1	
Address:		301 Alpha Drive, RIDC Park,		Job #	
City:		Pittsburgh		460-125465-1	
State, Zip:		PA, 15238		Preservation Codes:	
Phone:		412-963-7058(Tel) 412-963-2468(Fax)		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anhydrous H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Email:		Project Name:		Other:	
Liberty 38		46011357			
Site:		SSON#			

Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Solid, O=Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	80118011 Prep EDB (GC)	Total Number of Containers	Special Instructions/Note:
MW-1 (460-125465-1)	12/14/16	10:37 Eastern	Water		X			2		
MW-2 (460-125465-2)	12/14/16	10:56 Eastern	Water		X			2		
MW-3 (460-125465-3)	12/14/16	13:32 Eastern	Water		X			2		
MW-4 (460-125465-4)	12/14/16	13:04 Eastern	Water		X			2		
MW-5 (460-125465-5)	12/14/16	11:11 Eastern	Water		X			2		
MW-6 (460-125465-6)	12/14/16	11:50 Eastern	Water		X			2		
MW-9 (460-125465-7)	12/14/16	12:18 Eastern	Water		X			2		
MW-10 (460-125465-8)	12/14/16	12:36 Eastern	Water		X			2		
MW-11 (460-125465-9)	12/14/16	11:36 Eastern	Water		X			2		

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analysis & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/testing/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/OC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>gated@hmore</i>		Received by: <i>TAKP</i>	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	

Chain of Custody Record

TestAmerica

WE LEAD IN ENVIRONMENTAL TESTING



460-125465 Chain of Custody

Client Information (Sub Contract Lab)	
Company:	TestAmerica Laboratories, Inc.
Address:	301 Alpha Drive, RIDC Park,
City:	Pittsburgh
State, Zip:	PA, 15238
Phone:	412-963-7058 (Tel) 412-963-2468 (Fax)
Email:	
Project Name:	Liberty 38
Star:	

Lab PM:	Miller, Jill K
Phone:	
E-Mail:	jill.miller@testamericainc.com
Accreditations Required (See note):	NELAP - Pennsylvania

Analysis Requested

Due Date Requested:	12/11/2016
TAT Requested (days):	
PO #:	
WO #:	
Project #:	46011357
Star:	SSOWW

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Soil, O=Organic, A=Air)	Field Filtered Sample (Yes or No)	Performs MS/MSD (Yes or No)	80118011 Prep EDB (GC)	Total Number of Containers	Special Instructions/Note:
MW-1 (460-125465-1)	12/14/16	10:37 Eastern		Water		X	X	2	
MW-2 (460-125465-2)	12/14/16	10:56 Eastern		Water		X	X	2	
MW-3 (460-125465-3)	12/14/16	13:32 Eastern		Water		X	X	2	
MW-4 (460-125465-4)	12/14/16	13:04 Eastern		Water		X	X	2	
MW-5 (460-125465-5)	12/14/16	11:11 Eastern		Water		X	X	2	
MW-6 (460-125465-6)	12/14/16	11:50 Eastern		Water		X	X	2	
MW-9 (460-125465-7)	12/14/16	12:18 Eastern		Water		X	X	2	
MW-10 (460-125465-8)	12/14/16	12:36 Eastern		Water		X	X	2	
MW-11 (460-125465-9)	12/14/16	11:36 Eastern		Water		X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis of the analyte being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification

Unconfirmed	
Deliverable Requested: I, II, III, IV, Other (specify)	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client	Disposal By Lab	Archive For
		Months

Empty Kit Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Custody Seal No.:

Custody Seal No.:

Custody Seal No.:

Custody Seal No.:

Custody Seal No.:

Custody Seal No.:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date:

Date:

Date:

Date:

Date:

Date:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-125465-1

Login Number: 125465

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR kOP#1 0.2
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-125465-1

Login Number: 125465

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 12/16/16 06:14 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-130682-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
4/10/2017 4:52:23 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAP and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

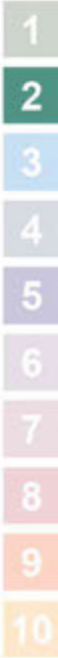


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	18

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-130682-1	MW-2	Water	03/29/17 10:39	03/31/17 20:00
460-130682-2	MW-3	Water	03/29/17 13:19	03/31/17 20:00
460-130682-3	MW-4	Water	03/29/17 12:48	03/31/17 20:00
460-130682-4	MW-5	Water	03/29/17 10:55	03/31/17 20:00
460-130682-5	MW-6	Water	03/29/17 11:33	03/31/17 20:00
460-130682-6	MW-9	Water	03/29/17 11:53	03/31/17 20:00
460-130682-7	MW-10	Water	03/29/17 12:18	03/31/17 20:00
460-130682-8	MW-11	Water	03/29/17 11:09	03/31/17 20:00

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Job ID: 460-130682-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-130682-1

Comments

No additional comments.

Receipt

The samples were received on 3/31/2017 8:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-130682-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Client Sample ID: MW-2

Date Collected: 03/29/17 10:39

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/07/17 15:05	1
1,2-Dichloroethane	ND		1.0		ug/L			04/07/17 15:05	1
Ethylbenzene	ND		1.0		ug/L			04/07/17 15:05	1
Isopropylbenzene	ND		1.0		ug/L			04/07/17 15:05	1
Naphthalene	ND		1.0		ug/L			04/07/17 15:05	1
Toluene	ND		1.0		ug/L			04/07/17 15:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/07/17 15:05	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/07/17 15:05	1
Xylenes, Total	ND		2.0		ug/L			04/07/17 15:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/07/17 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	101		77 - 124		04/07/17 15:05	1
Dibromofluoromethane (Surr)	108		72 - 131		04/07/17 15:05	1
1,2-Dichloroethane-d4 (Surr)	105		74 - 132		04/07/17 15:05	1
Toluene-d8 (Surr)	102		80 - 120		04/07/17 15:05	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/04/17 09:45	04/04/17 19:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	04/04/17 09:45	04/04/17 19:56	1
1,1,1,2-Tetrachloroethane	94		60 - 140	04/04/17 09:45	04/04/17 19:56	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/06/17 01:38	04/06/17 06:50	5

Client Sample ID: MW-3

Date Collected: 03/29/17 13:19

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	81		1.0		ug/L			04/07/17 15:27	1
1,2-Dichloroethane	ND		1.0		ug/L			04/07/17 15:27	1
Ethylbenzene	34		1.0		ug/L			04/07/17 15:27	1
Isopropylbenzene	6.4		1.0		ug/L			04/07/17 15:27	1
Naphthalene	2.8		1.0		ug/L			04/07/17 15:27	1
Toluene	7.0		1.0		ug/L			04/07/17 15:27	1
1,2,4-Trimethylbenzene	34		1.0		ug/L			04/07/17 15:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/07/17 15:27	1
Xylenes, Total	24		2.0		ug/L			04/07/17 15:27	1
Methyl tert-butyl ether	9.6		1.0		ug/L			04/07/17 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124		04/07/17 15:27	1
Dibromofluoromethane (Surr)	102		72 - 131		04/07/17 15:27	1
1,2-Dichloroethane-d4 (Surr)	101		74 - 132		04/07/17 15:27	1
Toluene-d8 (Surr)	101		80 - 120		04/07/17 15:27	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/04/17 09:45	04/04/17 20:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	94		60 - 140				04/04/17 09:45	04/04/17 20:22	1
1,1,1,2-Tetrachloroethane	95		60 - 140				04/04/17 09:45	04/04/17 20:22	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/06/17 01:38	04/06/17 06:57	5

Client Sample ID: MW-4

Date Collected: 03/29/17 12:48

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	230		1.0		ug/L			04/07/17 15:50	1
1,2-Dichloroethane	ND		1.0		ug/L			04/07/17 15:50	1
Ethylbenzene	140		1.0		ug/L			04/07/17 15:50	1
Isopropylbenzene	16		1.0		ug/L			04/07/17 15:50	1
Naphthalene	9.9		1.0		ug/L			04/07/17 15:50	1
Toluene	160		1.0		ug/L			04/07/17 15:50	1
1,2,4-Trimethylbenzene	57		1.0		ug/L			04/07/17 15:50	1
1,3,5-Trimethylbenzene	13		1.0		ug/L			04/07/17 15:50	1
Xylenes, Total	260		2.0		ug/L			04/07/17 15:50	1
Methyl tert-butyl ether	23		1.0		ug/L			04/07/17 15:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	97		77 - 124					04/07/17 15:50	1
Dibromofluoromethane (Surr)	93		72 - 131					04/07/17 15:50	1
1,2-Dichloroethane-d4 (Surr)	94		74 - 132					04/07/17 15:50	1
Toluene-d8 (Surr)	95		80 - 120					04/07/17 15:50	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/04/17 09:45	04/04/17 20:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140				04/04/17 09:45	04/04/17 20:47	1
1,1,1,2-Tetrachloroethane	90		60 - 140				04/04/17 09:45	04/04/17 20:47	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/06/17 01:38	04/06/17 07:00	5

Client Sample ID: MW-5

Date Collected: 03/29/17 10:55

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/07/17 16:12	1
1,2-Dichloroethane	ND		1.0		ug/L			04/07/17 16:12	1
Ethylbenzene	ND		1.0		ug/L			04/07/17 16:12	1
Isopropylbenzene	ND		1.0		ug/L			04/07/17 16:12	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Client Sample ID: MW-5

Date Collected: 03/29/17 10:55

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			04/07/17 16:12	1
Toluene	ND		1.0		ug/L			04/07/17 16:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/07/17 16:12	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/07/17 16:12	1
Xylenes, Total	ND		2.0		ug/L			04/07/17 16:12	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/07/17 16:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		77 - 124		04/07/17 16:12	1
Dibromofluoromethane (Surr)	108		72 - 131		04/07/17 16:12	1
1,2-Dichloroethane-d4 (Surr)	104		74 - 132		04/07/17 16:12	1
Toluene-d8 (Surr)	102		80 - 120		04/07/17 16:12	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/04/17 09:45	04/04/17 21:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	94		60 - 140	04/04/17 09:45	04/04/17 21:12	1
1,1,1,2-Tetrachloroethane	95		60 - 140	04/04/17 09:45	04/04/17 21:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/06/17 01:38	04/06/17 07:07	5

Client Sample ID: MW-6

Date Collected: 03/29/17 11:33

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/07/17 16:35	1
1,2-Dichloroethane	ND		1.0		ug/L			04/07/17 16:35	1
Ethylbenzene	ND		1.0		ug/L			04/07/17 16:35	1
Isopropylbenzene	ND		1.0		ug/L			04/07/17 16:35	1
Naphthalene	ND		1.0		ug/L			04/07/17 16:35	1
Toluene	ND		1.0		ug/L			04/07/17 16:35	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/07/17 16:35	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/07/17 16:35	1
Xylenes, Total	ND		2.0		ug/L			04/07/17 16:35	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/07/17 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	95		77 - 124		04/07/17 16:35	1
Dibromofluoromethane (Surr)	99		72 - 131		04/07/17 16:35	1
1,2-Dichloroethane-d4 (Surr)	96		74 - 132		04/07/17 16:35	1
Toluene-d8 (Surr)	94		80 - 120		04/07/17 16:35	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/04/17 09:45	04/04/17 21:37	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Client Sample ID: MW-6

Date Collected: 03/29/17 11:33

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	96		60 - 140	04/04/17 09:45	04/04/17 21:37	1
1,1,1,2-Tetrachloroethane	98		60 - 140	04/04/17 09:45	04/04/17 21:37	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15		1.5		ug/L		04/06/17 01:38	04/06/17 07:20	5

Client Sample ID: MW-9

Date Collected: 03/29/17 11:53

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	8.5		1.0		ug/L			04/07/17 16:57	1
1,2-Dichloroethane	ND		1.0		ug/L			04/07/17 16:57	1
Ethylbenzene	ND		1.0		ug/L			04/07/17 16:57	1
Isopropylbenzene	6.8		1.0		ug/L			04/07/17 16:57	1
Naphthalene	ND		1.0		ug/L			04/07/17 16:57	1
Toluene	ND		1.0		ug/L			04/07/17 16:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/07/17 16:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/07/17 16:57	1
Xylenes, Total	ND		2.0		ug/L			04/07/17 16:57	1
Methyl tert-butyl ether	3.4		1.0		ug/L			04/07/17 16:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	105		77 - 124		04/07/17 16:57	1
Dibromofluoromethane (Surr)	107		72 - 131		04/07/17 16:57	1
1,2-Dichloroethane-d4 (Surr)	105		74 - 132		04/07/17 16:57	1
Toluene-d8 (Surr)	101		80 - 120		04/07/17 16:57	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/04/17 09:45	04/04/17 22:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	96		60 - 140	04/04/17 09:45	04/04/17 22:02	1
1,1,1,2-Tetrachloroethane	101		60 - 140	04/04/17 09:45	04/04/17 22:02	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/06/17 01:38	04/06/17 07:24	5

Client Sample ID: MW-10

Date Collected: 03/29/17 12:18

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	810		5.0		ug/L			04/10/17 12:31	5
1,2-Dichloroethane	ND		5.0		ug/L			04/10/17 12:31	5
Ethylbenzene	130		5.0		ug/L			04/10/17 12:31	5
Isopropylbenzene	26		5.0		ug/L			04/10/17 12:31	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Client Sample ID: MW-10

Date Collected: 03/29/17 12:18

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	5.9		5.0		ug/L			04/10/17 12:31	5
Toluene	6.1		5.0		ug/L			04/10/17 12:31	5
1,2,4-Trimethylbenzene	13		5.0		ug/L			04/10/17 12:31	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			04/10/17 12:31	5
Xylenes, Total	22		10		ug/L			04/10/17 12:31	5
Methyl tert-butyl ether	60		5.0		ug/L			04/10/17 12:31	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	100		77 - 124		04/10/17 12:31	5
Dibromofluoromethane (Surr)	97		72 - 131		04/10/17 12:31	5
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		04/10/17 12:31	5
Toluene-d8 (Surr)	97		80 - 120		04/10/17 12:31	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/04/17 09:45	04/04/17 22:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140	04/04/17 09:45	04/04/17 22:27	1
1,1,1,2-Tetrachloroethane	94		60 - 140	04/04/17 09:45	04/04/17 22:27	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/06/17 01:38	04/06/17 07:27	5

Client Sample ID: MW-11

Date Collected: 03/29/17 11:09

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/07/17 17:20	1
1,2-Dichloroethane	ND		1.0		ug/L			04/07/17 17:20	1
Ethylbenzene	ND		1.0		ug/L			04/07/17 17:20	1
Isopropylbenzene	ND		1.0		ug/L			04/07/17 17:20	1
Naphthalene	ND		1.0		ug/L			04/07/17 17:20	1
Toluene	ND		1.0		ug/L			04/07/17 17:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/07/17 17:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/07/17 17:20	1
Xylenes, Total	ND		2.0		ug/L			04/07/17 17:20	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/07/17 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	94		77 - 124		04/07/17 17:20	1
Dibromofluoromethane (Surr)	99		72 - 131		04/07/17 17:20	1
1,2-Dichloroethane-d4 (Surr)	97		74 - 132		04/07/17 17:20	1
Toluene-d8 (Surr)	91		80 - 120		04/07/17 17:20	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		04/04/17 09:47	04/04/17 22:51	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Client Sample ID: MW-11

Date Collected: 03/29/17 11:09

Date Received: 03/31/17 20:00

Lab Sample ID: 460-130682-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	99		60 - 140	04/04/17 09:47	04/04/17 22:51	1
1,1,1,2-Tetrachloroethane	102		60 - 140	04/04/17 09:47	04/04/17 22:51	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/06/17 01:38	04/06/17 07:34	5

Accreditation/Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Laboratory: TestAmerica Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-17
New Jersey	NELAP	2	12028	06-30-17
New York	NELAP	2	11452	04-01-18
Pennsylvania	NELAP	3	68-00522	02-28-18
Rhode Island	State Program	1	LAO00132	12-30-17
USDA	Federal		NJCA-003-08	04-04-17 *

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-17
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-17
Illinois	NELAP	5	200005	06-30-17
Kansas	NELAP	7	E-10350	01-31-18
Louisiana	NELAP	6	04041	06-30-17
New Hampshire	NELAP	1	2030	04-04-17 *
New Jersey	NELAP	2	PA005	06-30-17
New York	NELAP	2	11182	03-31-18
North Carolina (WW/SW)	State Program	4	434	12-31-17
Pennsylvania	NELAP	3	02-00416	04-30-17 *
South Carolina	State Program	4	89014	04-30-17 *
Texas	NELAP	6	T104704528-15-2	03-31-18
US Fish & Wildlife	Federal		LE94312A-1	10-31-17
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-17
Virginia	NELAP	3	460189	09-14-17
West Virginia DEP	State Program	3	142	01-31-18
Wisconsin	State Program	5	998027800	08-31-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-130682-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

3.2
KAP1

Page 1 of 1

Name (for report and invoice) Karel Bokart		Samples Name (Printed) Karel Bokart		Site/Project Identification Liberty 01 #38	
Company Counterpart Tank Services		P. O. # 08-12-4292		State (Location of site): NJ: <input type="checkbox"/> NY: <input type="checkbox"/> Other: PA	
Address 534 E. Benjamin Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: PAUST	
City Dugessville		State PA		LAB USE ONLY Project No:	
Phone 610 3654977		Fax		Job No: 130682	
Sample Identification		Date	Time	Matrix	No. of Cont.
MW-2	3/29/17	1039	GW	6	X
MW-3		1319		6	X
MW-4		1248		6	X
MW-5		1055		6	X
MW-6		1133		6	X
MW-9		1153		6	X
MW-10		1218		6	X
MW-11		1109		6	X
<div style="display: flex; justify-content: space-between;"> <div> <p>Preservation Used: 1 = ICE, 2 = HCl, 3 = H₂SO₄, 4 = HNO₃, 5 = NaOH</p> <p>6 = Other _____, 7 = Other _____</p> </div> <div> <p>Soil: _____</p> <p>Water: 1/2 1/2</p> </div> </div>					
<div style="display: flex; align-items: center;"> <div style="margin-left: 10px;"> <p>460-130682 Chain of Custody</p> </div> </div>					

Special Instructions *Please lab filter for metals*

Water Metals Filtered (Yes/No)? **N**

Relinquished by Karl Bokart	Company CPT	Date / Time 3/31/17 1000	Received by 	Company PA
Relinquished by Queddamore	Company PAKOP	Date / Time 3/31/17 1623	Received by 	Company PAKOP
Relinquished by 	Company PAKOP	Date / Time 3/31/17 2000	Received by Edison	Company Edison
Relinquished by	Company	Date / Time	Received by	Company

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

TAL - 0016 (07/15)

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

ORIGIN ID: KPDA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1010 WEST 9TH AVE
SUITE 50
KING OF PRUSSIA, PA 19406
UNITED STATES US

SHIP DATE: 31MAR17
ACTWGT: 35.00 LB
CAD: 8490299/INET3850

BILL RECIPIENT

TO **SAMPLE RECEIPT**
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7058
INV: PAI

REF:



460-130682 Waybill



FedEx
Express



J1 1117821481ev

TRKH 7787 9632 8850
0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 AGCA

15238
PA-US PIT

Uncorrected temp
Thermometer ID

2.9 °C
12

CF

110

Initials

TN

PT-WI-SR-001 effective 7/26/13

Chain of Custody Record



Client Information

Client Contact:
Shipping/Receiving

Company:
TestAmerica Laboratories, Inc.

Address:
301 Alpha Drive, RIDC Park,

City:
Pittsburgh

State, Zip:
PA, 15238

Phone:
412-963-7058(Tel) 412-963-2468(Fax)

Email:

Project Name:
Liberty Oil #38

Site:

Due Date Requested:
4/6/2017

TAT Requested (days):

PO #

WO #

Project #

46011357

SSOWN

COC No:
460-48070-1

Page:
Page 1 of 1

State of Origin:
Pennsylvania

Job #:
460-130682-1

Preservation Codes:

A - HCL

B - NaOH

C - Zn Acetate

D - Nitric Acid

E - NaHSO4

F - MeOH

G - Amchlor

H - Ascorbic Acid

I - Ice

J - DI Water

K - EDTA

L - EDA

Other:

Analysis Requested

Perform MS/MSD (Yes or No)

60118011 Prep EDB (GC)

Field Filtered Sample (Yes or No)

60118011 Prep EDB (GC)

Matrix (Residue, Suspended, Dissolved)

Sample Type (C=Comp, G=Grab)

Sample Time

Sample Date

Preservation Code

Special Instructions/Note:

Total Number of Containers

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/testing, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Primary Deliverable Rank: 1

Empty Kit Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Relinquished by:

Date:

3/31/17

1440

Company:

TA

Company:

Company:

Company:

Company:

Company:

Company:

Company:

Time:

3/31/17

1440

Company:

TA

Company:

Company:

Company:

Company:

Company:

Company:

Company:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Method of Shipment:

Return To Client

Disposal By Lab

Archive For

Months

Special Instructions/QC Requirements:

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-130682-1

Login Number: 130682

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1 3.2°C
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-130682-1

Login Number: 130682

List Number: 2

Creator: Neri, Tom

List Source: TestAmerica Pittsburgh

List Creation: 04/01/17 10:35 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	2.9
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-135878-1
Client Project/Site: Liberty Oil 38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
7/5/2017 9:15:02 AM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAP and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

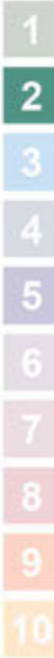


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	14
Method Summary	15
Chain of Custody	16
Receipt Checklists	21

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-135878-1	MW-1	Water	06/22/17 10:45	06/23/17 11:45
460-135878-2	MW-2	Water	06/22/17 11:00	06/23/17 11:45
460-135878-3	MW-3	Water	06/22/17 13:33	06/23/17 11:45
460-135878-4	MW-4	Water	06/22/17 13:06	06/23/17 11:45
460-135878-5	MW-5	Water	06/22/17 11:14	06/23/17 11:45
460-135878-6	MW-6	Water	06/22/17 11:40	06/23/17 11:45
460-135878-7	MW-7	Water	06/22/17 14:26	06/23/17 11:45
460-135878-8	MW-8	Water	06/22/17 13:57	06/23/17 11:45
460-135878-9	MW-9	Water	06/22/17 12:18	06/23/17 11:45
460-135878-10	MW-10	Water	06/22/17 12:37	06/23/17 11:45
460-135878-11	MW-11	Water	06/22/17 11:27	06/23/17 11:45

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Job ID: 460-135878-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-135878-1

Comments

No additional comments.

Receipt

The samples were received on 6/23/2017 11:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

GC/MS VOA

Method(s) 8260C: Surrogate Toluene-d8 recovery for the following samples was outside control limits: MW-6 (460-135878-6) and MW-8 (460-135878-8). Surrogate recoveries for the other three system monitoring compounds were within control limits; therefore, re-analysis was not performed.

Method(s) 8260C: Surrogate Toluene-d8 recovery for the following LCSD was outside control limits: (LCSD 460-447020/5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 460-447020 recovered outside control limits for the following analyte: 1,3,5-Trimethylbenzene. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data has been flagged and reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Client Sample ID: MW-1

Date Collected: 06/22/17 10:45

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			07/03/17 13:07	1
1,2-Dichloroethane	ND		1.0		ug/L			07/03/17 13:07	1
Ethylbenzene	ND		1.0		ug/L			07/03/17 13:07	1
Isopropylbenzene	ND		1.0		ug/L			07/03/17 13:07	1
Naphthalene	ND		1.0		ug/L			07/03/17 13:07	1
Toluene	ND		1.0		ug/L			07/03/17 13:07	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/03/17 13:07	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/03/17 13:07	1
Xylenes, Total	ND		2.0		ug/L			07/03/17 13:07	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/03/17 13:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	104		77 - 124		07/03/17 13:07	1
Dibromofluoromethane (Surr)	97		72 - 131		07/03/17 13:07	1
1,2-Dichloroethane-d4 (Surr)	88		74 - 132		07/03/17 13:07	1
Toluene-d8 (Surr)	97		80 - 120		07/03/17 13:07	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	94		60 - 140	06/28/17 08:54	06/28/17 19:16	1
1,1,1,2-Tetrachloroethane	106		60 - 140	06/28/17 08:54	06/28/17 19:16	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 17:38	5

Client Sample ID: MW-2

Date Collected: 06/22/17 11:00

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			06/30/17 22:56	1
1,2-Dichloroethane	ND		1.0		ug/L			06/30/17 22:56	1
Ethylbenzene	ND		1.0		ug/L			06/30/17 22:56	1
Isopropylbenzene	ND		1.0		ug/L			06/30/17 22:56	1
Naphthalene	ND		1.0		ug/L			06/30/17 22:56	1
Toluene	ND		1.0		ug/L			06/30/17 22:56	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			06/30/17 22:56	1
1,3,5-Trimethylbenzene	ND *		1.0		ug/L			06/30/17 22:56	1
Xylenes, Total	ND		2.0		ug/L			06/30/17 22:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/30/17 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	94		77 - 124		06/30/17 22:56	1
Dibromofluoromethane (Surr)	104		72 - 131		06/30/17 22:56	1
1,2-Dichloroethane-d4 (Surr)	96		74 - 132		06/30/17 22:56	1
Toluene-d8 (Surr)	107		80 - 120		06/30/17 22:56	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 19:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	98		60 - 140				06/28/17 08:54	06/28/17 19:41	1
1,1,1,2-Tetrachloroethane	114		60 - 140				06/28/17 08:54	06/28/17 19:41	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 17:45	5

Client Sample ID: MW-3

Date Collected: 06/22/17 13:33

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	67		1.0		ug/L			06/30/17 23:18	1
1,2-Dichloroethane	ND		1.0		ug/L			06/30/17 23:18	1
Ethylbenzene	14		1.0		ug/L			06/30/17 23:18	1
Isopropylbenzene	2.8		1.0		ug/L			06/30/17 23:18	1
Naphthalene	1.4		1.0		ug/L			06/30/17 23:18	1
Toluene	11		1.0		ug/L			06/30/17 23:18	1
1,2,4-Trimethylbenzene	9.1		1.0		ug/L			06/30/17 23:18	1
1,3,5-Trimethylbenzene	1.4 *		1.0		ug/L			06/30/17 23:18	1
Xylenes, Total	17		2.0		ug/L			06/30/17 23:18	1
Methyl tert-butyl ether	5.4		1.0		ug/L			06/30/17 23:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		77 - 124					06/30/17 23:18	1
Dibromofluoromethane (Surr)	112		72 - 131					06/30/17 23:18	1
1,2-Dichloroethane-d4 (Surr)	107		74 - 132					06/30/17 23:18	1
Toluene-d8 (Surr)	113		80 - 120					06/30/17 23:18	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 20:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	100		60 - 140				06/28/17 08:54	06/28/17 20:07	1
1,1,1,2-Tetrachloroethane	106		60 - 140				06/28/17 08:54	06/28/17 20:07	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 17:48	5

Client Sample ID: MW-4

Date Collected: 06/22/17 13:06

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	41		1.0		ug/L			06/30/17 23:41	1
1,2-Dichloroethane	ND		1.0		ug/L			06/30/17 23:41	1
Ethylbenzene	2.8		1.0		ug/L			06/30/17 23:41	1
Isopropylbenzene	2.7		1.0		ug/L			06/30/17 23:41	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Client Sample ID: MW-4

Date Collected: 06/22/17 13:06

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	1.4		1.0		ug/L			06/30/17 23:41	1
Toluene	ND		1.0		ug/L			06/30/17 23:41	1
1,2,4-Trimethylbenzene	1.3		1.0		ug/L			06/30/17 23:41	1
1,3,5-Trimethylbenzene	ND *		1.0		ug/L			06/30/17 23:41	1
Xylenes, Total	ND		2.0		ug/L			06/30/17 23:41	1
Methyl tert-butyl ether	13		1.0		ug/L			06/30/17 23:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124		06/30/17 23:41	1
Dibromofluoromethane (Surr)	114		72 - 131		06/30/17 23:41	1
1,2-Dichloroethane-d4 (Surr)	108		74 - 132		06/30/17 23:41	1
Toluene-d8 (Surr)	115		80 - 120		06/30/17 23:41	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	95		60 - 140				06/28/17 08:54	06/28/17 20:32	1
1,1,1,2-Tetrachloroethane	106		60 - 140				06/28/17 08:54	06/28/17 20:32	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 17:55	5

Client Sample ID: MW-5

Date Collected: 06/22/17 11:14

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			07/01/17 00:02	1
1,2-Dichloroethane	ND		1.0		ug/L			07/01/17 00:02	1
Ethylbenzene	ND		1.0		ug/L			07/01/17 00:02	1
Isopropylbenzene	ND		1.0		ug/L			07/01/17 00:02	1
Naphthalene	ND		1.0		ug/L			07/01/17 00:02	1
Toluene	ND		1.0		ug/L			07/01/17 00:02	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/01/17 00:02	1
1,3,5-Trimethylbenzene	ND *		1.0		ug/L			07/01/17 00:02	1
Xylenes, Total	ND		2.0		ug/L			07/01/17 00:02	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/01/17 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	105		77 - 124		07/01/17 00:02	1
Dibromofluoromethane (Surr)	117		72 - 131		07/01/17 00:02	1
1,2-Dichloroethane-d4 (Surr)	112		74 - 132		07/01/17 00:02	1
Toluene-d8 (Surr)	116		80 - 120		07/01/17 00:02	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 20:57	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Client Sample ID: MW-5

Date Collected: 06/22/17 11:14

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	06/28/17 08:54	06/28/17 20:57	1
1,1,1,2-Tetrachloroethane	106		60 - 140	06/28/17 08:54	06/28/17 20:57	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 17:58	5

Client Sample ID: MW-6

Date Collected: 06/22/17 11:40

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			07/01/17 00:25	1
1,2-Dichloroethane	ND		1.0		ug/L			07/01/17 00:25	1
Ethylbenzene	ND		1.0		ug/L			07/01/17 00:25	1
Isopropylbenzene	ND		1.0		ug/L			07/01/17 00:25	1
Naphthalene	ND		1.0		ug/L			07/01/17 00:25	1
Toluene	ND		1.0		ug/L			07/01/17 00:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/01/17 00:25	1
1,3,5-Trimethylbenzene	ND *		1.0		ug/L			07/01/17 00:25	1
Xylenes, Total	ND		2.0		ug/L			07/01/17 00:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/01/17 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	108		77 - 124		07/01/17 00:25	1
Dibromofluoromethane (Surr)	116		72 - 131		07/01/17 00:25	1
1,2-Dichloroethane-d4 (Surr)	115		74 - 132		07/01/17 00:25	1
Toluene-d8 (Surr)	122 X		80 - 120		07/01/17 00:25	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 21:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	100		60 - 140	06/28/17 08:54	06/28/17 21:22	1
1,1,1,2-Tetrachloroethane	116		60 - 140	06/28/17 08:54	06/28/17 21:22	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	22		1.5		ug/L		06/28/17 14:49	06/28/17 18:18	5

Client Sample ID: MW-7

Date Collected: 06/22/17 14:26

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	160		1.0		ug/L			07/01/17 01:32	1
1,2-Dichloroethane	ND		1.0		ug/L			07/01/17 01:32	1
Ethylbenzene	57		1.0		ug/L			07/01/17 01:32	1
Isopropylbenzene	6.0		1.0		ug/L			07/01/17 01:32	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Client Sample ID: MW-7

Date Collected: 06/22/17 14:26

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	14		1.0		ug/L			07/01/17 01:32	1
Toluene	110		1.0		ug/L			07/01/17 01:32	1
1,2,4-Trimethylbenzene	61		1.0		ug/L			07/01/17 01:32	1
1,3,5-Trimethylbenzene	15 *		1.0		ug/L			07/01/17 01:32	1
Xylenes, Total	140		2.0		ug/L			07/01/17 01:32	1
Methyl tert-butyl ether	22		1.0		ug/L			07/01/17 01:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	105		77 - 124		07/01/17 01:32	1
Dibromofluoromethane (Surr)	113		72 - 131		07/01/17 01:32	1
1,2-Dichloroethane-d4 (Surr)	114		74 - 132		07/01/17 01:32	1
Toluene-d8 (Surr)	118		80 - 120		07/01/17 01:32	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 21:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	98		60 - 140				06/28/17 08:54	06/28/17 21:47	1
1,1,1,2-Tetrachloroethane	104		60 - 140				06/28/17 08:54	06/28/17 21:47	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 18:22	5

Client Sample ID: MW-8

Date Collected: 06/22/17 13:57

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	41		1.0		ug/L			07/01/17 01:54	1
1,2-Dichloroethane	ND		1.0		ug/L			07/01/17 01:54	1
Ethylbenzene	58		1.0		ug/L			07/01/17 01:54	1
Isopropylbenzene	10		1.0		ug/L			07/01/17 01:54	1
Naphthalene	17		1.0		ug/L			07/01/17 01:54	1
Toluene	4.8		1.0		ug/L			07/01/17 01:54	1
1,2,4-Trimethylbenzene	150		1.0		ug/L			07/01/17 01:54	1
1,3,5-Trimethylbenzene	43 *		1.0		ug/L			07/01/17 01:54	1
Xylenes, Total	120		2.0		ug/L			07/01/17 01:54	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/01/17 01:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	102		77 - 124		07/01/17 01:54	1
Dibromofluoromethane (Surr)	112		72 - 131		07/01/17 01:54	1
1,2-Dichloroethane-d4 (Surr)	111		74 - 132		07/01/17 01:54	1
Toluene-d8 (Surr)	121 X		80 - 120		07/01/17 01:54	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 22:13	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Client Sample ID: MW-8

Date Collected: 06/22/17 13:57

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	100		60 - 140	06/28/17 08:54	06/28/17 22:13	1
1,1,1,2-Tetrachloroethane	113		60 - 140	06/28/17 08:54	06/28/17 22:13	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 18:25	5

Client Sample ID: MW-9

Date Collected: 06/22/17 12:18

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	11		1.0		ug/L			07/01/17 00:48	1
1,2-Dichloroethane	ND		1.0		ug/L			07/01/17 00:48	1
Ethylbenzene	ND		1.0		ug/L			07/01/17 00:48	1
Isopropylbenzene	10		1.0		ug/L			07/01/17 00:48	1
Naphthalene	ND		1.0		ug/L			07/01/17 00:48	1
Toluene	ND		1.0		ug/L			07/01/17 00:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/01/17 00:48	1
1,3,5-Trimethylbenzene	ND *		1.0		ug/L			07/01/17 00:48	1
Xylenes, Total	ND		2.0		ug/L			07/01/17 00:48	1
Methyl tert-butyl ether	5.9		1.0		ug/L			07/01/17 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124		07/01/17 00:48	1
Dibromofluoromethane (Surr)	117		72 - 131		07/01/17 00:48	1
1,2-Dichloroethane-d4 (Surr)	124		74 - 132		07/01/17 00:48	1
Toluene-d8 (Surr)	119		80 - 120		07/01/17 00:48	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 22:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	102		60 - 140	06/28/17 08:54	06/28/17 22:38	1
1,1,1,2-Tetrachloroethane	110		60 - 140	06/28/17 08:54	06/28/17 22:38	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 18:28	5

Client Sample ID: MW-10

Date Collected: 06/22/17 12:37

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	330		1.0		ug/L			07/01/17 02:17	1
1,2-Dichloroethane	ND		1.0		ug/L			07/01/17 02:17	1
Ethylbenzene	61		1.0		ug/L			07/01/17 02:17	1
Isopropylbenzene	5.7		1.0		ug/L			07/01/17 02:17	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Client Sample ID: MW-10

Lab Sample ID: 460-135878-10

Date Collected: 06/22/17 12:37

Matrix: Water

Date Received: 06/23/17 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	12		1.0		ug/L			07/01/17 02:17	1
Toluene	9.0		1.0		ug/L			07/01/17 02:17	1
1,2,4-Trimethylbenzene	29		1.0		ug/L			07/01/17 02:17	1
1,3,5-Trimethylbenzene	2.2 *		1.0		ug/L			07/01/17 02:17	1
Xylenes, Total	42		2.0		ug/L			07/01/17 02:17	1
Methyl tert-butyl ether	13		1.0		ug/L			07/01/17 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	107		77 - 124		07/01/17 02:17	1
Dibromofluoromethane (Surr)	114		72 - 131		07/01/17 02:17	1
1,2-Dichloroethane-d4 (Surr)	116		74 - 132		07/01/17 02:17	1
Toluene-d8 (Surr)	120		80 - 120		07/01/17 02:17	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 23:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	106		60 - 140	06/28/17 08:54	06/28/17 23:03	1
1,1,1,2-Tetrachloroethane	119		60 - 140	06/28/17 08:54	06/28/17 23:03	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 18:32	5

Client Sample ID: MW-11

Lab Sample ID: 460-135878-11

Date Collected: 06/22/17 11:27

Matrix: Water

Date Received: 06/23/17 11:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			07/01/17 01:10	1
1,2-Dichloroethane	ND		1.0		ug/L			07/01/17 01:10	1
Ethylbenzene	ND		1.0		ug/L			07/01/17 01:10	1
Isopropylbenzene	ND		1.0		ug/L			07/01/17 01:10	1
Naphthalene	ND		1.0		ug/L			07/01/17 01:10	1
Toluene	ND		1.0		ug/L			07/01/17 01:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/01/17 01:10	1
1,3,5-Trimethylbenzene	ND *		1.0		ug/L			07/01/17 01:10	1
Xylenes, Total	ND		2.0		ug/L			07/01/17 01:10	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/01/17 01:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	106		77 - 124		07/01/17 01:10	1
Dibromofluoromethane (Surr)	113		72 - 131		07/01/17 01:10	1
1,2-Dichloroethane-d4 (Surr)	112		74 - 132		07/01/17 01:10	1
Toluene-d8 (Surr)	115		80 - 120		07/01/17 01:10	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		06/28/17 08:54	06/28/17 23:28	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Client Sample ID: MW-11

Date Collected: 06/22/17 11:27

Date Received: 06/23/17 11:45

Lab Sample ID: 460-135878-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	104		60 - 140	06/28/17 08:54	06/28/17 23:28	1
1,1,1,2-Tetrachloroethane	121		60 - 140	06/28/17 08:54	06/28/17 23:28	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		06/28/17 14:49	06/28/17 18:42	5

Accreditation/Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Pennsylvania	NELAP	3	68-00522	02-28-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,3,5-Trimethylbenzene

Laboratory: TestAmerica Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-18

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-135878-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

11
KOP1 Page 1 of 2

Name (for report and invoice) Rachel Berkart		Samplers Name (Printed) Rachel Berkart		Site/Project Identification Liberty 38	
Company Castle Point Tank Services		P.O. # 08-12-4292		State (Location of site): NJ: <input type="checkbox"/> NY: <input type="checkbox"/> Other: PA	
Address 530 E. Benjamin Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: UST	
City Douglasville State GA		Phone 678 385 4977 Fax 678 385 4977		LAB USE ONLY Project No: 135878	
Sample Identification		Date	Time	Matrix	No. of Cont.
MW-1		6/22/17	1045	SW	6
MW-2					6
MW-3					6
MW-4					6
MW-5					6
MW-6					6
MW-7					6
MW-8					6
MW-9					6
MW-10					6
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH		Soil:		Water:	
6 = Other _____, 7 = Other _____		1/2		1/2	



460-135878 Chain of Custody

Special Instructions Please Filter For Metals

Water Metals Filtered (Yes/No)? **N**

Relinquished by Rachel Berkart	Company CPIS	Date / Time 6/23/17 11:45	Received by [Signature]	Company TH
Relinquished by [Signature]	Company TH	Date / Time 6/23/17 11:45	Received by [Signature]	Company TH
Relinquished by [Signature]	Company TH	Date / Time 6/23/17 11:45	Received by [Signature]	Company TH
Relinquished by [Signature]	Company TH	Date / Time 6/23/17 11:45	Received by [Signature]	Company TH

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

TAL-0016 (0715)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

1
2
3
4
5
6
7
8
9
10

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-135878-1

Login Number: 135878

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-135878-1

Login Number: 135878

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 06/24/17 01:30 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-141411-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
9/29/2017 9:25:44 AM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

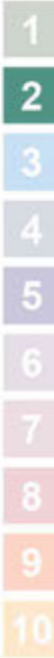


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	17

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-141411-1	MW-1	Water	09/20/17 10:29	09/22/17 11:30
460-141411-2	MW-2	Water	09/20/17 10:52	09/22/17 11:30
460-141411-3	MW-3	Water	09/20/17 13:46	09/22/17 11:30
460-141411-4	MW-4	Water	09/20/17 13:14	09/22/17 11:30
460-141411-5	MW-5	Water	09/20/17 11:06	09/22/17 11:30
460-141411-6	MW-9	Water	09/20/17 12:15	09/22/17 11:30
460-141411-7	MW-10	Water	09/20/17 12:40	09/22/17 11:30
460-141411-8	MW-11	Water	09/20/17 11:33	09/22/17 11:30

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Job ID: 460-141411-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-141411-1

Comments

No additional comments.

Receipt

The samples were received on 9/22/2017 11:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-141411-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Client Sample ID: MW-1

Date Collected: 09/20/17 10:29

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/28/17 06:05	1
1,2-Dichloroethane	ND		1.0		ug/L			09/28/17 06:05	1
Ethylbenzene	ND		1.0		ug/L			09/28/17 06:05	1
Isopropylbenzene	ND		1.0		ug/L			09/28/17 06:05	1
Naphthalene	ND		1.0		ug/L			09/28/17 06:05	1
Toluene	ND		1.0		ug/L			09/28/17 06:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/28/17 06:05	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/28/17 06:05	1
Xylenes, Total	ND		2.0		ug/L			09/28/17 06:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/28/17 06:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124		09/28/17 06:05	1
Dibromofluoromethane (Surr)	84		72 - 131		09/28/17 06:05	1
1,2-Dichloroethane-d4 (Surr)	82		74 - 132		09/28/17 06:05	1
Toluene-d8 (Surr)	92		80 - 120		09/28/17 06:05	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/23/17 13:38	09/23/17 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	97		60 - 140	09/23/17 13:38	09/23/17 19:36	1
1,1,1,2-Tetrachloroethane	103		60 - 140	09/23/17 13:38	09/23/17 19:36	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/28/17 20:33	09/29/17 05:50	5

Client Sample ID: MW-2

Date Collected: 09/20/17 10:52

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/28/17 06:31	1
1,2-Dichloroethane	ND		1.0		ug/L			09/28/17 06:31	1
Ethylbenzene	ND		1.0		ug/L			09/28/17 06:31	1
Isopropylbenzene	1.1		1.0		ug/L			09/28/17 06:31	1
Naphthalene	ND		1.0		ug/L			09/28/17 06:31	1
Toluene	ND		1.0		ug/L			09/28/17 06:31	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/28/17 06:31	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/28/17 06:31	1
Xylenes, Total	ND		2.0		ug/L			09/28/17 06:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/28/17 06:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	105		77 - 124		09/28/17 06:31	1
Dibromofluoromethane (Surr)	85		72 - 131		09/28/17 06:31	1
1,2-Dichloroethane-d4 (Surr)	82		74 - 132		09/28/17 06:31	1
Toluene-d8 (Surr)	93		80 - 120		09/28/17 06:31	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/23/17 13:38	09/23/17 20:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	98		60 - 140				09/23/17 13:38	09/23/17 20:01	1
1,1,1,2-Tetrachloroethane	105		60 - 140				09/23/17 13:38	09/23/17 20:01	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/28/17 20:33	09/29/17 05:56	5

Client Sample ID: MW-3

Date Collected: 09/20/17 13:46

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	33		1.0		ug/L			09/28/17 09:52	1
1,2-Dichloroethane	ND		1.0		ug/L			09/28/17 09:52	1
Ethylbenzene	ND		1.0		ug/L			09/28/17 09:52	1
Isopropylbenzene	ND		1.0		ug/L			09/28/17 09:52	1
Naphthalene	ND		1.0		ug/L			09/28/17 09:52	1
Toluene	1.4		1.0		ug/L			09/28/17 09:52	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/28/17 09:52	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/28/17 09:52	1
Xylenes, Total	ND		2.0		ug/L			09/28/17 09:52	1
Methyl tert-butyl ether	3.5		1.0		ug/L			09/28/17 09:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	104		77 - 124					09/28/17 09:52	1
Dibromofluoromethane (Surr)	84		72 - 131					09/28/17 09:52	1
1,2-Dichloroethane-d4 (Surr)	82		74 - 132					09/28/17 09:52	1
Toluene-d8 (Surr)	93		80 - 120					09/28/17 09:52	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/23/17 13:38	09/23/17 20:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140				09/23/17 13:38	09/23/17 20:26	1
1,1,1,2-Tetrachloroethane	96		60 - 140				09/23/17 13:38	09/23/17 20:26	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/28/17 20:33	09/29/17 06:06	5

Client Sample ID: MW-4

Date Collected: 09/20/17 13:14

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	66		1.0		ug/L			09/28/17 10:19	1
1,2-Dichloroethane	ND		1.0		ug/L			09/28/17 10:19	1
Ethylbenzene	17		1.0		ug/L			09/28/17 10:19	1
Isopropylbenzene	3.4		1.0		ug/L			09/28/17 10:19	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Client Sample ID: MW-4

Date Collected: 09/20/17 13:14

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	2.0		1.0		ug/L			09/28/17 10:19	1
Toluene	26		1.0		ug/L			09/28/17 10:19	1
1,2,4-Trimethylbenzene	6.9		1.0		ug/L			09/28/17 10:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/28/17 10:19	1
Xylenes, Total	23		2.0		ug/L			09/28/17 10:19	1
Methyl tert-butyl ether	7.1		1.0		ug/L			09/28/17 10:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	109		77 - 124		09/28/17 10:19	1
Dibromofluoromethane (Surr)	87		72 - 131		09/28/17 10:19	1
1,2-Dichloroethane-d4 (Surr)	83		74 - 132		09/28/17 10:19	1
Toluene-d8 (Surr)	95		80 - 120		09/28/17 10:19	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/23/17 13:38	09/23/17 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	95		60 - 140				09/23/17 13:38	09/23/17 20:51	1
1,1,1,2-Tetrachloroethane	100		60 - 140				09/23/17 13:38	09/23/17 20:51	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/28/17 20:33	09/29/17 06:20	5

Client Sample ID: MW-5

Date Collected: 09/20/17 11:06

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/28/17 10:45	1
1,2-Dichloroethane	ND		1.0		ug/L			09/28/17 10:45	1
Ethylbenzene	ND		1.0		ug/L			09/28/17 10:45	1
Isopropylbenzene	ND		1.0		ug/L			09/28/17 10:45	1
Naphthalene	ND		1.0		ug/L			09/28/17 10:45	1
Toluene	ND		1.0		ug/L			09/28/17 10:45	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/28/17 10:45	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/28/17 10:45	1
Xylenes, Total	ND		2.0		ug/L			09/28/17 10:45	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/28/17 10:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	106		77 - 124		09/28/17 10:45	1
Dibromofluoromethane (Surr)	85		72 - 131		09/28/17 10:45	1
1,2-Dichloroethane-d4 (Surr)	83		74 - 132		09/28/17 10:45	1
Toluene-d8 (Surr)	93		80 - 120		09/28/17 10:45	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/23/17 13:38	09/23/17 21:16	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Client Sample ID: MW-5

Date Collected: 09/20/17 11:06

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	89		60 - 140	09/23/17 13:38	09/23/17 21:16	1
1,1,1,2-Tetrachloroethane	95		60 - 140	09/23/17 13:38	09/23/17 21:16	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/28/17 20:33	09/29/17 06:23	5

Client Sample ID: MW-9

Date Collected: 09/20/17 12:15

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.9		1.0		ug/L			09/28/17 11:12	1
1,2-Dichloroethane	ND		1.0		ug/L			09/28/17 11:12	1
Ethylbenzene	ND		1.0		ug/L			09/28/17 11:12	1
Isopropylbenzene	2.6		1.0		ug/L			09/28/17 11:12	1
Naphthalene	ND		1.0		ug/L			09/28/17 11:12	1
Toluene	ND		1.0		ug/L			09/28/17 11:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/28/17 11:12	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/28/17 11:12	1
Xylenes, Total	ND		2.0		ug/L			09/28/17 11:12	1
Methyl tert-butyl ether	2.0		1.0		ug/L			09/28/17 11:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	106		77 - 124		09/28/17 11:12	1
Dibromofluoromethane (Surr)	84		72 - 131		09/28/17 11:12	1
1,2-Dichloroethane-d4 (Surr)	82		74 - 132		09/28/17 11:12	1
Toluene-d8 (Surr)	92		80 - 120		09/28/17 11:12	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/23/17 13:38	09/23/17 21:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	96		60 - 140	09/23/17 13:38	09/23/17 21:41	1
1,1,1,2-Tetrachloroethane	102		60 - 140	09/23/17 13:38	09/23/17 21:41	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/28/17 20:33	09/29/17 06:26	5

Client Sample ID: MW-10

Date Collected: 09/20/17 12:40

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2500		5.0		ug/L			09/28/17 12:32	5
1,2-Dichloroethane	50		5.0		ug/L			09/28/17 12:32	5
Ethylbenzene	550		5.0		ug/L			09/28/17 12:32	5
Isopropylbenzene	65		5.0		ug/L			09/28/17 12:32	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Client Sample ID: MW-10

Date Collected: 09/20/17 12:40

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	46		5.0		ug/L			09/28/17 12:32	5
Toluene	20		5.0		ug/L			09/28/17 12:32	5
1,2,4-Trimethylbenzene	71		5.0		ug/L			09/28/17 12:32	5
1,3,5-Trimethylbenzene	14		5.0		ug/L			09/28/17 12:32	5
Xylenes, Total	85		10		ug/L			09/28/17 12:32	5
Methyl tert-butyl ether	68		5.0		ug/L			09/28/17 12:32	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	107		77 - 124		09/28/17 12:32	5
Dibromofluoromethane (Surr)	83		72 - 131		09/28/17 12:32	5
1,2-Dichloroethane-d4 (Surr)	83		74 - 132		09/28/17 12:32	5
Toluene-d8 (Surr)	93		80 - 120		09/28/17 12:32	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/23/17 13:38	09/23/17 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	09/23/17 13:38	09/23/17 22:06	1
1,1,1,2-Tetrachloroethane	99		60 - 140	09/23/17 13:38	09/23/17 22:06	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/28/17 20:33	09/29/17 06:30	5

Client Sample ID: MW-11

Date Collected: 09/20/17 11:33

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/28/17 11:39	1
1,2-Dichloroethane	ND		1.0		ug/L			09/28/17 11:39	1
Ethylbenzene	ND		1.0		ug/L			09/28/17 11:39	1
Isopropylbenzene	ND		1.0		ug/L			09/28/17 11:39	1
Naphthalene	ND		1.0		ug/L			09/28/17 11:39	1
Toluene	ND		1.0		ug/L			09/28/17 11:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/28/17 11:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/28/17 11:39	1
Xylenes, Total	ND		2.0		ug/L			09/28/17 11:39	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/28/17 11:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	107		77 - 124		09/28/17 11:39	1
Dibromofluoromethane (Surr)	87		72 - 131		09/28/17 11:39	1
1,2-Dichloroethane-d4 (Surr)	84		74 - 132		09/28/17 11:39	1
Toluene-d8 (Surr)	96		80 - 120		09/28/17 11:39	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		09/23/17 13:38	09/23/17 22:31	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Client Sample ID: MW-11

Date Collected: 09/20/17 11:33

Date Received: 09/22/17 11:30

Lab Sample ID: 460-141411-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	09/23/17 13:38	09/23/17 22:31	1
1,1,1,2-Tetrachloroethane	99		60 - 140	09/23/17 13:38	09/23/17 22:31	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		09/28/17 20:33	09/29/17 06:33	5

Accreditation/Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Laboratory: TestAmerica Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-17
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-18
Pennsylvania	NELAP	3	68-00522	02-28-18
Rhode Island	State Program	1	LAO00132	12-30-17
USDA	Federal		NJCA-003-08	06-13-20

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		PA00164	07-31-18
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-18
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-18
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-18
North Carolina (WW/SW)	State Program	4	434	12-31-17
Pennsylvania	NELAP	3	02-00416	04-30-18
South Carolina	State Program	4	89014	04-30-18
Texas	NELAP	6	T104704528-15-2	03-31-18
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-18
Wisconsin	State Program	5	998027800	08-31-18

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-141411-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

Page 1 of 1

Name (for report and invoice) Rachel Burkart		Sampler's Name (Printed) Rachel Burkart		Site/Project Identification Liberty 0.1 #38	
Company Center Point Tank Services, Inc		P.O. # 08-12-4292		State (Location of site): NJ: <input type="checkbox"/> NY: <input type="checkbox"/> Other: PA	
Address 336 E Benjamin Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: PAUST	
City Douglasville		State PA		LAB USE ONLY Project No:	
Phone 603 385 4977		Fax		Job No: 141411	
Sample Identification		Date	Time	Matrix	No. of Cont.
MW-1	9/20/17	10:29	GW	6	1
MW-2				6	1
MW-3				6	1
MW-4				6	1
MW-5				6	1
MW-9				6	1
MW-10				6	1
MW-11				6	1
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH		Soil:		Water:	
6 = Other		7 = Other			



460-141411 Chain of Custody

Special Instructions: **Please lab filter for metals**

Water Metals Filtered (Yes/No)? **N**

Relinquished by [Signature]	Company CPIS	Date / Time 9/20/17 11:30	Received by [Signature]	Company [Signature]
Relinquished by [Signature]	Company THKOS	Date / Time 9/20/17 19:15	Received by [Signature]	Company TH
Relinquished by [Signature]	Company TA	Date / Time 9/22/17 20:00	Received by [Signature]	Company TH Edison
Relinquished by [Signature]	Company	Date / Time	Received by	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
Massachusetts (M-NJ312), North Carolina (No. 578)

101683

Chain of Custody Record

TestAmerica

IN ENVIRONMENTAL TESTING



460-141411 Chain of Custody

Client Information (Sub Contract Lab) Client Contact: _____ Shipping/Receiving: _____ Company: TestAmerica Laboratories, Inc. Address: 301 Alpha Drive, RIDC Park, Pittsburgh, PA, 15238 Phone: 412-963-7058(Tel) 412-963-2468(Fax) Email: _____ Project Name: Liberty Oil #38 Site: _____		Lab PM: Miller, Jill K E-Mail: jill.miller@testamericainc.com Accreditations Required (See note): NELAP - Pennsylvania	
Due Date Requested: 9/28/2017 TAI Requested (days): _____ PO # _____ WO # _____ Project # 46011357 SSOW# _____		Analysis Requested Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: _____ M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification - Client ID (Lab ID)		Total Number of Containers	
MW-1 (460-141411-1)	Sample Date: 9/20/17	Sample Time: 10:29 Eastern	Field Filtered Sample (Yes or No): X
MW-2 (460-141411-2)	Sample Date: 9/20/17	Sample Time: 10:52 Eastern	Field Filtered Sample (Yes or No): X
MW-3 (460-141411-3)	Sample Date: 9/20/17	Sample Time: 13:46 Eastern	Field Filtered Sample (Yes or No): X
MW-4 (460-141411-4)	Sample Date: 9/20/17	Sample Time: 13:14 Eastern	Field Filtered Sample (Yes or No): X
MW-5 (460-141411-5)	Sample Date: 9/20/17	Sample Time: 11:06 Eastern	Field Filtered Sample (Yes or No): X
MW-9 (460-141411-6)	Sample Date: 9/20/17	Sample Time: 12:15 Eastern	Field Filtered Sample (Yes or No): X
MW-10 (460-141411-7)	Sample Date: 9/20/17	Sample Time: 12:40 Eastern	Field Filtered Sample (Yes or No): X
MW-11 (460-141411-8)	Sample Date: 9/20/17	Sample Time: 11:33 Eastern	Field Filtered Sample (Yes or No): X
Special Instructions/Note:		Special Instructions/Note:	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/analyte/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.			
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: _____ Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Method of Shipment: _____ Received by: _____ Received by: _____ Received by: _____ Cooler Temperature(s) °C and Other Remarks: _____	
Date: 9/22/17 1545 Date: _____ Date: _____ Date: _____		Date: _____ Date: _____ Date: _____ Date: _____	
Custody Seal No.: _____ Δ Yes Δ No		Company: _____ Company: _____ Company: _____ Company: _____	

1
2
3
4
5
6
7
8
9
10

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-141411-1

Login Number: 141411

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR KOP#1
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-141411-1

Login Number: 141411

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 09/23/17 12:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-147646-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
1/4/2018 10:15:36 AM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

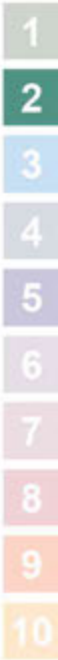


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	12
Method Summary	13
Chain of Custody	14
Receipt Checklists	17

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-147646-1	MW-1	Water	12/22/17 10:50	12/26/17 11:35
460-147646-2	MW-2	Water	12/22/17 11:10	12/26/17 11:35
460-147646-3	MW-3	Water	12/22/17 13:22	12/26/17 11:35
460-147646-4	MW-4	Water	12/22/17 12:58	12/26/17 11:35
460-147646-5	MW-5	Water	12/22/17 11:24	12/26/17 11:35
460-147646-6	MW-9	Water	12/22/17 12:13	12/26/17 11:35
460-147646-7	MW-10	Water	12/22/17 12:32	12/26/17 11:35
460-147646-8	MW-11	Water	12/22/17 11:47	12/26/17 11:35

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Job ID: 460-147646-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-147646-1

Comments

No additional comments.

Receipt

The samples were received on 12/26/2017 11:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (460-147646-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Client Sample ID: MW-1

Date Collected: 12/22/17 10:50

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/02/18 13:21	1
1,2-Dichloroethane	ND		1.0		ug/L			01/02/18 13:21	1
Ethylbenzene	ND		1.0		ug/L			01/02/18 13:21	1
Isopropylbenzene	ND		1.0		ug/L			01/02/18 13:21	1
Naphthalene	ND		1.0		ug/L			01/02/18 13:21	1
Toluene	ND		1.0		ug/L			01/02/18 13:21	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/02/18 13:21	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/02/18 13:21	1
Xylenes, Total	ND		2.0		ug/L			01/02/18 13:21	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/02/18 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	97		77 - 124		01/02/18 13:21	1
Dibromofluoromethane (Surr)	99		72 - 131		01/02/18 13:21	1
1,2-Dichloroethane-d4 (Surr)	95		74 - 132		01/02/18 13:21	1
Toluene-d8 (Surr)	99		80 - 120		01/02/18 13:21	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/02/18 11:03	01/02/18 20:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	94		60 - 140	01/02/18 11:03	01/02/18 20:01	1
1,1,1,2-Tetrachloroethane	93		60 - 140	01/02/18 11:03	01/02/18 20:01	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/29/17 10:10	12/29/17 15:39	5

Client Sample ID: MW-2

Date Collected: 12/22/17 11:10

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/02/18 13:45	1
1,2-Dichloroethane	ND		1.0		ug/L			01/02/18 13:45	1
Ethylbenzene	ND		1.0		ug/L			01/02/18 13:45	1
Isopropylbenzene	ND		1.0		ug/L			01/02/18 13:45	1
Naphthalene	ND		1.0		ug/L			01/02/18 13:45	1
Toluene	ND		1.0		ug/L			01/02/18 13:45	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/02/18 13:45	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/02/18 13:45	1
Xylenes, Total	ND		2.0		ug/L			01/02/18 13:45	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/02/18 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	99		77 - 124		01/02/18 13:45	1
Dibromofluoromethane (Surr)	98		72 - 131		01/02/18 13:45	1
1,2-Dichloroethane-d4 (Surr)	92		74 - 132		01/02/18 13:45	1
Toluene-d8 (Surr)	97		80 - 120		01/02/18 13:45	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/02/18 11:03	01/02/18 20:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	99		60 - 140				01/02/18 11:03	01/02/18 20:28	1
1,1,1,2-Tetrachloroethane	100		60 - 140				01/02/18 11:03	01/02/18 20:28	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/29/17 10:10	12/29/17 15:52	5

Client Sample ID: MW-3

Date Collected: 12/22/17 13:22

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/02/18 14:08	1
1,2-Dichloroethane	ND		1.0		ug/L			01/02/18 14:08	1
Ethylbenzene	ND		1.0		ug/L			01/02/18 14:08	1
Isopropylbenzene	ND		1.0		ug/L			01/02/18 14:08	1
Naphthalene	ND		1.0		ug/L			01/02/18 14:08	1
Toluene	ND		1.0		ug/L			01/02/18 14:08	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/02/18 14:08	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/02/18 14:08	1
Xylenes, Total	ND		2.0		ug/L			01/02/18 14:08	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/02/18 14:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		77 - 124					01/02/18 14:08	1
Dibromofluoromethane (Surr)	101		72 - 131					01/02/18 14:08	1
1,2-Dichloroethane-d4 (Surr)	91		74 - 132					01/02/18 14:08	1
Toluene-d8 (Surr)	100		80 - 120					01/02/18 14:08	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/02/18 11:03	01/02/18 20:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	97		60 - 140				01/02/18 11:03	01/02/18 20:55	1
1,1,1,2-Tetrachloroethane	95		60 - 140				01/02/18 11:03	01/02/18 20:55	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/29/17 10:10	12/29/17 15:56	5

Client Sample ID: MW-4

Date Collected: 12/22/17 12:58

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	53		1.0		ug/L			01/02/18 14:32	1
1,2-Dichloroethane	ND		1.0		ug/L			01/02/18 14:32	1
Ethylbenzene	24		1.0		ug/L			01/02/18 14:32	1
Isopropylbenzene	13		1.0		ug/L			01/02/18 14:32	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Client Sample ID: MW-4

Date Collected: 12/22/17 12:58

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	25		1.0		ug/L			01/02/18 14:32	1
Toluene	19		1.0		ug/L			01/02/18 14:32	1
1,2,4-Trimethylbenzene	47		1.0		ug/L			01/02/18 14:32	1
1,3,5-Trimethylbenzene	9.9		1.0		ug/L			01/02/18 14:32	1
Xylenes, Total	65		2.0		ug/L			01/02/18 14:32	1
Methyl tert-butyl ether	8.0		1.0		ug/L			01/02/18 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		77 - 124		01/02/18 14:32	1
Dibromofluoromethane (Surr)	97		72 - 131		01/02/18 14:32	1
1,2-Dichloroethane-d4 (Surr)	93		74 - 132		01/02/18 14:32	1
Toluene-d8 (Surr)	98		80 - 120		01/02/18 14:32	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/02/18 11:03	01/02/18 21:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	102		60 - 140	01/02/18 11:03	01/02/18 21:20	1
1,1,1,2-Tetrachloroethane	99		60 - 140	01/02/18 11:03	01/02/18 21:20	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/29/17 10:10	12/29/17 15:59	5

Client Sample ID: MW-5

Date Collected: 12/22/17 11:24

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/02/18 20:16	1
1,2-Dichloroethane	ND		1.0		ug/L			01/02/18 20:16	1
Ethylbenzene	ND		1.0		ug/L			01/02/18 20:16	1
Isopropylbenzene	ND		1.0		ug/L			01/02/18 20:16	1
Naphthalene	ND		1.0		ug/L			01/02/18 20:16	1
Toluene	ND		1.0		ug/L			01/02/18 20:16	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/02/18 20:16	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/02/18 20:16	1
Xylenes, Total	ND		2.0		ug/L			01/02/18 20:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/02/18 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		77 - 124		01/02/18 20:16	1
Dibromofluoromethane (Surr)	97		72 - 131		01/02/18 20:16	1
1,2-Dichloroethane-d4 (Surr)	93		74 - 132		01/02/18 20:16	1
Toluene-d8 (Surr)	98		80 - 120		01/02/18 20:16	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/02/18 11:03	01/02/18 21:45	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Client Sample ID: MW-5

Date Collected: 12/22/17 11:24

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	100		60 - 140	01/02/18 11:03	01/02/18 21:45	1
1,1,1,2-Tetrachloroethane	98		60 - 140	01/02/18 11:03	01/02/18 21:45	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/29/17 10:10	12/29/17 16:02	5

Client Sample ID: MW-9

Date Collected: 12/22/17 12:13

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/02/18 15:18	1
1,2-Dichloroethane	ND		1.0		ug/L			01/02/18 15:18	1
Ethylbenzene	ND		1.0		ug/L			01/02/18 15:18	1
Isopropylbenzene	1.2		1.0		ug/L			01/02/18 15:18	1
Naphthalene	ND		1.0		ug/L			01/02/18 15:18	1
Toluene	ND		1.0		ug/L			01/02/18 15:18	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/02/18 15:18	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/02/18 15:18	1
Xylenes, Total	ND		2.0		ug/L			01/02/18 15:18	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/02/18 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	98		77 - 124		01/02/18 15:18	1
Dibromofluoromethane (Surr)	102		72 - 131		01/02/18 15:18	1
1,2-Dichloroethane-d4 (Surr)	98		74 - 132		01/02/18 15:18	1
Toluene-d8 (Surr)	97		80 - 120		01/02/18 15:18	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/02/18 11:03	01/02/18 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	106		60 - 140	01/02/18 11:03	01/02/18 22:12	1
1,1,1,2-Tetrachloroethane	107		60 - 140	01/02/18 11:03	01/02/18 22:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/29/17 10:12	12/29/17 16:06	5

Client Sample ID: MW-10

Date Collected: 12/22/17 12:32

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2000		5.0		ug/L			01/02/18 16:05	5
1,2-Dichloroethane	ND		5.0		ug/L			01/02/18 16:05	5
Ethylbenzene	490		5.0		ug/L			01/02/18 16:05	5
Isopropylbenzene	70		5.0		ug/L			01/02/18 16:05	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Client Sample ID: MW-10

Date Collected: 12/22/17 12:32

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	27		5.0		ug/L			01/02/18 16:05	5
Toluene	13		5.0		ug/L			01/02/18 16:05	5
1,2,4-Trimethylbenzene	23		5.0		ug/L			01/02/18 16:05	5
1,3,5-Trimethylbenzene	ND		5.0		ug/L			01/02/18 16:05	5
Xylenes, Total	24		10		ug/L			01/02/18 16:05	5
Methyl tert-butyl ether	58		5.0		ug/L			01/02/18 16:05	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	95		77 - 124		01/02/18 16:05	5
Dibromofluoromethane (Surr)	99		72 - 131		01/02/18 16:05	5
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		01/02/18 16:05	5
Toluene-d8 (Surr)	98		80 - 120		01/02/18 16:05	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/02/18 11:03	01/02/18 22:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	103		60 - 140				01/02/18 11:03	01/02/18 22:38	1
1,1,1,2-Tetrachloroethane	105		60 - 140				01/02/18 11:03	01/02/18 22:38	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/29/17 10:12	12/29/17 16:09	5

Client Sample ID: MW-11

Date Collected: 12/22/17 11:47

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			01/02/18 15:41	1
1,2-Dichloroethane	ND		1.0		ug/L			01/02/18 15:41	1
Ethylbenzene	ND		1.0		ug/L			01/02/18 15:41	1
Isopropylbenzene	ND		1.0		ug/L			01/02/18 15:41	1
Naphthalene	ND		1.0		ug/L			01/02/18 15:41	1
Toluene	ND		1.0		ug/L			01/02/18 15:41	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/02/18 15:41	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/02/18 15:41	1
Xylenes, Total	ND		2.0		ug/L			01/02/18 15:41	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/02/18 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	97		77 - 124		01/02/18 15:41	1
Dibromofluoromethane (Surr)	98		72 - 131		01/02/18 15:41	1
1,2-Dichloroethane-d4 (Surr)	95		74 - 132		01/02/18 15:41	1
Toluene-d8 (Surr)	98		80 - 120		01/02/18 15:41	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		01/02/18 11:03	01/02/18 23:03	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Client Sample ID: MW-11

Date Collected: 12/22/17 11:47

Date Received: 12/26/17 11:35

Lab Sample ID: 460-147646-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	105		60 - 140	01/02/18 11:03	01/02/18 23:03	1
1,1,1,2-Tetrachloroethane	103		60 - 140	01/02/18 11:03	01/02/18 23:03	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		12/29/17 10:12	12/29/17 16:16	5

Accreditation/Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Laboratory: TestAmerica Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-18
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-18
Pennsylvania	NELAP	3	68-00522	02-28-18
Rhode Island	State Program	1	LAO00132	12-30-17 *
USDA	Federal		NJCA-003-08	06-13-20

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		PA00164	07-31-18
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-18
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-18
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-18
North Carolina (WW/SW)	State Program	4	434	12-31-18
Pennsylvania	NELAP	3	02-00416	04-30-18
South Carolina	State Program	4	89014	04-30-18
Texas	NELAP	6	T104704528-15-2	03-31-18
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-18
Wisconsin	State Program	5	998027800	08-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-147646-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

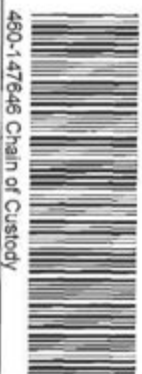
CHAIN OF CUSTODY / ANALYSIS REQUEST

2.9 - KOP-1

Page 1 of 1

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

Name (for report and invoice) Rachel Burkart		Samplers Name (Printed) Rachel Burkart		Site/Project Identification Lehigh Oil #38	
Company Center Point Tank Services		P.O. # 08-12-4292		State (Location of site): NJ: <input type="checkbox"/> NY: <input type="checkbox"/> Other: PA	
Address 536 E Benjamin Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input checked="" type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: UST	
City Douglasville		Fax 610 345 4977		LAB USE ONLY Project No:	
Sample Identification		Date	Time	Matrix	No. of Cont.
MW-1	12/22/17	1050	6:00		6
MW-2		1110			6
MW-3		1322			6
MW-4		1258			6
MW-5		1124			6
MW-9		1213			6
MW-10		1232			6
MW-11		1147			6
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH 6 = Other _____, 7 = Other _____		Soil: _____ Water: 1/2 1/2		Leaded gasoline <input checked="" type="checkbox"/> Unleaded gasoline <input checked="" type="checkbox"/>	



450-147646 Chain of Custody

Special Instructions Please Lab Filter for Metals

Water Metals Filtered (Yes/No)? **N**

Relinquished by Rachel Burkart	Company CPTS	Date / Time 12/21/17 11:35	Received by [Signature]	Company TRKOS
Relinquished by [Signature]	Company TRKOS	Date / Time 12/26/17	Received by [Signature]	Company TRKOS
Relinquished by	Company	Date / Time	Received by	Company
Relinquished by	Company	Date / Time	Received by	Company

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

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

TAL-0016 (07/15)

Chain of Custody Record



460-147646 Chain of Custody

460-147646-1

Client Information (Sub Contract Lab) Client Contact: Miller, Jill K Shipping/Receiving: Jill Miller Company: TestAmerica Laboratories, Inc. Address: 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238 Phone: 412-963-7058(Tel) 412-963-2468(Fax) Email: Jill.Miller@testamericainc.com Project Name: Center Point (KOP) Site: 46011357		Lab PM: Miller, Jill K E-Mail: jill.miller@testamericainc.com Accreditation Required (See note): NELAP - Pennsylvania	
Due Date Requested: 1/2/2018 TAT Requested (days): 1		Analysis Requested A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Sample Identification - Client ID (Lab ID) MW-1 (460-147646-1) MW-2 (460-147646-2) MW-3 (460-147646-3) MW-4 (460-147646-4) MW-5 (460-147646-5) MW-9 (460-147646-6) MW-10 (460-147646-7) MW-11 (460-147646-8)		Special Instructions/Note: Total Number of Containers: 2 Field Filtered Sample (Yes or No) X Perform MS/MSD (Yes or No) X 8015/9011 Prep EDB (GC) X	
Sample Date 12/22/17 Sample Time 10:50 Eastern 11:10 Eastern 13:22 Eastern 12:58 Eastern 11:24 Eastern 12:13 Eastern 12:32 Eastern 11:47 Eastern		Matrix Water Water Water Water Water Water Water Water	
Sample Type (C=Comp, G=Grab) Preservation Code:		Special Instructions/Note: Total Number of Containers: 2 Field Filtered Sample (Yes or No) X Perform MS/MSD (Yes or No) X 8015/9011 Prep EDB (GC) X	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analysis & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain of custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.			
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months			
Special Instructions/QC Requirements:			
Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by:		Date: 12/26/17 13:00 12/27/17 0930 Date/Time:	
Company: TA-KOP Company:		Company: Company:	
Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-147646-1

Login Number: 147646

List Source: TestAmerica Edison

List Number: 1

Creator: Keehn, Jeffrey S

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	2.9c IR#KOP-1
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-147646-1

Login Number: 147646

List Number: 2

Creator: Neri, Tom

List Source: TestAmerica Pittsburgh

List Creation: 12/27/17 12:52 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	2.6/2.1
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-151532-1
Client Project/Site: Liberty Oil #38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
3/14/2018 12:08:12 PM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

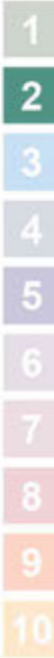


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	8
Method Summary	9
Chain of Custody	10
Receipt Checklists	13

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-151532-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-151532-1	MW-12	Water	03/06/18 13:00	03/08/18 11:34
460-151532-2	MW-13	Water	03/06/18 12:33	03/08/18 11:34

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-151532-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▣	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-151532-1

Job ID: 460-151532-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-151532-1

Comments

No additional comments.

Receipt

The samples were received on 3/8/2018 11:34 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-12 (460-151532-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-151532-1

Client Sample ID: MW-12

Date Collected: 03/06/18 13:00

Date Received: 03/08/18 11:34

Lab Sample ID: 460-151532-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	460		2.0		ug/L			03/10/18 08:38	2
1,2-Dichloroethane	ND		2.0		ug/L			03/10/18 08:38	2
Ethylbenzene	520		2.0		ug/L			03/10/18 08:38	2
Isopropylbenzene	78		2.0		ug/L			03/10/18 08:38	2
Naphthalene	160		2.0		ug/L			03/10/18 08:38	2
Toluene	120		2.0		ug/L			03/10/18 08:38	2
1,2,4-Trimethylbenzene	550		2.0		ug/L			03/10/18 08:38	2
1,3,5-Trimethylbenzene	180		2.0		ug/L			03/10/18 08:38	2
Xylenes, Total	720		4.0		ug/L			03/10/18 08:38	2
Methyl tert-butyl ether	25		2.0		ug/L			03/10/18 08:38	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	100		77 - 124		03/10/18 08:38	2
Dibromofluoromethane (Surr)	112		72 - 131		03/10/18 08:38	2
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		03/10/18 08:38	2
Toluene-d8 (Surr)	99		80 - 120		03/10/18 08:38	2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/10/18 07:31	03/10/18 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	103		60 - 140	03/10/18 07:31	03/10/18 13:22	1
1,1,1,2-Tetrachloroethane	97		60 - 140	03/10/18 07:31	03/10/18 13:22	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/13/18 10:32	03/13/18 15:21	5

Client Sample ID: MW-13

Date Collected: 03/06/18 12:33

Date Received: 03/08/18 11:34

Lab Sample ID: 460-151532-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	68		1.0		ug/L			03/10/18 08:13	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/18 08:13	1
Ethylbenzene	100		1.0		ug/L			03/10/18 08:13	1
Isopropylbenzene	8.3		1.0		ug/L			03/10/18 08:13	1
Naphthalene	12		1.0		ug/L			03/10/18 08:13	1
Toluene	99		1.0		ug/L			03/10/18 08:13	1
1,2,4-Trimethylbenzene	85		1.0		ug/L			03/10/18 08:13	1
1,3,5-Trimethylbenzene	15		1.0		ug/L			03/10/18 08:13	1
Xylenes, Total	210		2.0		ug/L			03/10/18 08:13	1
Methyl tert-butyl ether	1.4		1.0		ug/L			03/10/18 08:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	101		77 - 124		03/10/18 08:13	1
Dibromofluoromethane (Surr)	111		72 - 131		03/10/18 08:13	1
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		03/10/18 08:13	1
Toluene-d8 (Surr)	99		80 - 120		03/10/18 08:13	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-151532-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/10/18 07:31	03/10/18 13:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	102		60 - 140				03/10/18 07:31	03/10/18 13:48	1
1,1,1,2-Tetrachloroethane	97		60 - 140				03/10/18 07:31	03/10/18 13:48	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		03/13/18 10:32	03/13/18 15:11	5

Accreditation/Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-151532-1

Laboratory: TestAmerica Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-18
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-18
Pennsylvania	NELAP	3	68-00522	02-28-19
Rhode Island	State Program	1	LAO00132	12-30-18
USDA	Federal		NJCA-003-08	06-13-20

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		PA00164	07-31-18
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-19
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-18
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-18 *
North Carolina (WW/SW)	State Program	4	434	12-31-18
Oregon	NELAP Secondary AB	10	PA-2151	01-28-19
Pennsylvania	NELAP	3	02-00416	04-30-18
South Carolina	State Program	4	89014	04-30-18
Texas	NELAP	6	T104704528-15-2	03-31-18 *
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-19
Wisconsin	State Program	5	998027800	08-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil #38

TestAmerica Job ID: 460-151532-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

[illegible]

Special Instructions

Relinquished by	Company	Date / Time	Received by	Company
<i>Rachel Skumud</i>	<i>CPTS</i>	<i>3-8-18 1134</i>	<i>[Signature]</i>	<i>TA-KOP</i>
Relinquished by <i>[Signature]</i>	<i>TA-KOP</i>	<i>3/8/18 1530</i>	Received by <i>—</i>	<i>TA</i>
Relinquished by <i>—</i>	<i>TA</i>	<i>3-8-18 1930</i>	Received by <i>[Signature]</i>	<i>TA-KOP</i>
Relinquished by	Company	Date / Time	Received by	Company

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

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

TAL - 0016 (0715)

Job Number:

151532

Number of Coolers:	IR Gun #	Cooler Temperatures						
		IR Gun #1		IR Gun #2		IR Gun #3		
3	1001	Cooler #1:	°C	°C	Cooler #4:	°C	Cooler #7:	°C
		Cooler #2:	°C	°C	Cooler #5:	°C	Cooler #8:	°C
		Cooler #3:	°C	°C	Cooler #6:	°C	Cooler #9:	°C

[illegible]

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.:

Lot # of Preservative(s):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials:

Date: 5/8

EDS-WI-038, Rev 4, 06/09/2014

tAmerica
ER IN ENVIRONMENTAL TESTINGVer: 09/20/2016

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-151532-1

Login Number: 151532

List Source: TestAmerica Edison

List Number: 1

Creator: Gilmore, Julie L

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	IR kOP#1
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-151532-1

Login Number: 151532

List Number: 2

Creator: Neri, Tom

List Source: TestAmerica Pittsburgh

List Creation: 03/09/18 04:29 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	4.0/3.5
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-152747-1
Client Project/Site: Liberty Oil 38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
4/4/2018 9:07:39 AM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10

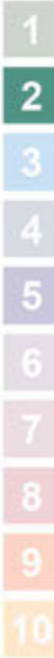


Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	13
Method Summary	14
Chain of Custody	15
Receipt Checklists	19

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-152747-1	MW-2	Water	03/27/18 10:33	03/28/18 11:21
460-152747-2	MW-3	Water	03/27/18 14:37	03/28/18 11:21
460-152747-3	MW-4	Water	03/27/18 12:04	03/28/18 11:21
460-152747-4	MW-5	Water	03/27/18 10:52	03/28/18 11:21
460-152747-5	MW-6	Water	03/27/18 11:34	03/28/18 11:21
460-152747-6	MW-7	Water	03/27/18 15:02	03/28/18 11:21
460-152747-7	MW-8	Water	03/27/18 15:34	03/28/18 11:21
460-152747-8	MW-9	Water	03/27/18 13:40	03/28/18 11:21
460-152747-9	MW-10	Water	03/27/18 13:59	03/28/18 11:21
460-152747-10	MW-11	Water	03/27/18 11:10	03/28/18 11:21

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Job ID: 460-152747-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative 460-152747-1

Comments

No additional comments.

Receipt

The samples were received on 3/28/2018 11:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

Receipt Exceptions

One or more containers for the following sample(s) was received broken or leaking: One 40mL HCl vial for MW-7 received broken.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-8 (460-152747-7) and MW-10 (460-152747-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-7 (460-152747-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Client Sample ID: MW-2

Date Collected: 03/27/18 10:33

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/30/18 15:04	1
1,2-Dichloroethane	ND		1.0		ug/L			03/30/18 15:04	1
Ethylbenzene	ND		1.0		ug/L			03/30/18 15:04	1
Isopropylbenzene	ND		1.0		ug/L			03/30/18 15:04	1
Naphthalene	ND		1.0		ug/L			03/30/18 15:04	1
Toluene	ND		1.0		ug/L			03/30/18 15:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/30/18 15:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/30/18 15:04	1
Xylenes, Total	ND		2.0		ug/L			03/30/18 15:04	1
MTBE	ND		1.0		ug/L			03/30/18 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	79		77 - 124		03/30/18 15:04	1
Dibromofluoromethane (Surr)	75		72 - 131		03/30/18 15:04	1
1,2-Dichloroethane-d4 (Surr)	88		74 - 132		03/30/18 15:04	1
Toluene-d8 (Surr)	101		80 - 120		03/30/18 15:04	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 11:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	93		60 - 140	03/31/18 08:49	03/31/18 11:13	1
1,1,1,2-Tetrachloroethane	92		60 - 140	03/31/18 08:49	03/31/18 11:13	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:53	04/03/18 17:47	5

Client Sample ID: MW-3

Date Collected: 03/27/18 14:37

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	85		1.0		ug/L			03/30/18 15:32	1
1,2-Dichloroethane	1.8		1.0		ug/L			03/30/18 15:32	1
Ethylbenzene	26		1.0		ug/L			03/30/18 15:32	1
Isopropylbenzene	5.8		1.0		ug/L			03/30/18 15:32	1
Naphthalene	3.4		1.0		ug/L			03/30/18 15:32	1
Toluene	2.2		1.0		ug/L			03/30/18 15:32	1
1,2,4-Trimethylbenzene	37		1.0		ug/L			03/30/18 15:32	1
1,3,5-Trimethylbenzene	1.3		1.0		ug/L			03/30/18 15:32	1
Xylenes, Total	17		2.0		ug/L			03/30/18 15:32	1
MTBE	9.8		1.0		ug/L			03/30/18 15:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	78		77 - 124		03/30/18 15:32	1
Dibromofluoromethane (Surr)	76		72 - 131		03/30/18 15:32	1
1,2-Dichloroethane-d4 (Surr)	88		74 - 132		03/30/18 15:32	1
Toluene-d8 (Surr)	100		80 - 120		03/30/18 15:32	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 11:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140				03/31/18 08:49	03/31/18 11:38	1
1,1,1,2-Tetrachloroethane	88		60 - 140				03/31/18 08:49	03/31/18 11:38	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:53	04/03/18 17:54	5

Client Sample ID: MW-4

Date Collected: 03/27/18 12:04

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	240		1.0		ug/L			04/01/18 15:17	1
1,2-Dichloroethane	ND		1.0		ug/L			04/01/18 15:17	1
Ethylbenzene	140		1.0		ug/L			04/01/18 15:17	1
Isopropylbenzene	17		1.0		ug/L			04/01/18 15:17	1
Naphthalene	16		1.0		ug/L			04/01/18 15:17	1
Toluene	24		1.0		ug/L			04/01/18 15:17	1
1,2,4-Trimethylbenzene	170		1.0		ug/L			04/01/18 15:17	1
1,3,5-Trimethylbenzene	50		1.0		ug/L			04/01/18 15:17	1
Xylenes, Total	220		2.0		ug/L			04/01/18 15:17	1
MTBE	12		1.0		ug/L			04/01/18 15:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124					04/01/18 15:17	1
Dibromofluoromethane (Surr)	104		72 - 131					04/01/18 15:17	1
1,2-Dichloroethane-d4 (Surr)	99		74 - 132					04/01/18 15:17	1
Toluene-d8 (Surr)	97		80 - 120					04/01/18 15:17	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 12:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	88		60 - 140				03/31/18 08:49	03/31/18 12:03	1
1,1,1,2-Tetrachloroethane	82		60 - 140				03/31/18 08:49	03/31/18 12:03	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:53	04/03/18 17:58	5

Client Sample ID: MW-5

Date Collected: 03/27/18 10:52

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/30/18 16:27	1
1,2-Dichloroethane	ND		1.0		ug/L			03/30/18 16:27	1
Ethylbenzene	ND		1.0		ug/L			03/30/18 16:27	1
Isopropylbenzene	ND		1.0		ug/L			03/30/18 16:27	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Client Sample ID: MW-5

Date Collected: 03/27/18 10:52

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			03/30/18 16:27	1
Toluene	ND		1.0		ug/L			03/30/18 16:27	1
1,2,4-Trimethylbenzene	1.3		1.0		ug/L			03/30/18 16:27	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/30/18 16:27	1
Xylenes, Total	ND		2.0		ug/L			03/30/18 16:27	1
MTBE	ND		1.0		ug/L			03/30/18 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	83		77 - 124		03/30/18 16:27	1
Dibromofluoromethane (Surr)	82		72 - 131		03/30/18 16:27	1
1,2-Dichloroethane-d4 (Surr)	96		74 - 132		03/30/18 16:27	1
Toluene-d8 (Surr)	106		80 - 120		03/30/18 16:27	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 12:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	86		60 - 140				03/31/18 08:49	03/31/18 12:28	1
1,1,1,2-Tetrachloroethane	87		60 - 140				03/31/18 08:49	03/31/18 12:28	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:53	04/03/18 18:04	5

Client Sample ID: MW-6

Date Collected: 03/27/18 11:34

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			04/01/18 09:23	1
1,2-Dichloroethane	ND		1.0		ug/L			04/01/18 09:23	1
Ethylbenzene	ND		1.0		ug/L			04/01/18 09:23	1
Isopropylbenzene	ND		1.0		ug/L			04/01/18 09:23	1
Naphthalene	ND		1.0		ug/L			04/01/18 09:23	1
Toluene	ND		1.0		ug/L			04/01/18 09:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/01/18 09:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/01/18 09:23	1
Xylenes, Total	ND		2.0		ug/L			04/01/18 09:23	1
MTBE	ND		1.0		ug/L			04/01/18 09:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	103		77 - 124		04/01/18 09:23	1
Dibromofluoromethane (Surr)	112		72 - 131		04/01/18 09:23	1
1,2-Dichloroethane-d4 (Surr)	106		74 - 132		04/01/18 09:23	1
Toluene-d8 (Surr)	98		80 - 120		04/01/18 09:23	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 12:53	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Client Sample ID: MW-6

Date Collected: 03/27/18 11:34

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	87		60 - 140	03/31/18 08:49	03/31/18 12:53	1
1,1,1,2-Tetrachloroethane	87		60 - 140	03/31/18 08:49	03/31/18 12:53	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.3		1.5		ug/L		04/03/18 12:53	04/03/18 18:18	5

Client Sample ID: MW-7

Date Collected: 03/27/18 15:02

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2500		10		ug/L			04/01/18 10:34	10
1,2-Dichloroethane	ND		10		ug/L			04/01/18 10:34	10
Ethylbenzene	540		10		ug/L			04/01/18 10:34	10
Isopropylbenzene	48		10		ug/L			04/01/18 10:34	10
Naphthalene	190		10		ug/L			04/01/18 10:34	10
Toluene	940		10		ug/L			04/01/18 10:34	10
1,2,4-Trimethylbenzene	700		10		ug/L			04/01/18 10:34	10
1,3,5-Trimethylbenzene	190		10		ug/L			04/01/18 10:34	10
Xylenes, Total	1900		20		ug/L			04/01/18 10:34	10
MTBE	390		10		ug/L			04/01/18 10:34	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	100		77 - 124		04/01/18 10:34	10
Dibromofluoromethane (Surr)	107		72 - 131		04/01/18 10:34	10
1,2-Dichloroethane-d4 (Surr)	93		74 - 132		04/01/18 10:34	10
Toluene-d8 (Surr)	96		80 - 120		04/01/18 10:34	10

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 13:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	88		60 - 140	03/31/18 08:49	03/31/18 13:18	1
1,1,1,2-Tetrachloroethane	77		60 - 140	03/31/18 08:49	03/31/18 13:18	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:54	04/03/18 18:22	5

Client Sample ID: MW-8

Date Collected: 03/27/18 15:34

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	270		5.0		ug/L			03/31/18 11:56	5
1,2-Dichloroethane	ND		5.0		ug/L			03/31/18 11:56	5
Ethylbenzene	360		5.0		ug/L			03/31/18 11:56	5
Isopropylbenzene	53		5.0		ug/L			03/31/18 11:56	5

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Client Sample ID: MW-8

Date Collected: 03/27/18 15:34

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	96		5.0		ug/L			03/31/18 11:56	5
Toluene	69		5.0		ug/L			03/31/18 11:56	5
1,2,4-Trimethylbenzene	620		5.0		ug/L			03/31/18 11:56	5
1,3,5-Trimethylbenzene	180		5.0		ug/L			03/31/18 11:56	5
Xylenes, Total	790		10		ug/L			03/31/18 11:56	5
MTBE	ND		5.0		ug/L			03/31/18 11:56	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	101		77 - 124		03/31/18 11:56	5
Dibromofluoromethane (Surr)	106		72 - 131		03/31/18 11:56	5
1,2-Dichloroethane-d4 (Surr)	98		74 - 132		03/31/18 11:56	5
Toluene-d8 (Surr)	88		80 - 120		03/31/18 11:56	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 13:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	96		60 - 140				03/31/18 08:49	03/31/18 13:42	1
1,1,1,2-Tetrachloroethane	87		60 - 140				03/31/18 08:49	03/31/18 13:42	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:54	04/03/18 18:31	5

Client Sample ID: MW-9

Date Collected: 03/27/18 13:40

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	18		1.0		ug/L			03/30/18 17:23	1
1,2-Dichloroethane	ND		1.0		ug/L			03/30/18 17:23	1
Ethylbenzene	ND		1.0		ug/L			03/30/18 17:23	1
Isopropylbenzene	10		1.0		ug/L			03/30/18 17:23	1
Naphthalene	ND		1.0		ug/L			03/30/18 17:23	1
Toluene	ND		1.0		ug/L			03/30/18 17:23	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/30/18 17:23	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/30/18 17:23	1
Xylenes, Total	ND		2.0		ug/L			03/30/18 17:23	1
MTBE	3.1		1.0		ug/L			03/30/18 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	79		77 - 124		03/30/18 17:23	1
Dibromofluoromethane (Surr)	77		72 - 131		03/30/18 17:23	1
1,2-Dichloroethane-d4 (Surr)	90		74 - 132		03/30/18 17:23	1
Toluene-d8 (Surr)	101		80 - 120		03/30/18 17:23	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 14:07	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Client Sample ID: MW-9

Date Collected: 03/27/18 13:40

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	83		60 - 140	03/31/18 08:49	03/31/18 14:07	1
1,1,1,2-Tetrachloroethane	86		60 - 140	03/31/18 08:49	03/31/18 14:07	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:54	04/03/18 18:38	5

Client Sample ID: MW-10

Date Collected: 03/27/18 13:59

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1300		5.0		ug/L			03/31/18 12:19	5
1,2-Dichloroethane	ND		5.0		ug/L			03/31/18 12:19	5
Ethylbenzene	130		5.0		ug/L			03/31/18 12:19	5
Isopropylbenzene	19		5.0		ug/L			03/31/18 12:19	5
Naphthalene	34		5.0		ug/L			03/31/18 12:19	5
Toluene	36		5.0		ug/L			03/31/18 12:19	5
1,2,4-Trimethylbenzene	76		5.0		ug/L			03/31/18 12:19	5
1,3,5-Trimethylbenzene	8.2		5.0		ug/L			03/31/18 12:19	5
Xylenes, Total	240		10		ug/L			03/31/18 12:19	5
MTBE	77		5.0		ug/L			03/31/18 12:19	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	101		77 - 124		03/31/18 12:19	5
Dibromofluoromethane (Surr)	108		72 - 131		03/31/18 12:19	5
1,2-Dichloroethane-d4 (Surr)	98		74 - 132		03/31/18 12:19	5
Toluene-d8 (Surr)	97		80 - 120		03/31/18 12:19	5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	84		60 - 140	03/31/18 08:49	03/31/18 14:32	1
1,1,1,2-Tetrachloroethane	81		60 - 140	03/31/18 08:49	03/31/18 14:32	1

Method: 200.8 - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:54	04/03/18 18:41	5

Client Sample ID: MW-11

Date Collected: 03/27/18 11:10

Date Received: 03/28/18 11:21

Lab Sample ID: 460-152747-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/30/18 17:51	1
1,2-Dichloroethane	ND		1.0		ug/L			03/30/18 17:51	1
Ethylbenzene	ND		1.0		ug/L			03/30/18 17:51	1
Isopropylbenzene	ND		1.0		ug/L			03/30/18 17:51	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Client Sample ID: MW-11

Lab Sample ID: 460-152747-10

Date Collected: 03/27/18 11:10

Matrix: Water

Date Received: 03/28/18 11:21

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0		ug/L			03/30/18 17:51	1
Toluene	ND		1.0		ug/L			03/30/18 17:51	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			03/30/18 17:51	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			03/30/18 17:51	1
Xylenes, Total	ND		2.0		ug/L			03/30/18 17:51	1
MTBE	ND		1.0		ug/L			03/30/18 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	82		77 - 124		03/30/18 17:51	1
Dibromofluoromethane (Surr)	81		72 - 131		03/30/18 17:51	1
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		03/30/18 17:51	1
Toluene-d8 (Surr)	105		80 - 120		03/30/18 17:51	1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 14:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	91		60 - 140	03/31/18 08:49	03/31/18 14:57	1
1,1,1,2-Tetrachloroethane	90		60 - 140	03/31/18 08:49	03/31/18 14:57	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:54	04/03/18 18:48	5

TestAmerica Edison

Accreditation/Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Laboratory: TestAmerica Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-18
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-18 *
Pennsylvania	NELAP	3	68-00522	02-28-19
Rhode Island	State Program	1	LAO00132	12-30-18
USDA	Federal		NJCA-003-08	06-13-20

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		PA00164	07-31-18
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	03-31-18 *
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-19
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-18 *
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-19
North Carolina (WW/SW)	State Program	4	434	12-31-18
Oregon	NELAP Secondary AB	10	PA-2151	01-28-19
Pennsylvania	NELAP	3	02-00416	04-30-18 *
South Carolina	State Program	4	89014	04-30-18 *
Texas	NELAP	6	T104704528-15-2	03-31-19
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-19
Wisconsin	State Program	5	998027800	08-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152747-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

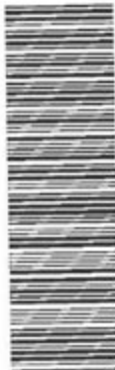
TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

CHAIN OF CUSTODY / ANALYSIS REQUEST

3.9.6 201-1

Page 1 of 1

Name (for report and invoice) Rachel Burkart		Samplers Name (Printed) Rachel Burkart		Site/Project Identification Liberty 01/38	
Company Center Point Tank Services		P.O.# 08-12-4292		State (Location of site): NJ: <input type="checkbox"/> NY: <input type="checkbox"/> Other: PA	
Address 536 E Benjamin Franklin Hwy		Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input checked="" type="checkbox"/> Other <input type="checkbox"/>		Regulatory Program: UST	
City Davidsville		State PA		LAB USE ONLY Project No: 152747	
Phone 610 385-4977		Fax		Sample Numbers	
Sample Identification		Date	Time	Matrix	No. of Cont.
MW-2		3/27/18	1633	GW	6
MW-3			1437		
MW-4			1264		
MW-5			1052		
MW-6			1134		
MW-7			1502		
MW-8			1534		
MW-9			1340		
MW-10			1359		
MW-11			1110		
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH, 6 = Other, 7 = Other		Soil:		Water:	
				1/2 1/2	



460-152747 Chain of Custody

Special Instructions		Water Metals Filtered (Yes/No)?	
Relinquished by Rachel Burkart	Company CPT	Date / Time 3/28/18 1121	Received by AS-KSP
Relinquished by 2) [Signature]	Company AS/KOP	Date / Time	Received by PA
Relinquished by 3) [Signature]	Company PA	Date / Time 3/28/18 2000	Received by TA Edi
Relinquished by 4) [Signature]	Company	Date / Time	Received by

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (11452)

152747

[illegible][illegible]

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.:

Volume of Preservative used (ml):

Lot # of Preservative(s): _____

Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: JK

Date: 3/28/18

EDS-WI-038, Rev 4, 05/09/2014


Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)				Lab PM:		Carrier Tracking No(s)		COC No:	
Client Contact:				Miller, Jill K				460-51160.1	
Shipping/Receiving				E-Mail:		State of Origin:		Page	
Company:				jill.miller@testamericainc.com		Pennsylvania		Page 1 of 2	
Address:				Accreditations Required (See note):		Job #:		Preservation Codes:	
TestAmerica Laboratories, Inc				NELAP - Pennsylvania		460-152747-1		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
City:				Due Date Requested:		Analysis Requested			
Pittsburgh				4/3/2018					
State, Zip:				TAT Requested (days):					
PA, 15238									
Phone:				PO #:					
412-963-7058(Tel) 412-963-2468(Fax)									
Email:				WO #:					
Project Name:				Project #:					
Center Point (KOP)				46011357					
Site:				SSOW#:					
Sample Identification - Client ID (Lab ID)									
Sample	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8011/8011 Prep EDB (GC)	Total Number of Containers	Special Instructions/Notes
MW-2 (460-152747-1)	3/27/18	10:33 Eastern	Water	Water			X	2	
MW-3 (460-152747-2)	3/27/18	14:37 Eastern	Water	Water			X	2	
MW-4 (460-152747-3)	3/27/18	12:04 Eastern	Water	Water			X	2	
MW-5 (460-152747-4)	3/27/18	10:52 Eastern	Water	Water			X	2	
MW-6 (460-152747-5)	3/27/18	11:34 Eastern	Water	Water			X	2	
MW-7 (460-152747-6)	3/27/18	15:02 Eastern	Water	Water			X	2	
MW-8 (460-152747-7)	3/27/18	15:34 Eastern	Water	Water			X	2	
MW-9 (460-152747-8)	3/27/18	13:40 Eastern	Water	Water			X	2	
MW-10 (460-152747-9)	3/27/18	13:50 Eastern	Water	Water			X	2	



460-152747 Chain of Custody

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Primary Deliverable Rank: 1

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:

Relinquished by: *[Signature]* Date: 3/28/18 Company: *[Signature]*

Relinquished by: Date: Company:

Relinquished by: Date: Company:

Custody Seal No.: *1413*

Custody Seals Intact: ☐ Yes ☐ No

Cooler Temperature(s) °C and Other Remarks:

TestAmerica

THE EFFECT OF ENVIRONMENTAL TESTING

[illegible]

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-152747-1

Login Number: 152747

List Source: TestAmerica Edison

List Number: 1

Creator: Keehn, Jeffrey S

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.9c IR#KOP-1
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	One vial for MW-7 received broken.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-152747-1

Login Number: 152747

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 03/29/18 12:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-152748-1
Client Project/Site: Liberty Oil 38

For:
Center Point Tank Service
536 E Benjamin Franklin
Douglassville, Pennsylvania 19518

Attn: Rachel Burkart

Jill Miller

Authorized for release by:
4/4/2018 9:07:29 AM

Jill Miller, Project Manager II
(732)549-3900
jill.miller@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1
2
3
4
5
6
7
8
9
10



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Certification Summary	8
Method Summary	9
Chain of Custody	10
Receipt Checklists	13

Sample Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152748-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-152748-1	MW-12	Water	03/27/18 12:59	03/28/18 11:23
460-152748-2	MW-13	Water	03/27/18 12:34	03/28/18 11:23

Definitions/Glossary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152748-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152748-1

Job ID: 460-152748-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative
460-152748-1

Comments

No additional comments.

Receipt

The samples were received on 3/28/2018 11:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-12 (460-152748-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152748-1

Client Sample ID: MW-12

Date Collected: 03/27/18 12:59

Date Received: 03/28/18 11:23

Lab Sample ID: 460-152748-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	560		2.0		ug/L			03/31/18 12:43	2
1,2-Dichloroethane	ND		2.0		ug/L			03/31/18 12:43	2
Ethylbenzene	470		2.0		ug/L			03/31/18 12:43	2
Isopropylbenzene	79		2.0		ug/L			03/31/18 12:43	2
Naphthalene	160		2.0		ug/L			03/31/18 12:43	2
Toluene	150		2.0		ug/L			03/31/18 12:43	2
1,2,4-Trimethylbenzene	490		2.0		ug/L			03/31/18 12:43	2
1,3,5-Trimethylbenzene	150		2.0		ug/L			03/31/18 12:43	2
Xylenes, Total	550		4.0		ug/L			03/31/18 12:43	2
Methyl tert-butyl ether	29		2.0		ug/L			03/31/18 12:43	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	96		77 - 124		03/31/18 12:43	2
Dibromofluoromethane (Surr)	95		72 - 131		03/31/18 12:43	2
1,2-Dichloroethane-d4 (Surr)	103		74 - 132		03/31/18 12:43	2
Toluene-d8 (Surr)	91		80 - 120		03/31/18 12:43	2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	98		60 - 140	03/31/18 08:49	03/31/18 15:47	1
1,1,1,2-Tetrachloroethane	91		60 - 140	03/31/18 08:49	03/31/18 15:47	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:54	04/03/18 19:11	5

Client Sample ID: MW-13

Date Collected: 03/27/18 12:34

Date Received: 03/28/18 11:23

Lab Sample ID: 460-152748-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	110		1.0		ug/L			03/30/18 18:18	1
1,2-Dichloroethane	2.4		1.0		ug/L			03/30/18 18:18	1
Ethylbenzene	140		1.0		ug/L			03/30/18 18:18	1
Isopropylbenzene	11		1.0		ug/L			03/30/18 18:18	1
Naphthalene	19		1.0		ug/L			03/30/18 18:18	1
Toluene	44		1.0		ug/L			03/30/18 18:18	1
1,2,4-Trimethylbenzene	150		1.0		ug/L			03/30/18 18:18	1
1,3,5-Trimethylbenzene	25		1.0		ug/L			03/30/18 18:18	1
Xylenes, Total	220		2.0		ug/L			03/30/18 18:18	1
Methyl tert-butyl ether	1.8		1.0		ug/L			03/30/18 18:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	78		77 - 124		03/30/18 18:18	1
Dibromofluoromethane (Surr)	78		72 - 131		03/30/18 18:18	1
1,2-Dichloroethane-d4 (Surr)	91		74 - 132		03/30/18 18:18	1
Toluene-d8 (Surr)	100		80 - 120		03/30/18 18:18	1

TestAmerica Edison

Client Sample Results

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152748-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020		ug/L		03/31/18 08:49	03/31/18 16:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	97		60 - 140				03/31/18 08:49	03/31/18 16:12	1
1,1,1,2-Tetrachloroethane	91		60 - 140				03/31/18 08:49	03/31/18 16:12	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.5		ug/L		04/03/18 12:54	04/03/18 19:18	5

Accreditation/Certification Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152748-1

Laboratory: TestAmerica Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-18
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-18 *
Pennsylvania	NELAP	3	68-00522	02-28-19
Rhode Island	State Program	1	LAO00132	12-30-18
USDA	Federal		NJCA-003-08	06-13-20

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		PA00164	07-31-18
Arkansas DEQ	State Program	6	88-0690	06-27-18
California	State Program	9	2891	03-31-18 *
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-18
Illinois	NELAP	5	200005	06-30-18
Kansas	NELAP	7	E-10350	01-31-19
Louisiana	NELAP	6	04041	06-30-18
Nevada	State Program	9	PA00164	07-31-18
New Hampshire	NELAP	1	2030	04-04-18 *
New Jersey	NELAP	2	PA005	06-30-18
New York	NELAP	2	11182	03-31-19
North Carolina (WW/SW)	State Program	4	434	12-31-18
Oregon	NELAP Secondary AB	10	PA-2151	01-28-19
Pennsylvania	NELAP	3	02-00416	04-30-18 *
South Carolina	State Program	4	89014	04-30-18 *
Texas	NELAP	6	T104704528-15-2	03-31-19
US Fish & Wildlife	Federal		LE94312A-1	07-31-18
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-18
Virginia	NELAP	3	460189	09-14-18
West Virginia DEP	State Program	3	142	01-31-19
Wisconsin	State Program	5	998027800	08-31-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Edison

Method Summary

Client: Center Point Tank Service
Project/Site: Liberty Oil 38

TestAmerica Job ID: 460-152748-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL PIT
200.8	Metals (ICP/MS)	EPA	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Receipt Temperature and pH Log

Job Number:

8h4251

Number of Coolers _____

IR Gun # _____

COOLERS

Cooler #1	C	C	C
Cooler #2	C	C	C
Cooler #3	C	C	C

COOLERS

Cooler #4	C	C	C
Cooler #5	C	C	C
Cooler #6	C	C	C

COOLERS

Cooler #7	C	C	C
Cooler #8	C	C	C
Cooler #9	C	C	C

[illegible]

If pH adjustments are required record the information below:

Sample No(s). adjusted:

Preservative Name/Conc.:

Lot # of Preservative(s):

Expiration Date:

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: _____

Date: 3/28/18

EDS-WI-038, Rev 4, 06/09/2014

1831, Oct 20

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-152748-1

Login Number: 152748

List Source: TestAmerica Edison

List Number: 1

Creator: Keehn, Jeffrey S

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.9c IR#KOP-1
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Center Point Tank Service

Job Number: 460-152748-1

Login Number: 152748

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 03/29/18 12:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX G

Aquifer Testing Data

Slug Testing Methodology

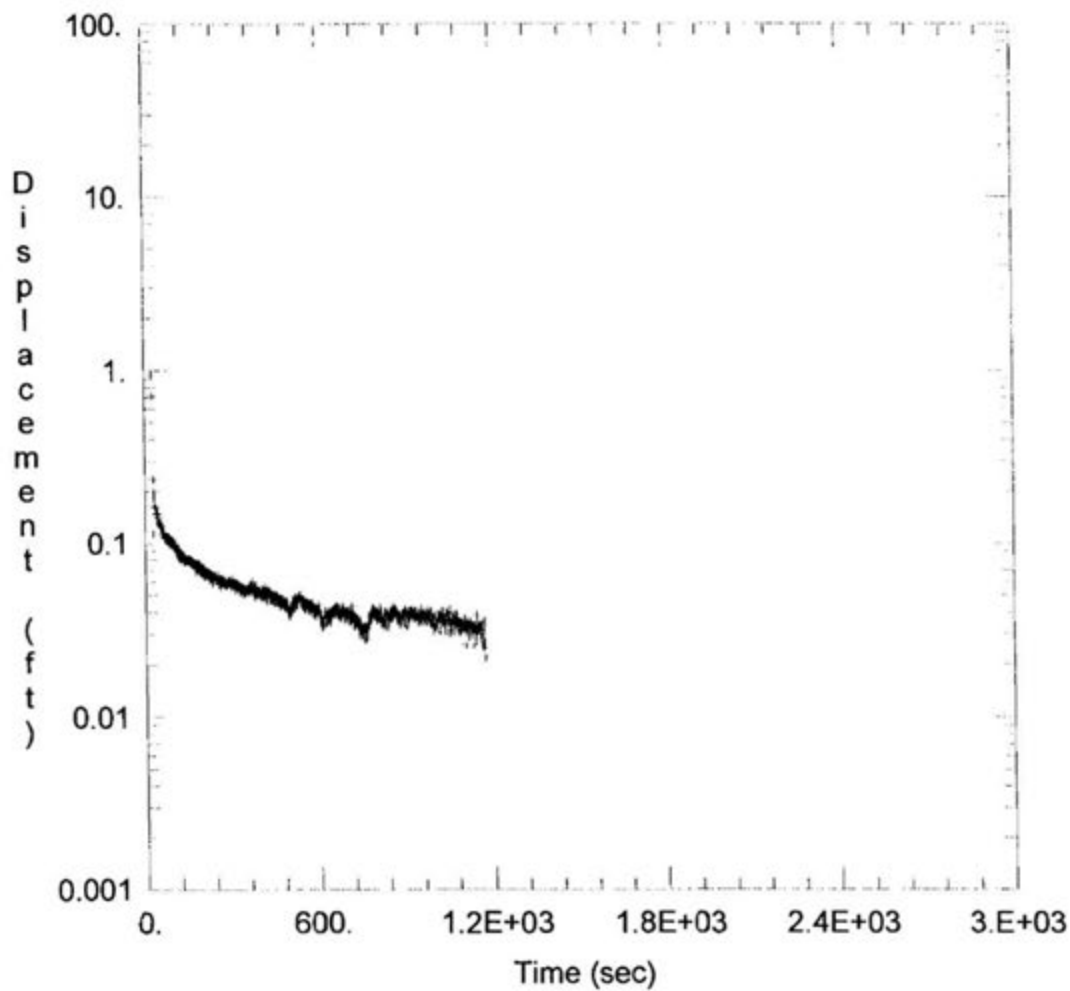
Field Methodology used for each well tested:

- Well top was opened, plug removed, allowed to equilibrate, and depth-to-water measurements made from a top-of-casing reference with a Keck electric tape.
- An In-Situ model cable connected level troll transducer was introduced to within approximately one foot from the well bottom.
- A Rugged Reader Level Troll Hand Held PC equipped with Win-Situ data logger software was attached to the land end of the downhole cable. The PC was used to set the clock, setup the test parameters; start, stop and monitor tests; and download and store completed test data sets.
- Once the falling head test parameters were set up and the test manually started, an approximately 1.0-gallon volume slug was quickly introduced to the well by submerging it completely beneath the static water level. A 0.4-gallon slug may be used in well casings that cannot accommodate the larger diameter one-gallon slug.
- The static water level was allowed recovered to within approximately ± 0.05 of static water level.
- Once the rising head test parameters were set up and the test manually started, the submerged slug was quickly removed from the well and the water level allowed to recover.
- Level troll data was downloaded and stored to the hand held PC.
- Slug, data cable and level troll system were decontaminated as necessary between each test well with an Alconox solution and clean water rinse prior to setting up on the next test well.

Data Evaluation:

The hand held PC saved data logger test information was downloaded to a desktop PC. Data files were evaluated using the Aqtesolve software program.

For each slug test, each test data set consisted of two columns of data: elapsed time and top casing referenced depth-to-water elevations. Using the program filters, the elevation data were transformed into feet of displacement. The well construction and water level test parameters were entered into the program. A straight-line manual curve matching option was used to estimate hydraulic conductivity from the data curves using the Bouwer and Rice method of slug testing analysis. The Bouwer and Rice method was used to accommodate tests completed on wells with partially submerged screens for an unconfined aquifer. This line matching process is based in part on a method described in Butler, 1998 which calls for straight-line matching those displacements ranging between 0.2 and 0.3 feet of normalized displacement along the curve. Line matching was adjusted where necessary to include valid portions of displacement data field that would have otherwise remained outside the ideal data ranges.



LIBERTY OIL #38 MW-1F

Data Set: C:\...\Tam38.MW-1F.aqt
Date: 02/25/09

Time: 14:47:28

PROJECT INFORMATION

Company: CPTS
Client: Liberty Oil #38
Test Location: Tamaqua
Test Well: MW-1F
Test Date: 2/16/09

AQUIFER DATA

Saturated Thickness: 15. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (Tam38 MW-1F)

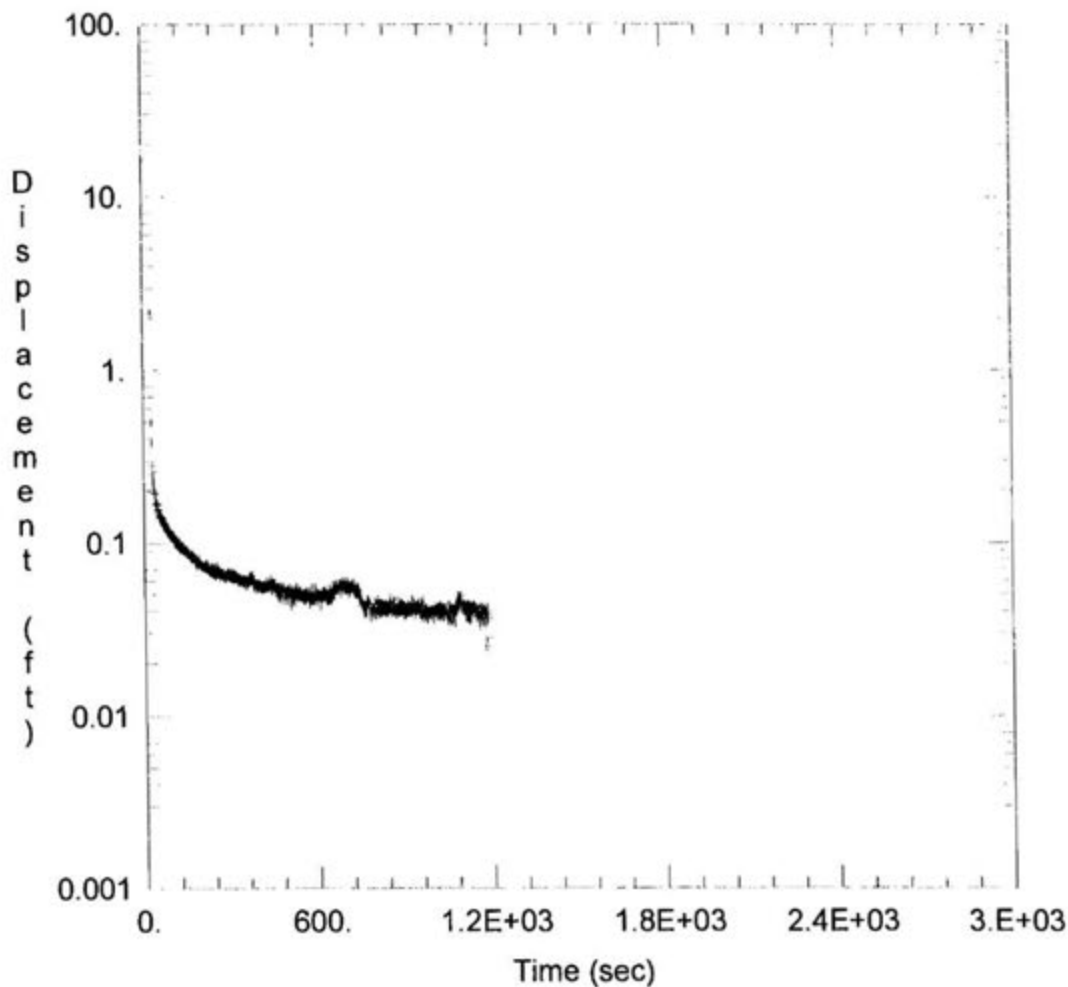
Initial Displacement: 0.896 ft
Wellbore Radius: 0.42 ft
Screen Length: 15. ft
Gravel Pack Porosity: 0.25

Casing Radius: 0.16 ft
Well Skin Radius: 0.42 ft
Total Well Penetration Depth: 15. ft

SOLUTION

Aquifer Model: Unconfined
 $K = 1.896$ ft/day

Solution Method: Bouwer-Rice
 $y_0 = 0.1997$ ft



LIBERTY OIL #38 MW-1R

Data Set: C:\...\Tam38.MW-1R.aqt
Date: 02/25/09

Time: 14:53:19

PROJECT INFORMATION

Company: CPTS
Client: Liberty Oil #38
Test Location: Tamaqua
Test Well: MW-1R
Test Date: 2/16/09

AQUIFER DATA

Saturated Thickness: 15. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (Tam38 MW-1R)

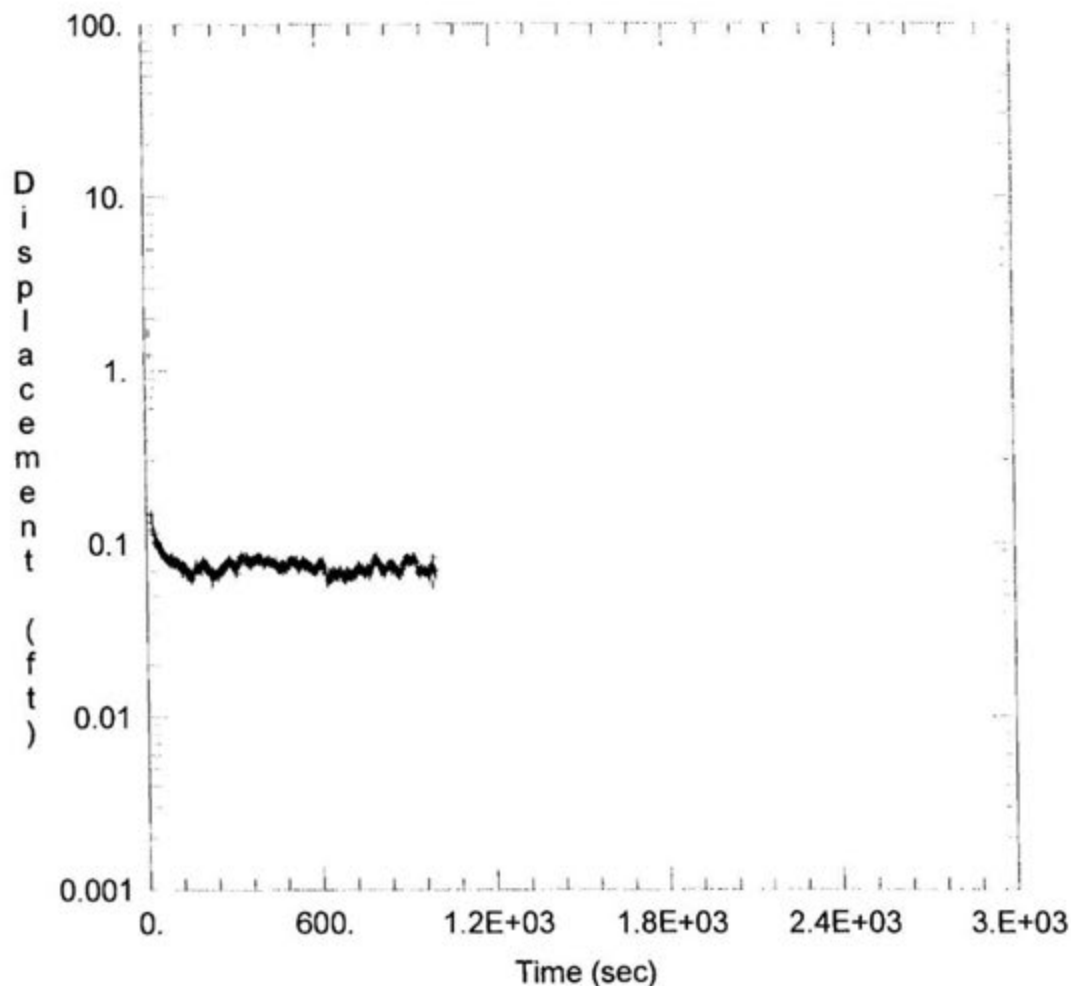
Initial Displacement: 2.153 ft
Wellbore Radius: 0.42 ft
Screen Length: 15. ft
Gravel Pack Porosity: 0.25

Casing Radius: 0.16 ft
Well Skin Radius: 0.42 ft
Total Well Penetration Depth: 15. ft

SOLUTION

Aquifer Model: Unconfined
 $K = 1.538$ ft/day

Solution Method: Bouwer-Rice
 $y_0 = 0.2284$ ft



LIBERTY OIL #38 MW-2F

Data Set: C:\...\Tam38.MW-2F.aqt
Date: 02/25/09

Time: 15:03:52

PROJECT INFORMATION

Company: CPTS
Client: Liberty Oil #38
Test Location: Tamaqua
Test Well: MW-2F
Test Date: 2/16/09

AQUIFER DATA

Saturated Thickness: 4.61 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (Tam38 MW-2F)

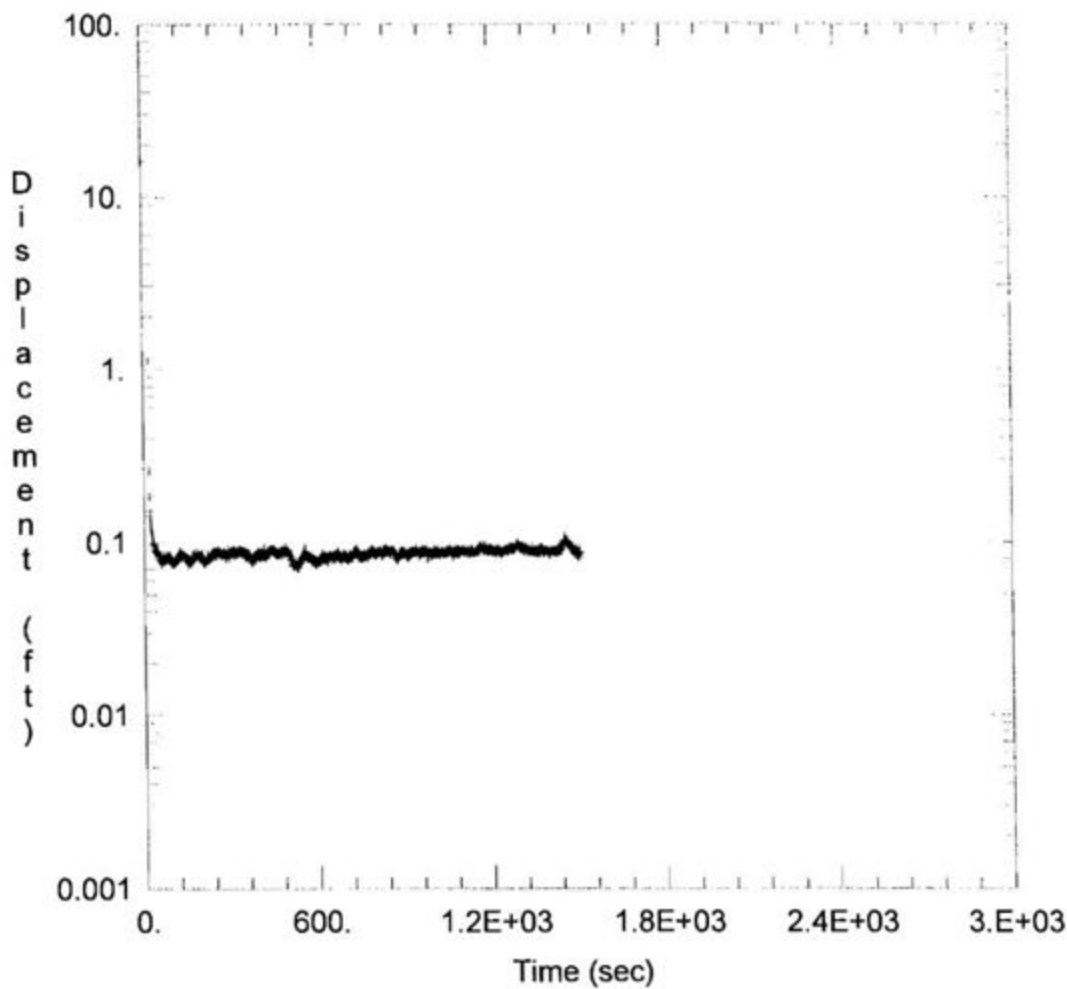
Initial Displacement: 1.573 ft
Wellbore Radius: 0.42 ft
Screen Length: 18. ft
Gravel Pack Porosity: 0.25

Casing Radius: 0.16 ft
Well Skin Radius: 0.42 ft
Total Well Penetration Depth: 4.61 ft

SOLUTION

Aquifer Model: Unconfined
 $K = 0.9158$ ft/day

Solution Method: Bouwer-Rice
 $y_0 = 0.1385$ ft



LIBERTY OIL #38 MW-2R

Data Set: C:\...\Tam38.MW-2R.aqt
Date: 02/25/09

Time: 15:09:57

PROJECT INFORMATION

Company: CPTS
Client: Liberty Oil #38
Test Location: Tamaqua
Test Well: MW-2R
Test Date: 2/16/09

AQUIFER DATA

Saturated Thickness: 4.61 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (Tam38 MW-2R)

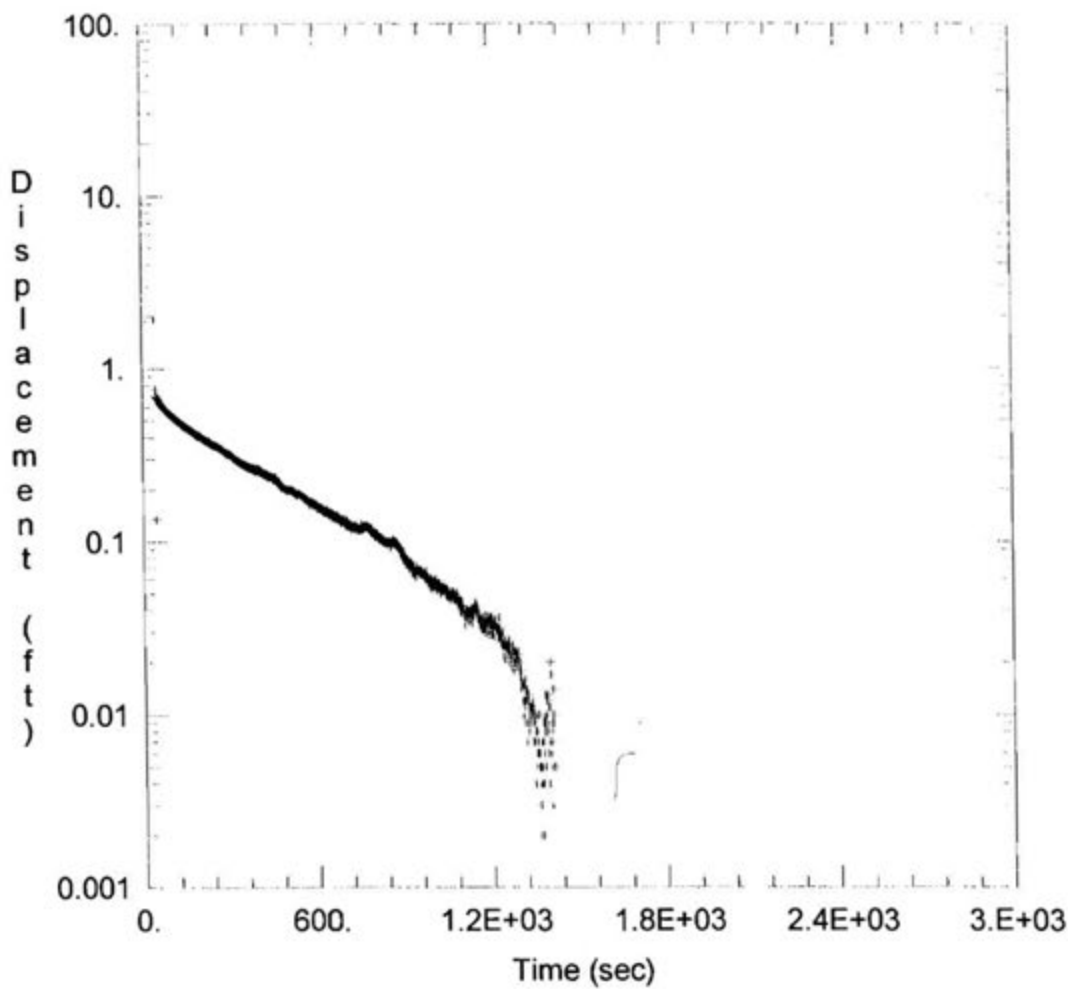
Initial Displacement: 1.05 ft
Wellbore Radius: 0.42 ft
Screen Length: 18. ft
Gravel Pack Porosity: 0.25

Casing Radius: 0.16 ft
Well Skin Radius: 0.42 ft
Total Well Penetration Depth: 4.61 ft

SOLUTION

Aquifer Model: Unconfined
 $K = 1.679$ ft/day

Solution Method: Bouwer-Rice
 $y_0 = 0.1663$ ft



LIBERTY OIL #38 MW-3F

Data Set: C:\...\Tam38.MW-3F.aqt
Date: 02/25/09

Time: 15:15:30

PROJECT INFORMATION

Company: CPTS
Client: Liberty Oil #38
Test Location: Tamaqua
Test Well: MW-3F
Test Date: 2/16/09

AQUIFER DATA

Saturated Thickness: 14.95 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (Tam38 MW-3F)

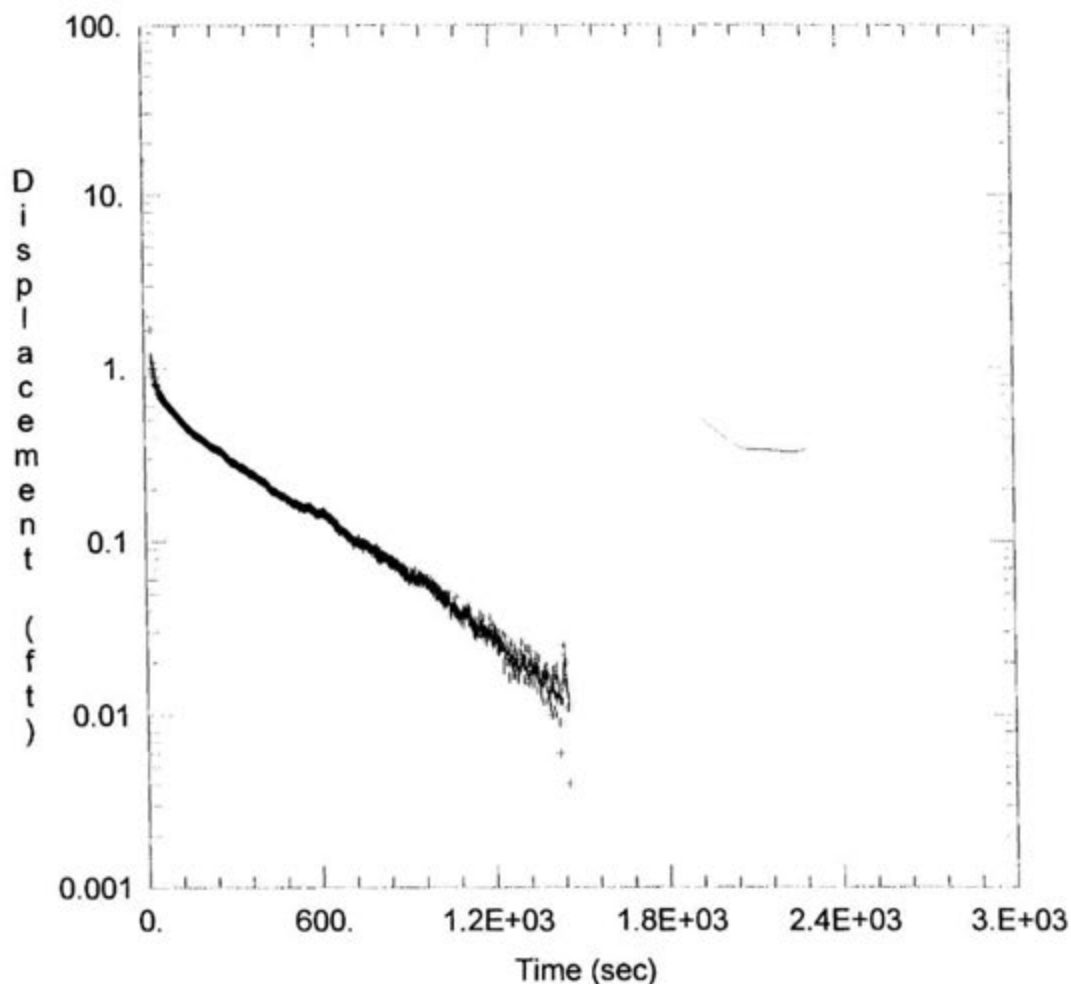
Initial Displacement: 1.883 ft
Wellbore Radius: 0.42 ft
Screen Length: 18. ft
Gravel Pack Porosity: 0.25

Casing Radius: 0.16 ft
Well Skin Radius: 0.42 ft
Total Well Penetration Depth: 14.95 ft

SOLUTION

Aquifer Model: Unconfined
 $K = 0.6981$ ft/day

Solution Method: Bouwer-Rice
 $y_0 = 0.8507$ ft



LIBERTY OIL #38 MW-3R

Data Set: C:\...\Tam38.MW-3R.aqt
Date: 02/25/09

Time: 15:25:36

PROJECT INFORMATION

Company: CPTS
Client: Liberty Oil #38
Test Location: Tamaqua
Test Well: MW-3R
Test Date: 2/16/09

AQUIFER DATA

Saturated Thickness: 14.95 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (Tam38 MW-3R)

Initial Displacement: 1.66 ft
Wellbore Radius: 0.42 ft
Screen Length: 18. ft
Gravel Pack Porosity: 0.25

Casing Radius: 0.16 ft
Well Skin Radius: 0.42 ft
Total Well Penetration Depth: 14.95 ft

SOLUTION

Aquifer Model: Unconfined
 $K = 0.9429$ ft/day

Solution Method: Bouwer-Rice
 $y_0 = 0.9664$ ft

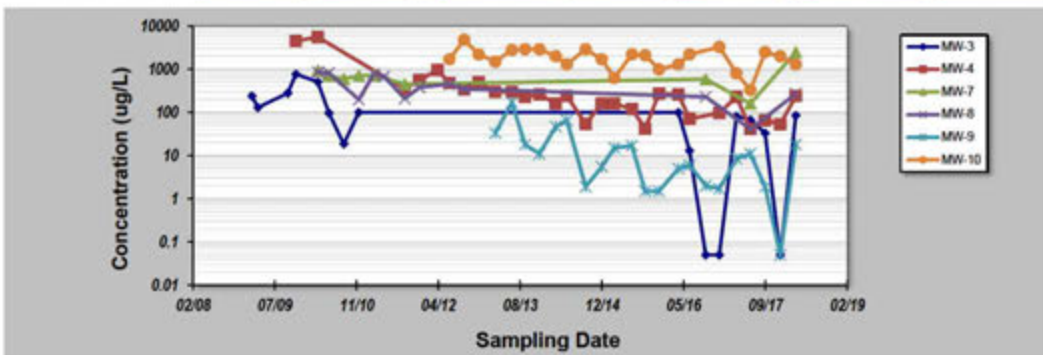
APPENDIX H

Mann Kendall Trend Analysis

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **May 29, 2018** Job ID: **08-12-4292**
 Facility Name: **Liberty Oil #38** Constituent: **benzene**
 Conducted By: **Rachel Burkart** Concentration Units: **ug/L**

Sampling Point ID:		MW-3	MW-4	MW-7	MW-8	MW-9	MW-10
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)					
1	2/16/09	240					
2	3/25/09	130					
3	9/24/09	280					
4	11/12/09	770	4,500				
5	3/26/10	511	5,560	931	865		
6	6/2/10	96.9		712	820		
7	9/1/10	18.6		597			
8	12/2/10	101		706	198		
9	3/4/11			720	781		
10	5/6/11				674		
11	9/9/11		350	450	210		
12	12/8/11		560		380		
13	3/27/12		960				
14	6/8/12		480		450	150	1,700
15	9/6/12		340		350	14	4,800
16	12/4/12		500			34	2,200
17	3/15/13		300			33	1,500
18	6/25/13		300			170	2,800
19	9/13/13		230			18	2,900
20	12/11/13		260			11	2,900
21	3/20/14		160			47	2,000
22	5/27/14		240			65	1,300
23	9/19/14		54			1.9	2,900
24	12/26/14		160			5.5	1,700
25	3/13/15		160			15	630
26	6/29/15		120			17	2,200
27	9/18/15		42			1.5	2,100
28	12/11/15		270			1.5	1,000
29	4/8/16		100			5.0	1,300
30	6/15/16		13			6.0	2,200
31	9/22/16	0.05		590	230	2.0	
32	12/14/16	0.05	97			1.7	3,300
33	3/29/17	81	230			8.5	810
34	6/22/17	67	41	160	41	11	330
35	9/20/17	33	66			1.9	2,500
36	12/22/17	0.05	53			0.1	2,000
37	3/27/18	85	240	2,500	270	18	1,300
38							
39							
40							
Coefficient of Variation:		1.39	2.15	0.81	0.63	1.81	0.50
Mann-Kendall Statistic (S):		-69	-247	-10	-34	-140	-60
Confidence Factor:		99.8%	>99.9%	82.1%	99.0%	>99.9%	94.0%
Concentration Trend:		Decreasing	Decreasing	Stable	Decreasing	Decreasing	Prob. Decreasing



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S=0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, Ground Water, 41(3):355-367, 2003.

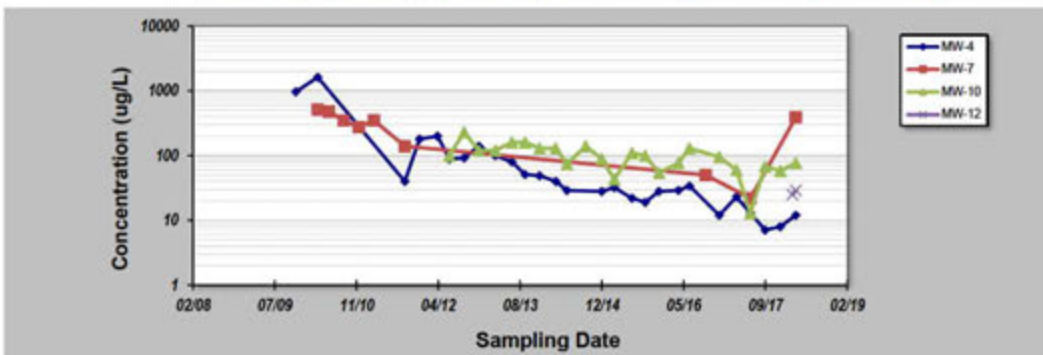
DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-env.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: May 29, 2018 Job ID: 08-12-4292
 Facility Name: Liberty Oil #38 Constituent: MTBE
 Conducted By: Rachel Burkart Concentration Units: ug/L

Sampling Point ID:		MW-4	MW-7	MW-10	MW-12			
Sampling Event	Sampling Date	MTBE CONCENTRATION (ug/L)						
1	9/24/09							
2	11/12/09	970						
3	3/26/10	1,620	513					
4	6/2/10		477					
5	9/1/10		348					
6	12/2/10		274					
7	3/4/11		350					
8	5/6/11							
9	9/9/11	40	140					
10	12/8/11	180						
11	3/27/12	260						
12	6/8/12	89		100				
13	9/6/12	92		230				
14	12/4/12	140		120				
15	3/15/13	100		120				
16	6/25/13	80		160				
17	9/13/13	51		160				
18	12/11/13	49		130				
19	3/20/14	40		130				
20	5/27/14	29		74				
21	9/19/14	<1.0		140				
22	12/26/14	28		89				
23	3/13/15	32		43				
24	6/29/15	22		110				
25	9/18/15	19		100				
26	12/11/15	28		54				
27	4/8/16	29		77				
28	6/15/16	34		130				
29	9/22/16		50					
30	12/14/16	12		95				
31	3/29/17	23		60				
32	6/22/17	13	22	13				
33	9/20/17	7.1		68				
34	12/22/17	8.0		58				
35	3/6/18				25			
36	3/27/18	12	390	77	29			
37								
38								
39								
40								
Coefficient of Variation:		2.37	0.62	0.46	0.10			
Mann-Kendall Statistic (S):		-271	-20	-118	1			
Confidence Factor:		>99.9%	97.8%	99.9%				
Concentration Trend:		Decreasing	Decreasing	Decreasing				



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90% and S<0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, Ground Water, 41(3):355-367, 2003.

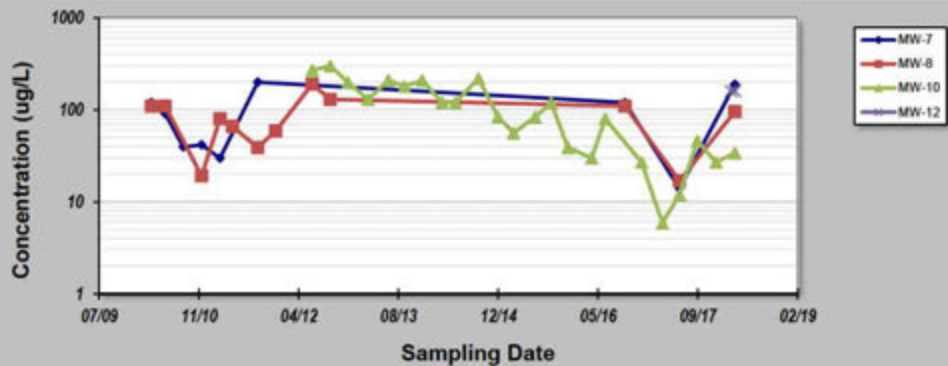
DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-env.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: May 29, 2018 Job ID: 08-12-4292
 Facility Name: Liberty Oil #38 Constituent: naphthalene
 Conducted By: Rachel Burkart Concentration Units: ug/L

Sampling Point ID:		MW-7	MW-8	MW-10	MW-12			
Sampling Event	Sampling Date	NAPHTHALENE CONCENTRATION (ug/L)						
1	3/25/10	120	110					
2	6/2/10	91.1	110					
3	9/1/10	39.6						
4	12/2/10	41.7	19.2					
5	3/4/11	29.9	80.2					
6	5/6/11		65.9					
7	9/9/11	200	39					
8	12/8/11		59					
9	3/27/12							
10	6/8/12		190	270				
11	9/6/12		130	300				
12	12/4/12			200				
13	3/15/13			130				
14	6/25/13			210				
15	9/13/13			180				
16	12/11/13			210				
17	3/20/14			120				
18	5/27/14			120				
19	9/19/14			220				
20	12/26/14			84				
21	3/13/15			56				
22	6/29/15			83				
23	9/18/15			120				
24	12/11/15			39				
25	4/8/16			30				
26	6/15/16			80				
27	9/22/16	120	110					
28	12/14/16			27				
29	3/29/17			5.9				
30	6/22/17	14	17	12				
31	9/20/17			46				
32	12/22/17			27				
33	3/6/18				160			
34	3/27/18	190	96	34	160			
35								
Coefficient of Variation:		0.73	0.58	0.77	0.00			
Mann-Kendall Statistic (S):		-1	-3	-180	0			
Confidence Factor:		50.0%	55.4%	>99.9%				
Concentration Trend:		Stable	Stable	Decreasing				



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90% and S<0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, Ground Water, 41(3):355-367, 2003.

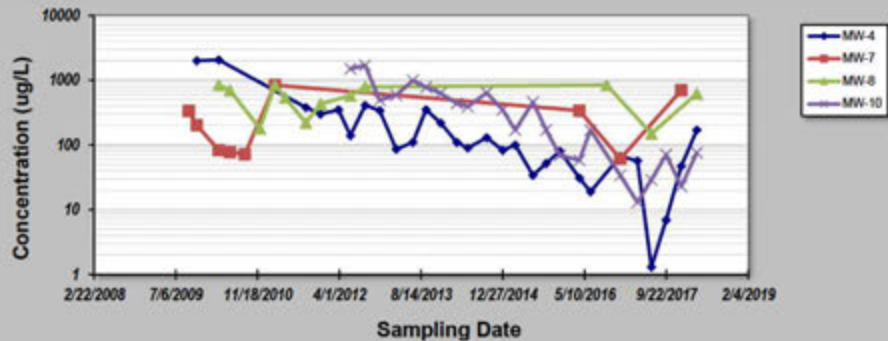
DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc. disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: May 29, 2018 Job ID: 08-12-4292
 Facility Name: Liberty Oil #38 Constituent: 1,2,4-TMB
 Conducted By: Rachel Burkart Concentration Units: ug/L

Sampling Point ID:		MW-4	MW-7	MW-8	MW-10	MW-12	MW-13
Sampling Event	Sampling Date	1,2,4-TMB CONCENTRATION (ug/L)					
1	9/24/09						
2	11/12/09	2,000					
3	3/26/10	2,060					
4	6/2/10		336	843			
5	9/1/10		202	701			
6	12/2/10		83.0				
7	3/4/11		77.5	180			
8	5/6/11		71.5	841			
9	9/9/11			539			
10	12/8/11	380	840	220			
11	3/27/12	300		430			
12	6/8/12	350			1,500		
13	9/6/12	140		580	1,700		
14	12/4/12	410		790			
15	3/15/13	340			490		
16	6/25/13	86			590		
17	9/13/13	110			990		
18	12/11/13	350			780		
19	3/20/14	220			630		
20	5/27/14	110			440		
21	9/19/14	90			390		
22	12/26/14	130			640		
23	3/13/15	83			350		
24	6/29/15	100			170		
25	9/18/15	34			460		
26	12/11/15	52			170		
27	4/8/16	80			69		
28	6/15/16	31			58		
29	9/22/16	19			170		
30	12/14/16		340	840			
31	3/29/17	67			34		
32	6/22/17	57			13		
33	9/20/17	1.3	61	150	29		
34	12/22/17	6.9			71		
35	3/6/18	47			23		
36	3/27/18	170	700	620	76	550	85
37						490	150
38							
39							
40							
Coefficient of Variation:		1.82	0.96	0.47	1.08	0.08	0.39
Mann-Kendall Statistic (S):		-254	-2	-8	-184	-1	1
Confidence Factor:		>99.9%	54.0%	68.1%	>99.9%		
Concentration Trend:		Decreasing	Stable	Stable	Decreasing		



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0). >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, Ground Water, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

GSI Environmental Inc., www.gsi-net.com