

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

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Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-113762-1

Client Project/Site: Frewsburg Site #907016

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Maurice Moore



Authorized for release by:

3/3/2017 7:00:56 AM

Orlette Johnson, Senior Project Manager

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

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Orlette Johnson
Senior Project Manager
3/3/2017 7:00:56 AM



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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

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
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: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Job ID: 480-113762-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-113762-1

Receipt

The samples were received on 2/22/2017 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

GC/MS 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.

General Chemistry

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

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 480-113762-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.8		1.0	0.81	ug/L	1		8260C	Total/NA
Trichloroethene	0.55	J	1.0	0.46	ug/L	1		8260C	Total/NA
Iron	0.20		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-113762-2

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 480-113762-1

Date Collected: 02/21/17 10:45

Matrix: Water

Date Received: 02/22/17 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/22/17 18:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/22/17 18:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/22/17 18:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/22/17 18:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/22/17 18:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/22/17 18:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/22/17 18:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/22/17 18:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/22/17 18:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/22/17 18:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/22/17 18:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/22/17 18:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/22/17 18:04	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/22/17 18:04	1
2-Hexanone	ND		5.0	1.2	ug/L			02/22/17 18:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/22/17 18:04	1
Acetone	ND		10	3.0	ug/L			02/22/17 18:04	1
Benzene	ND		1.0	0.41	ug/L			02/22/17 18:04	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/22/17 18:04	1
Bromoform	ND		1.0	0.26	ug/L			02/22/17 18:04	1
Bromomethane	ND		1.0	0.69	ug/L			02/22/17 18:04	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/22/17 18:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/22/17 18:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/22/17 18:04	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/22/17 18:04	1
Chloroethane	ND		1.0	0.32	ug/L			02/22/17 18:04	1
Chloroform	ND		1.0	0.34	ug/L			02/22/17 18:04	1
Chloromethane	ND		1.0	0.35	ug/L			02/22/17 18:04	1
cis-1,2-Dichloroethene	3.8		1.0	0.81	ug/L			02/22/17 18:04	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/22/17 18:04	1
Cyclohexane	ND		1.0	0.18	ug/L			02/22/17 18:04	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/22/17 18:04	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/22/17 18:04	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/22/17 18:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/22/17 18:04	1
Methyl acetate	ND		2.5	1.3	ug/L			02/22/17 18:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/22/17 18:04	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/22/17 18:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/22/17 18:04	1
Styrene	ND		1.0	0.73	ug/L			02/22/17 18:04	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/22/17 18:04	1
Toluene	ND		1.0	0.51	ug/L			02/22/17 18:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/22/17 18:04	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/22/17 18:04	1
Trichloroethene	0.55 J		1.0	0.46	ug/L			02/22/17 18:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/22/17 18:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/22/17 18:04	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/22/17 18:04	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Client Sample ID: OUTFALL 001

Lab Sample ID: 480-113762-1

Date Collected: 02/21/17 10:45

Matrix: Water

Date Received: 02/22/17 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		02/22/17 18:04	1
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		02/22/17 18:04	1
4-Bromofluorobenzene (Surr)	104		73 - 120		02/22/17 18:04	1
Dibromofluoromethane (Surr)	110		75 - 123		02/22/17 18:04	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.20		0.050	0.019	mg/L	-	02/23/17 09:03	02/23/17 15:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		4.7	1.3	mg/L	-	03/01/17 09:39	03/01/17 13:56	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L	-		02/23/17 09:47	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-113762-2

Date Collected: 02/21/17 00:00

Matrix: Water

Date Received: 02/22/17 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/22/17 18:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/22/17 18:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/22/17 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/22/17 18:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/22/17 18:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/22/17 18:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/22/17 18:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/22/17 18:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/22/17 18:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/22/17 18:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/22/17 18:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/22/17 18:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/22/17 18:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/22/17 18:32	1
2-Hexanone	ND		5.0	1.2	ug/L			02/22/17 18:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/22/17 18:32	1
Acetone	ND		10	3.0	ug/L			02/22/17 18:32	1
Benzene	ND		1.0	0.41	ug/L			02/22/17 18:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/22/17 18:32	1
Bromoform	ND		1.0	0.26	ug/L			02/22/17 18:32	1
Bromomethane	ND		1.0	0.69	ug/L			02/22/17 18:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/22/17 18:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/22/17 18:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/22/17 18:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/22/17 18:32	1
Chloroethane	ND		1.0	0.32	ug/L			02/22/17 18:32	1
Chloroform	ND		1.0	0.34	ug/L			02/22/17 18:32	1
Chloromethane	ND		1.0	0.35	ug/L			02/22/17 18:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/22/17 18:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/22/17 18:32	1
Cyclohexane	ND		1.0	0.18	ug/L			02/22/17 18:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/22/17 18:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/22/17 18:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/22/17 18:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/22/17 18:32	1
Methyl acetate	ND		2.5	1.3	ug/L			02/22/17 18:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/22/17 18:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/22/17 18:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/22/17 18:32	1
Styrene	ND		1.0	0.73	ug/L			02/22/17 18:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/22/17 18:32	1
Toluene	ND		1.0	0.51	ug/L			02/22/17 18:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/22/17 18:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/22/17 18:32	1
Trichloroethene	ND		1.0	0.46	ug/L			02/22/17 18:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/22/17 18:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/22/17 18:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/22/17 18:32	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-113762-2

Date Collected: 02/21/17 00:00

Matrix: Water

Date Received: 02/22/17 10:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Toluene-d8 (Surr)</i>	104		80 - 120		02/22/17 18:32	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	109		77 - 120		02/22/17 18:32	1
<i>4-Bromofluorobenzene (Surr)</i>	104		73 - 120		02/22/17 18:32	1
<i>Dibromofluoromethane (Surr)</i>	111		75 - 123		02/22/17 18:32	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	TOL (80-120)	12DCE (77-120)	BFB (73-120)	DBFM (75-123)
480-113762-1	OUTFALL 001	102	106	104	110
480-113762-2	TRIP BLANK	104	109	104	111
LCS 480-344876/5	Lab Control Sample	107	102	115	105
MB 480-344876/7	Method Blank	106	104	111	106

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

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

Lab Sample ID: MB 480-344876/7

Matrix: Water

Analysis Batch: 344876

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/22/17 11:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/22/17 11:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/22/17 11:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/22/17 11:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/22/17 11:48	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/22/17 11:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/22/17 11:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/22/17 11:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/22/17 11:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/22/17 11:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/22/17 11:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/22/17 11:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/22/17 11:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/22/17 11:48	1
2-Hexanone	ND		5.0	1.2	ug/L			02/22/17 11:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/22/17 11:48	1
Acetone	ND		10	3.0	ug/L			02/22/17 11:48	1
Benzene	ND		1.0	0.41	ug/L			02/22/17 11:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/22/17 11:48	1
Bromoform	ND		1.0	0.26	ug/L			02/22/17 11:48	1
Bromomethane	ND		1.0	0.69	ug/L			02/22/17 11:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/22/17 11:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/22/17 11:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/22/17 11:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/22/17 11:48	1
Chloroethane	ND		1.0	0.32	ug/L			02/22/17 11:48	1
Chloroform	ND		1.0	0.34	ug/L			02/22/17 11:48	1
Chloromethane	ND		1.0	0.35	ug/L			02/22/17 11:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/22/17 11:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/22/17 11:48	1
Cyclohexane	ND		1.0	0.18	ug/L			02/22/17 11:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/22/17 11:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/22/17 11:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/22/17 11:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/22/17 11:48	1
Methyl acetate	ND		2.5	1.3	ug/L			02/22/17 11:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/22/17 11:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/22/17 11:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/22/17 11:48	1
Styrene	ND		1.0	0.73	ug/L			02/22/17 11:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/22/17 11:48	1
Toluene	ND		1.0	0.51	ug/L			02/22/17 11:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/22/17 11:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/22/17 11:48	1
Trichloroethene	ND		1.0	0.46	ug/L			02/22/17 11:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/22/17 11:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/22/17 11:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/22/17 11:48	1

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	106		80 - 120		02/22/17 11:48	1
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		02/22/17 11:48	1
4-Bromofluorobenzene (Surr)	111		73 - 120		02/22/17 11:48	1
Dibromofluoromethane (Surr)	106		75 - 123		02/22/17 11:48	1

Lab Sample ID: LCS 480-344876/5

Matrix: Water

Analysis Batch: 344876

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.8		ug/L		107	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.3		ug/L		93	76 - 120
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.4		ug/L		105	61 - 148
1,1-Dichloroethane	25.0	23.9		ug/L		96	77 - 120
1,1-Dichloroethene	25.0	25.2		ug/L		101	66 - 127
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.0		ug/L		88	56 - 134
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	80 - 124
1,2-Dichloroethane	25.0	23.5		ug/L		94	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 120
2-Butanone (MEK)	125	102		ug/L		82	57 - 140
2-Hexanone	125	107		ug/L		86	65 - 127
4-Methyl-2-pentanone (MIBK)	125	107		ug/L		86	71 - 125
Acetone	125	113		ug/L		90	56 - 142
Benzene	25.0	24.1		ug/L		96	71 - 124
Bromodichloromethane	25.0	26.9		ug/L		107	80 - 122
Bromoform	25.0	31.7		ug/L		127	61 - 132
Bromomethane	25.0	33.1		ug/L		132	55 - 144
Carbon disulfide	25.0	23.4		ug/L		94	59 - 134
Carbon tetrachloride	25.0	27.9		ug/L		111	72 - 134
Chlorobenzene	25.0	25.8		ug/L		103	80 - 120
Dibromochloromethane	25.0	28.8		ug/L		115	75 - 125
Chloroethane	25.0	29.5		ug/L		118	69 - 136
Chloroform	25.0	24.4		ug/L		98	73 - 127
Chloromethane	25.0	22.9		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	24.7		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	26.3		ug/L		105	74 - 124
Cyclohexane	25.0	24.4		ug/L		98	59 - 135
Dichlorodifluoromethane	25.0	24.8		ug/L		99	59 - 135
Ethylbenzene	25.0	25.2		ug/L		101	77 - 123
1,2-Dibromoethane	25.0	25.4		ug/L		102	77 - 120
Isopropylbenzene	25.0	24.6		ug/L		98	77 - 122
Methyl acetate	125	101		ug/L		81	74 - 133
Methyl tert-butyl ether	25.0	26.9		ug/L		107	77 - 120
Methylcyclohexane	25.0	24.6		ug/L		98	68 - 134
Methylene Chloride	25.0	26.7		ug/L		107	75 - 124
Styrene	25.0	26.3		ug/L		105	80 - 120
Tetrachloroethene	25.0	26.2		ug/L		105	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	73 - 127

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

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

Lab Sample ID: LCS 480-344876/5

Matrix: Water

Analysis Batch: 344876

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	25.0	26.5		ug/L		106	80 - 120
Trichloroethene	25.0	24.8		ug/L		99	74 - 123
Trichlorofluoromethane	25.0	29.1		ug/L		116	62 - 150
Vinyl chloride	25.0	24.6		ug/L		99	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	107		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	115		73 - 120
Dibromofluoromethane (Surr)	105		75 - 123

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-345037/1-A

Matrix: Water

Analysis Batch: 345203

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 345037

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050	0.019	mg/L		02/23/17 09:03	02/23/17 14:33	1

Lab Sample ID: LCS 480-345037/2-A

Matrix: Water

Analysis Batch: 345203

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 345037

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.73		mg/L		107	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 480-345711/1-A

Matrix: Water

Analysis Batch: 345784

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 345711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.1	1.4	mg/L		03/01/17 09:39	03/01/17 13:56	1

Lab Sample ID: LCS 480-345711/2-A

Matrix: Water

Analysis Batch: 345784

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 345711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	41.1	35.66		mg/L		87	78 - 114

TestAmerica Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-345083/1
Matrix: Water
Analysis Batch: 345083

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	1.0	mg/L	-		02/23/17 09:47	1

Lab Sample ID: LCS 480-345083/2
Matrix: Water
Analysis Batch: 345083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	252	245.2		mg/L	-	97	88 - 110

Lab Sample ID: 480-113762-1 DU
Matrix: Water
Analysis Batch: 345083

Client Sample ID: OUTFALL 001
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		ND		mg/L	-	NC	10

QC Association Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

GC/MS VOA

Analysis Batch: 344876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-113762-1	OUTFALL 001	Total/NA	Water	8260C	
480-113762-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-344876/7	Method Blank	Total/NA	Water	8260C	
LCS 480-344876/5	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 345037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-113762-1	OUTFALL 001	Total/NA	Water	200.7	
MB 480-345037/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-345037/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 345203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-113762-1	OUTFALL 001	Total/NA	Water	200.7 Rev 4.4	345037
MB 480-345037/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	345037
LCS 480-345037/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	345037

General Chemistry

Analysis Batch: 345083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-113762-1	OUTFALL 001	Total/NA	Water	SM 2540D	
MB 480-345083/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-345083/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-113762-1 DU	OUTFALL 001	Total/NA	Water	SM 2540D	

Prep Batch: 345711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-113762-1	OUTFALL 001	Total/NA	Water	1664A	
MB 480-345711/1-A	Method Blank	Total/NA	Water	1664A	
LCS 480-345711/2-A	Lab Control Sample	Total/NA	Water	1664A	

Analysis Batch: 345784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-113762-1	OUTFALL 001	Total/NA	Water	1664A	345711
MB 480-345711/1-A	Method Blank	Total/NA	Water	1664A	345711
LCS 480-345711/2-A	Lab Control Sample	Total/NA	Water	1664A	345711

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Client Sample ID: OUTFALL 001

Date Collected: 02/21/17 10:45

Date Received: 02/22/17 10:00

Lab Sample ID: 480-113762-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	344876	02/22/17 18:04	RRS	TAL BUF
Total/NA	Prep	200.7			345037	02/23/17 09:03	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	345203	02/23/17 15:47	AMH	TAL BUF
Total/NA	Prep	1664A			345711	03/01/17 09:39	MDL	TAL BUF
Total/NA	Analysis	1664A		1	345784	03/01/17 13:56	MDL	TAL BUF
Total/NA	Analysis	SM 2540D		1	345083	02/23/17 09:47	EKB	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 02/21/17 00:00

Date Received: 02/22/17 10:00

Lab Sample ID: 480-113762-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	344876	02/22/17 18:32	RRS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17 *

* Certification renewal pending - certification considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
1664A	HEM and SGT-HEM	1664A	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF

Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: New York State D.E.C.
Project/Site: Frewsburg Site #907016

TestAmerica Job ID: 480-113762-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-113762-1	OUTFALL 001	Water	02/21/17 10:45	02/22/17 10:00
480-113762-2	TRIP BLANK	Water	02/21/17 00:00	02/22/17 10:00

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Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record



Carrier Tracking No(s):		COC No:	
480-89506-19837.1		480-113762 COC	
Page: 1 of 1		Job #:	
Lab P/N: Johnson, Orlette S		Analysis Requested	
E-Mail: orlette.johnson@testamericainc.com		Special Instructions/Note:	
Sample: T-Palmer (GES)		Total Number of containers	
Phone: 716-866-3590		Preservation Codes:	
Company: Groundwater & Environmental Services Inc		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:	
Due Date Requested:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
TAT Requested (days):		Special Instructions/Note:	
16-05		Total Number of containers	
PO #:		Preservation Codes:	
CallOut ID 126536		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:	
WO #:		Special Instructions/Note:	
Project #:		Total Number of containers	
48013647		Preservation Codes:	
SSOW#:		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		Special Instructions/Note:	
Sample Date		Total Number of containers	
2-21-17		Preservation Codes:	
Sample Time		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:	
1045		Special Instructions/Note:	
Sample Type		Total Number of containers	
G		Preservation Codes:	
Matrix		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:	
(W=water, S=solid, O=oil, B=biomass, A=air)		Special Instructions/Note:	
Water		Total Number of containers	
W		Preservation Codes:	
Outfall 001		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:	
Outfall 001 Tapwater		Special Instructions/Note:	
Possible Hazard Identification		Total Number of containers	
Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological ☐		Preservation Codes:	
Deliverable Requested: I, II, III, IV, Other (specify)		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:	
Empty Kit Relinquished by:		Special Instructions/Note:	
Relinquished by:		Total Number of containers	
2-21-17 / 1605		Preservation Codes:	
Date/Time:		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:	
2-22-17 / 1600		Special Instructions/Note:	
Date/Time:		Total Number of containers	
2-22-17 / 1600		Preservation Codes:	
Date/Time:		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:	
Custody Seal No.:		Special Instructions/Note:	
A Yes ☐ A No ☐		Total Number of containers	
Cooler Temperature(s) °C and Other Remarks:		Preservation Codes:	
2.9 2.9		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:	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-113762-1

Login Number: 113762

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wallace, Cameron

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	