

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: 480-122550-1

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:

8/23/2017 8:17:24 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
8/23/2017 8:17:24 AM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Surrogate Summary	11
QC Sample Results	12
QC Association Summary	15
Lab Chronicle	16
Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21



Definitions/Glossary

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

TestAmerica Job ID: 480-122550-1

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.

General Chemistry

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

TestAmerica Job ID: 480-122550-1

Job ID: 480-122550-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-122550-1

Comments

No additional comments.

Receipt

The samples were received on 8/10/2017 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3° 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: 480-122550-1

Client Sample ID: TREATMENT EFFLUENT

Lab Sample ID: 480-122550-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	3.2	J	10	3.0	ug/L	1			8260C	Total/NA
Trichloroethene	1.3		1.0	0.46	ug/L	1			8260C	Total/NA
Iron	0.41		0.050	0.019	mg/L	1			200.7 Rev 4.4	Total/NA
Zinc	0.10		0.010	0.0015	mg/L	1			200.7 Rev 4.4	Total/NA
Oil & Grease	1.4	J	5.1	1.4	mg/L	1			1664B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-122550-2

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: 480-122550-1

Client Sample ID: TREATMENT EFFLUENT

Lab Sample ID: 480-122550-1

Date Collected: 08/10/17 13:00

Matrix: Water

Date Received: 08/10/17 16:00

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			08/22/17 11:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/22/17 11:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/22/17 11:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/22/17 11:45	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/22/17 11:45	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/22/17 11:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/22/17 11:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/22/17 11:45	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/22/17 11:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/22/17 11:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/22/17 11:45	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/22/17 11:45	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/22/17 11:45	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/22/17 11:45	1
2-Hexanone	ND		5.0	1.2	ug/L			08/22/17 11:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/22/17 11:45	1
Acetone	3.2	J	10	3.0	ug/L			08/22/17 11:45	1
Benzene	ND		1.0	0.41	ug/L			08/22/17 11:45	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/22/17 11:45	1
Bromoform	ND		1.0	0.26	ug/L			08/22/17 11:45	1
Bromomethane	ND		1.0	0.69	ug/L			08/22/17 11:45	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/22/17 11:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/22/17 11:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/22/17 11:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/22/17 11:45	1
Chloroethane	ND		1.0	0.32	ug/L			08/22/17 11:45	1
Chloroform	ND		1.0	0.34	ug/L			08/22/17 11:45	1
Chloromethane	ND		1.0	0.35	ug/L			08/22/17 11:45	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/22/17 11:45	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/22/17 11:45	1
Cyclohexane	ND		1.0	0.18	ug/L			08/22/17 11:45	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/22/17 11:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/22/17 11:45	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/22/17 11:45	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/22/17 11:45	1
Methyl acetate	ND		2.5	1.3	ug/L			08/22/17 11:45	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/22/17 11:45	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/22/17 11:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/22/17 11:45	1
Styrene	ND		1.0	0.73	ug/L			08/22/17 11:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/22/17 11:45	1
Toluene	ND		1.0	0.51	ug/L			08/22/17 11:45	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/22/17 11:45	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/22/17 11:45	1
Trichloroethene	1.3		1.0	0.46	ug/L			08/22/17 11:45	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/22/17 11:45	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/22/17 11:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/22/17 11:45	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-122550-1

Client Sample ID: TREATMENT EFFLUENT

Lab Sample ID: 480-122550-1

Date Collected: 08/10/17 13:00

Matrix: Water

Date Received: 08/10/17 16:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		08/22/17 11:45	1
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		08/22/17 11:45	1
4-Bromofluorobenzene (Surr)	94		73 - 120		08/22/17 11:45	1
Dibromofluoromethane (Surr)	98		75 - 123		08/22/17 11:45	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		08/14/17 09:52	08/14/17 17:30	1
Iron	0.41		0.050	0.019	mg/L		08/14/17 09:52	08/14/17 17:30	1
Zinc	0.10		0.010	0.0015	mg/L		08/14/17 09:52	08/14/17 17:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	1.4	J	5.1	1.4	mg/L		08/17/17 08:55	08/17/17 08:55	1

Client Sample Results

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

TestAmerica Job ID: 480-122550-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-122550-2

Date Collected: 08/10/17 00:00

Matrix: Water

Date Received: 08/10/17 16:00

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			08/22/17 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/22/17 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/22/17 10:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/22/17 10:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/22/17 10:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/22/17 10:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/22/17 10:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/22/17 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/22/17 10:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/22/17 10:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/22/17 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/22/17 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/22/17 10:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/22/17 10:59	1
2-Hexanone	ND		5.0	1.2	ug/L			08/22/17 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/22/17 10:59	1
Acetone	ND		10	3.0	ug/L			08/22/17 10:59	1
Benzene	ND		1.0	0.41	ug/L			08/22/17 10:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/22/17 10:59	1
Bromoform	ND		1.0	0.26	ug/L			08/22/17 10:59	1
Bromomethane	ND		1.0	0.69	ug/L			08/22/17 10:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/22/17 10:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/22/17 10:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/22/17 10:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/22/17 10:59	1
Chloroethane	ND		1.0	0.32	ug/L			08/22/17 10:59	1
Chloroform	ND		1.0	0.34	ug/L			08/22/17 10:59	1
Chloromethane	ND		1.0	0.35	ug/L			08/22/17 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/22/17 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/22/17 10:59	1
Cyclohexane	ND		1.0	0.18	ug/L			08/22/17 10:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/22/17 10:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/22/17 10:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/22/17 10:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/22/17 10:59	1
Methyl acetate	ND		2.5	1.3	ug/L			08/22/17 10:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/22/17 10:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/22/17 10:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/22/17 10:59	1
Styrene	ND		1.0	0.73	ug/L			08/22/17 10:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/22/17 10:59	1
Toluene	ND		1.0	0.51	ug/L			08/22/17 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/22/17 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/22/17 10:59	1
Trichloroethene	ND		1.0	0.46	ug/L			08/22/17 10:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/22/17 10:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/22/17 10:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/22/17 10:59	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-122550-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-122550-2

Date Collected: 08/10/17 00:00

Matrix: Water

Date Received: 08/10/17 16:00

<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>	97		80 - 120		08/22/17 10:59	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	101		77 - 120		08/22/17 10:59	1
<i>4-Bromofluorobenzene (Surr)</i>	97		73 - 120		08/22/17 10:59	1
<i>Dibromofluoromethane (Surr)</i>	100		75 - 123		08/22/17 10:59	1

Surrogate Summary

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

TestAmerica Job ID: 480-122550-1

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)
480-122550-1	TREATMENT EFFLUENT	96	101	94	98
480-122550-2	TRIP BLANK	97	101	97	100
LCS 480-373227/4	Lab Control Sample	98	102	97	99
MB 480-373227/6	Method Blank	97	103	97	101

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: 480-122550-1

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

Lab Sample ID: MB 480-373227/6

Matrix: Water

Analysis Batch: 373227

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			08/22/17 10:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/22/17 10:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/22/17 10:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/22/17 10:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/22/17 10:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/22/17 10:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/22/17 10:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/22/17 10:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/22/17 10:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/22/17 10:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/22/17 10:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/22/17 10:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/22/17 10:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/22/17 10:03	1
2-Hexanone	ND		5.0	1.2	ug/L			08/22/17 10:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/22/17 10:03	1
Acetone	ND		10	3.0	ug/L			08/22/17 10:03	1
Benzene	ND		1.0	0.41	ug/L			08/22/17 10:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/22/17 10:03	1
Bromoform	ND		1.0	0.26	ug/L			08/22/17 10:03	1
Bromomethane	ND		1.0	0.69	ug/L			08/22/17 10:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/22/17 10:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/22/17 10:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/22/17 10:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/22/17 10:03	1
Chloroethane	ND		1.0	0.32	ug/L			08/22/17 10:03	1
Chloroform	ND		1.0	0.34	ug/L			08/22/17 10:03	1
Chloromethane	ND		1.0	0.35	ug/L			08/22/17 10:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/22/17 10:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/22/17 10:03	1
Cyclohexane	ND		1.0	0.18	ug/L			08/22/17 10:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/22/17 10:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/22/17 10:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/22/17 10:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/22/17 10:03	1
Methyl acetate	ND		2.5	1.3	ug/L			08/22/17 10:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/22/17 10:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/22/17 10:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/22/17 10:03	1
Styrene	ND		1.0	0.73	ug/L			08/22/17 10:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/22/17 10:03	1
Toluene	ND		1.0	0.51	ug/L			08/22/17 10:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/22/17 10:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/22/17 10:03	1
Trichloroethene	ND		1.0	0.46	ug/L			08/22/17 10:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/22/17 10:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/22/17 10:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/22/17 10:03	1

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-122550-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		08/22/17 10:03	1
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		08/22/17 10:03	1
4-Bromofluorobenzene (Surr)	97		73 - 120		08/22/17 10:03	1
Dibromofluoromethane (Surr)	101		75 - 123		08/22/17 10:03	1

Lab Sample ID: LCS 480-373227/4

Matrix: Water

Analysis Batch: 373227

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	27.3		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.4		ug/L		102	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	29.7		ug/L		119	61 - 148
1,1-Dichloroethane	25.0	25.9		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	26.4		ug/L		106	66 - 127
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	25.6		ug/L		103	56 - 134
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	80 - 124
1,2-Dichloroethane	25.0	25.5		ug/L		102	75 - 120
1,2-Dichloropropane	25.0	25.4		ug/L		101	76 - 120
1,3-Dichlorobenzene	25.0	26.2		ug/L		105	77 - 120
1,4-Dichlorobenzene	25.0	25.6		ug/L		102	80 - 120
2-Butanone (MEK)	125	126		ug/L		100	57 - 140
2-Hexanone	125	131		ug/L		105	65 - 127
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		103	71 - 125
Acetone	125	130		ug/L		104	56 - 142
Benzene	25.0	25.9		ug/L		104	71 - 124
Bromodichloromethane	25.0	25.8		ug/L		103	80 - 122
Bromoform	25.0	26.7		ug/L		107	61 - 132
Bromomethane	25.0	23.2		ug/L		93	55 - 144
Carbon disulfide	25.0	25.9		ug/L		104	59 - 134
Carbon tetrachloride	25.0	28.0		ug/L		112	72 - 134
Chlorobenzene	25.0	25.3		ug/L		101	80 - 120
Dibromochloromethane	25.0	26.5		ug/L		106	75 - 125
Chloroethane	25.0	25.5		ug/L		102	69 - 136
Chloroform	25.0	25.8		ug/L		103	73 - 127
Chloromethane	25.0	23.9		ug/L		95	68 - 124
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	74 - 124
cis-1,3-Dichloropropene	25.0	26.6		ug/L		106	74 - 124
Cyclohexane	25.0	27.2		ug/L		109	59 - 135
Dichlorodifluoromethane	25.0	25.4		ug/L		102	59 - 135
Ethylbenzene	25.0	26.5		ug/L		106	77 - 123
1,2-Dibromoethane	25.0	25.1		ug/L		100	77 - 120
Isopropylbenzene	25.0	26.2		ug/L		105	77 - 122
Methyl acetate	125	124		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	25.4		ug/L		102	77 - 120
Methylcyclohexane	25.0	27.0		ug/L		108	68 - 134
Methylene Chloride	25.0	24.6		ug/L		98	75 - 124
Styrene	25.0	26.2		ug/L		105	80 - 120
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	25.1		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	26.7		ug/L		107	73 - 127

TestAmerica Buffalo

QC Sample Results

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

TestAmerica Job ID: 480-122550-1

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

Lab Sample ID: LCS 480-373227/4

Matrix: Water

Analysis Batch: 373227

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	26.6		ug/L		106	80 - 120
Trichloroethene	25.0	26.9		ug/L		107	74 - 123
Trichlorofluoromethane	25.0	25.8		ug/L		103	62 - 150
Vinyl chloride	25.0	25.5		ug/L		102	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	97		73 - 120
Dibromofluoromethane (Surr)	99		75 - 123

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-371960/1-A

Matrix: Water

Analysis Batch: 372157

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 371960

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		08/14/17 09:52	08/14/17 16:28	1
Iron	ND		0.050	0.019	mg/L		08/14/17 09:52	08/14/17 16:28	1
Zinc	ND		0.010	0.0015	mg/L		08/14/17 09:52	08/14/17 16:28	1

Lab Sample ID: LCS 480-371960/2-A

Matrix: Water

Analysis Batch: 372157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 371960

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.80		mg/L		98	85 - 115
Iron	10.0	10.50		mg/L		105	85 - 115
Zinc	0.200	0.203		mg/L		102	85 - 115

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 480-372567/1-A

Matrix: Water

Analysis Batch: 372629

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 372567

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		08/17/17 08:55	08/17/17 08:55	1

Lab Sample ID: LCS 480-372567/2-A

Matrix: Water

Analysis Batch: 372629

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 372567

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	39.9	36.99		mg/L		93	78 - 114

TestAmerica Buffalo

QC Association Summary

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

TestAmerica Job ID: 480-122550-1

GC/MS VOA

Analysis Batch: 373227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122550-1	TREATMENT EFFLUENT	Total/NA	Water	8260C	
480-122550-2	TRIP BLANK	Total/NA	Water	8260C	
MB 480-373227/6	Method Blank	Total/NA	Water	8260C	
LCS 480-373227/4	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 371960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122550-1	TREATMENT EFFLUENT	Total/NA	Water	200.7	
MB 480-371960/1-A	Method Blank	Total/NA	Water	200.7	
LCS 480-371960/2-A	Lab Control Sample	Total/NA	Water	200.7	

Analysis Batch: 372157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122550-1	TREATMENT EFFLUENT	Total/NA	Water	200.7 Rev 4.4	371960
MB 480-371960/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	371960
LCS 480-371960/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	371960

General Chemistry

Prep Batch: 372567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122550-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	
MB 480-372567/1-A	Method Blank	Total/NA	Water	1664B	
LCS 480-372567/2-A	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 372629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-122550-1	TREATMENT EFFLUENT	Total/NA	Water	1664B	372567
MB 480-372567/1-A	Method Blank	Total/NA	Water	1664B	372567
LCS 480-372567/2-A	Lab Control Sample	Total/NA	Water	1664B	372567

Lab Chronicle

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

TestAmerica Job ID: 480-122550-1

Client Sample ID: TREATMENT EFFLUENT

Date Collected: 08/10/17 13:00

Date Received: 08/10/17 16:00

Lab Sample ID: 480-122550-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	373227	08/22/17 11:45	ARS	TAL BUF
Total/NA	Prep	200.7			371960	08/14/17 09:52	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	372157	08/14/17 17:30	LMH	TAL BUF
Total/NA	Prep	1664B			372567	08/17/17 08:55	DSC	TAL BUF
Total/NA	Analysis	1664B		1	372629	08/17/17 08:55	DSC	TAL BUF

Client Sample ID: TRIP BLANK

Date Collected: 08/10/17 00:00

Date Received: 08/10/17 16:00

Lab Sample ID: 480-122550-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	373227	08/22/17 10:59	ARS	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-122550-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

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

TestAmerica Job ID: 480-122550-1

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
1664B	HEM and SGT-HEM	1664B	TAL BUF

Protocol References:

1664B = 1664B

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 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: 480-122550-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-122550-1	TREATMENT EFFLUENT	Water	08/10/17 13:00	08/10/17 16:00
480-122550-2	TRIP BLANK	Water	08/10/17 00:00	08/10/17 16:00

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Chain of Custody Record

Client Information Client Contact: Thomas Palmer Company: Groundwater & Environmental Services Inc Address: 495 Aero Drive Suite 3 City: Cheektowaga State, Zip: NY, 14225 Phone: Email: tpalmer@gesonline.com Project Name: Frewsburg Site#907016 Site:		Sampler: <i>MLC</i> Phone: <i>800 287 7857</i> Lab PM: Johnson, Orlette S E-Mail: orlette.johnson@testamericainc.com Carrier Tracking No(s): COC No: 480-99986-19840.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): PO #: CallOut ID 126536 WO #: Project #: 48013647 SSOW#:		Analysis Requested Preservation Codes: A - HCL B - NaCl C - Zn / D - Ni / E - NaH F - MeO G - Amc H - Asco I - Ice J - DI Wa K - EDTA L - EDA Other: 480-122550 COC hydrate Z - other (specify)	
Sample Identification Treatment Effluent <i>Try Blank</i>		Total Number of Containers:	
Sample Date: <i>8/10/17</i> Sample Time: <i>1300</i> Sample Type (C=Comp, G=grab): <i>G</i> Matrix (W=water, S=solid, O=oil, BT=Tissue, A=Air): <i>Water</i>		Special Instructions/Note:	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological 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 Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i> Relinquished by:		Received by: <i>[Signature]</i> Received by: <i>[Signature]</i> Received by:	
Date: <i>8-10-17</i> Time: <i>16:00</i> Date: Time: Date: Time:		Date/Time: <i>8/10/17 1600</i> Date/Time: Date/Time:	
Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <i>23°C</i>	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-122550-1

Login Number: 122550

List Number: 1

Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

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.	N/A	