

**FORMER GASTOWN MGP SITE
SITE NO. 915171**

**2015 LAB REPORTS
FOR THE GROUNDWATER COLLECTION
& TREATMENT SYSTEM**

The lab report is missing for August 2015. The November 2015 sample was collected in early December 2015.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-74493-1

Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Sampling Event: Mthly Post-Carbon

Mthly Pre-Carbon

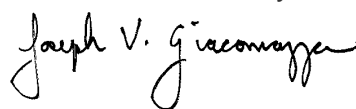
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

2/6/2015 11:26:10 AM

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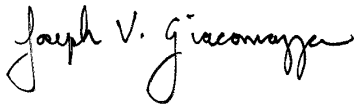
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Results relate only to the items tested and the sample(s) as received by the laboratory.

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.



Joe Giacomazza
Project Management Assistant II
2/6/2015 11:26:10 AM

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

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.

GC 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.
H	Sample was prepped or analyzed beyond the specified holding time

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Job ID: 480-74493-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-74493-1

Receipt

The samples were received on 1/21/2015 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.1° C and 2.6° C.

GC/MS VOA

Method(s) 8260C: The initial calibration curve analyzed in 224868 was outside read back acceptance criteria for Acetonitrile, n-Butanol, 2-Nitropropane, Bromoform, and Benzyl chloride. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

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

HPLC/IC

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Outside Sump (480-74493-2), Post-Carbon 1 (480-74495-1), Post-Carbon 2 (480-74495-2), Post-Carbon 3 (480-74495-3), Pre-Carbon (480-74493-1). Elevated reporting limits (RLs) are provided.

Method(s) 8021B: Additional dilutions and re-analysis of the following sample(s) was performed outside of the analytical holding time due to non-Historically elevated positives for Benzene: Post-Carbon 1 (480-74495-1), Post-Carbon 2 (480-74495-2).

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.

General Chemistry

Method(s) 9040C, SM 4500 H+ B: The following sample(s) was received outside of holding time: Post-Carbon 3 (480-74495-3).

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-74493-1

Date Collected: 01/21/15 13:30

Matrix: Wastewater

Date Received: 01/21/15 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	10	J	40	6.9	ug/L			02/04/15 18:03	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			02/04/15 18:03	200
Benzene	6400		40	4.7	ug/L			02/04/15 18:03	200
Ethylbenzene	180		40	5.7	ug/L			02/04/15 18:03	200
Isopropylbenzene	9.7	J	40	5.4	ug/L			02/04/15 18:03	200
Methyl tert-butyl ether	78	J	80	8.7	ug/L			02/04/15 18:03	200
m,p-Xylene	14	J	80	11	ug/L			02/04/15 18:03	200
n-Butylbenzene	ND		40	6.2	ug/L			02/04/15 18:03	200
n-Propylbenzene	ND		40	26	ug/L			02/04/15 18:03	200
o-Xylene	7.2	J	40	5.4	ug/L			02/04/15 18:03	200
p-Cymene	ND		40	5.9	ug/L			02/04/15 18:03	200
sec-Butylbenzene	9.5	J	40	4.1	ug/L			02/04/15 18:03	200
Toluene	330		40	7.1	ug/L			02/04/15 18:03	200
Xylenes, Total	21	J	80	11	ug/L			02/04/15 18:03	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		02/04/15 18:03	200
4-Bromofluorobenzene	101		64 - 141		02/04/15 18:03	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	133000	B	500	100	ug/L		01/23/15 10:15	01/23/15 16:19	1
Iron	5870		50.0	19.3	ug/L		01/23/15 10:15	01/23/15 16:19	1
Magnesium	83700		200	43.4	ug/L		01/23/15 10:15	01/23/15 16:19	1
Potassium	4700		500	100	ug/L		01/23/15 10:15	01/23/15 16:19	1
Sodium	71800		1000	324	ug/L		01/23/15 10:15	01/23/15 16:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	115		10.0	5.6	mg/L			01/23/15 20:28	20
Sulfate	145		40.0	7.0	mg/L			01/23/15 20:28	20
Alkalinity, Total	515		60.0	24.0	mg/L			01/27/15 19:05	6

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-74493-2

Date Collected: 01/21/15 13:30

Matrix: Water

Date Received: 01/21/15 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	41	J	100	17	ug/L			02/04/15 18:40	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			02/04/15 18:40	500
Benzene	7900		100	12	ug/L			02/04/15 18:40	500
Ethylbenzene	880		100	14	ug/L			02/04/15 18:40	500
Isopropylbenzene	ND		100	14	ug/L			02/04/15 18:40	500
Methyl tert-butyl ether	98	J	200	22	ug/L			02/04/15 18:40	500
m,p-Xylene	340		200	27	ug/L			02/04/15 18:40	500
n-Butylbenzene	ND		100	15	ug/L			02/04/15 18:40	500
n-Propylbenzene	ND		100	65	ug/L			02/04/15 18:40	500
o-Xylene	170		100	14	ug/L			02/04/15 18:40	500
p-Cymene	ND		100	15	ug/L			02/04/15 18:40	500
sec-Butylbenzene	ND		100	10	ug/L			02/04/15 18:40	500
Toluene	2100		100	18	ug/L			02/04/15 18:40	500
Xylenes, Total	510		200	27	ug/L			02/04/15 18:40	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		02/04/15 18:40	500
4-Bromofluorobenzene	100		64 - 141		02/04/15 18:40	500

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-74495-1

Date Collected: 01/21/15 14:00

Matrix: Wastewater

Date Received: 01/21/15 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			02/04/15 19:15	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			02/04/15 19:15	50
Ethylbenzene	65		10	1.4	ug/L			02/04/15 19:15	50
Isopropylbenzene	ND		10	1.4	ug/L			02/04/15 19:15	50
Methyl tert-butyl ether	65		20	2.2	ug/L			02/04/15 19:15	50
m,p-Xylene	ND		20	2.7	ug/L			02/04/15 19:15	50
n-Butylbenzene	ND		10	1.5	ug/L			02/04/15 19:15	50
n-Propylbenzene	ND		10	6.5	ug/L			02/04/15 19:15	50
o-Xylene	ND		10	1.4	ug/L			02/04/15 19:15	50
p-Cymene	ND		10	1.5	ug/L			02/04/15 19:15	50
sec-Butylbenzene	ND		10	1.0	ug/L			02/04/15 19:15	50
Toluene	96		10	1.8	ug/L			02/04/15 19:15	50
Xylenes, Total	ND		20	2.7	ug/L			02/04/15 19:15	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		02/04/15 19:15	50
4-Bromofluorobenzene	101		64 - 141		02/04/15 19:15	50

Method: 8021B - Volatile Organic Compounds (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6600	H	100	12	ug/L			02/05/15 10:16	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145		02/05/15 10:16	500
4-Bromofluorobenzene	103		64 - 141		02/05/15 10:16	500

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-74495-2

Date Collected: 01/21/15 14:05

Matrix: Water

Date Received: 01/21/15 14:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			02/04/15 19:49	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			02/04/15 19:49	50
Ethylbenzene	410		10	1.4	ug/L			02/04/15 19:49	50
Isopropylbenzene	2.5	J	10	1.4	ug/L			02/04/15 19:49	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			02/04/15 19:49	50
m,p-Xylene	8.5	J	20	2.7	ug/L			02/04/15 19:49	50
n-Butylbenzene	ND		10	1.5	ug/L			02/04/15 19:49	50
n-Propylbenzene	ND		10	6.5	ug/L			02/04/15 19:49	50
o-Xylene	15		10	1.4	ug/L			02/04/15 19:49	50
p-Cymene	ND		10	1.5	ug/L			02/04/15 19:49	50
sec-Butylbenzene	ND		10	1.0	ug/L			02/04/15 19:49	50
Toluene	970		10	1.8	ug/L			02/04/15 19:49	50
Xylenes, Total	24		20	2.7	ug/L			02/04/15 19:49	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		02/04/15 19:49	50
4-Bromofluorobenzene	99		64 - 141		02/04/15 19:49	50

Method: 8021B - Volatile Organic Compounds (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6700	H	100	12	ug/L			02/05/15 10:50	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145		02/05/15 10:50	500
4-Bromofluorobenzene	103		64 - 141		02/05/15 10:50	500

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-74495-3

Date Collected: 01/21/15 14:10

Matrix: Water

Date Received: 01/21/15 14:30

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			02/03/15 10:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/03/15 10:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/03/15 10:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/03/15 10:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/03/15 10:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/03/15 10:41	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			02/03/15 10:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/03/15 10:41	1
2-Hexanone	ND		5.0	1.2	ug/L			02/03/15 10:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/03/15 10:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/03/15 10:41	1
Acetone	ND		10	3.0	ug/L			02/03/15 10:41	1
Benzene	0.43	J	1.0	0.41	ug/L			02/03/15 10:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/03/15 10:41	1
Bromoform	ND		1.0	0.26	ug/L			02/03/15 10:41	1
Bromomethane	ND		1.0	0.69	ug/L			02/03/15 10:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/03/15 10:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/03/15 10:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/03/15 10:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/03/15 10:41	1
Chloroethane	ND		1.0	0.32	ug/L			02/03/15 10:41	1
Chloroform	1.9		1.0	0.34	ug/L			02/03/15 10:41	1
Chloromethane	ND		1.0	0.35	ug/L			02/03/15 10:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/03/15 10:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/03/15 10:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/03/15 10:41	1
Styrene	ND		1.0	0.73	ug/L			02/03/15 10:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/03/15 10:41	1
Toluene	ND		1.0	0.51	ug/L			02/03/15 10:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/03/15 10:41	1
Trichloroethene	ND		1.0	0.46	ug/L			02/03/15 10:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/03/15 10:41	1
Vinyl acetate	ND		5.0	0.85	ug/L			02/03/15 10:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/03/15 10:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		66 - 137		02/03/15 10:41	1
Toluene-d8 (Surr)	97		71 - 126		02/03/15 10:41	1
4-Bromofluorobenzene (Surr)	97		73 - 120		02/03/15 10:41	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/04/15 20:23	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/04/15 20:23	1
Benzene	0.52		0.20	0.023	ug/L			02/04/15 20:23	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/04/15 20:23	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/04/15 20:23	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/04/15 20:23	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/04/15 20:23	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/04/15 20:23	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-74493-3

Date Collected: 01/21/15 14:10

Matrix: Water

Date Received: 01/21/15 14:30

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			02/04/15 20:23	1
o-Xylene	ND		0.20	0.027	ug/L			02/04/15 20:23	1
p-Cymene	ND		0.20	0.030	ug/L			02/04/15 20:23	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/04/15 20:23	1
Toluene	ND		0.20	0.036	ug/L			02/04/15 20:23	1
Xylenes, Total	ND		0.40	0.054	ug/L			02/04/15 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145		02/04/15 20:23	1
4-Bromofluorobenzene	99		64 - 141		02/04/15 20:23	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	170		50.0	19.3	ug/L		01/23/15 10:15	01/23/15 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.29		0.010	0.0050	mg/L		01/26/15 19:00	01/27/15 10:55	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.44	HF	0.100	0.100	SU			01/22/15 10:39	1

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Client Sample ID: Pre-Carbon

Date Collected: 01/21/15 13:30

Date Received: 01/21/15 14:30

Lab Sample ID: 480-74493-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	225541	02/04/15 18:03	LMW	TAL BUF
Total/NA	Prep	200.7			224173	01/23/15 10:15	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	224337	01/23/15 16:19	LMH	TAL BUF
Total/NA	Analysis	300.0		20	224208	01/23/15 20:28	NDB	TAL BUF
Total/NA	Analysis	310.2		6	224678	01/27/15 19:05	MRF	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 01/21/15 13:30

Date Received: 01/21/15 14:30

Lab Sample ID: 480-74493-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	225541	02/04/15 18:40	LMW	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 01/21/15 14:00

Date Received: 01/21/15 14:30

Lab Sample ID: 480-74495-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	225541	02/04/15 19:15	LMW	TAL BUF
Total/NA	Analysis	8021B	DL	500	225541	02/05/15 10:16	LMW	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 01/21/15 14:05

Date Received: 01/21/15 14:30

Lab Sample ID: 480-74495-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	225541	02/04/15 19:49	LMW	TAL BUF
Total/NA	Analysis	8021B	DL	500	225541	02/05/15 10:50	LMW	TAL BUF

Client Sample ID: Post-Carbon 3

Date Collected: 01/21/15 14:10

Date Received: 01/21/15 14:30

Lab Sample ID: 480-74495-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	225348	02/03/15 10:41	CDC	TAL BUF
Total/NA	Analysis	8021B		1	225541	02/04/15 20:23	LMW	TAL BUF
Total/NA	Prep	200.7			224173	01/23/15 10:15	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	224337	01/23/15 16:22	LMH	TAL BUF
Total/NA	Prep	Distill/CN			224485	01/26/15 19:00	CLT	TAL BUF
Total/NA	Analysis	335.4		1	224607	01/27/15 10:55	KMF	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	224023	01/22/15 10:39	MDL	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-74493-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15 *

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Water	1,2-Dichloroethene, Total
SM 4500 H+ B		Water	pH

* Certification renewal pending - certification considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-74493-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

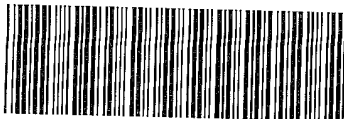
Client: New York State D.E.C.

TestAmerica Job ID: 480-74493-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-74493-1	Pre-Carbon	Wastewater	01/21/15 13:30	01/21/15 14:30
480-74493-2	Outside Sump	Water	01/21/15 13:30	01/21/15 14:30
480-74495-1	Post-Carbon 1	Wastewater	01/21/15 14:00	01/21/15 14:30
480-74495-2	Post-Carbon 2	Water	01/21/15 14:05	01/21/15 14:30
480-74495-3	Post-Carbon 3	Water	01/21/15 14:10	01/21/15 14:30

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client: 480-74493 Chain of Custody		Sampler: <i>m. Kasis</i>		Lab PM: Fischer, Brian J		Carrier Tracking No(s):		COC No: 480-43989-1176.1	
Client C: Thomas Palmer		Phone: 716 860 4934		E-Mail: brian.fischer@testamericainc.com				Page: Page 1 of 1	
Company: Groundwater & Environmental Services Inc				Analysis Requested				Job #:	
Address: 495 Aero Drive Suite 3		Due Date Requested:		<div>Field Filtered Sample (Yes or No)</div> <div>Perform MS/MSD (Yes or No)</div> <div>300.0 - 280 - (MOD) Local Method</div> <div>200.7 - (MOD) Local Method</div> <div>310.2 - Alkalinity, Total</div> <div>80216 (MOD) STARS 156 00A 8021</div>		<div>Total Number of Containers</div>		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 M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
City: Cheektowaga		TAT Requested (days): 570							
State, Zip: NY, 14225		PO #:							
Phone:		Purchase Order not requir							
Email: tpalmer@gesonline.com		WO #:							
Project Name: NYSEDEC - Gastown WWTP/Gastown Event Desc: Mthly Pre-Car		Project #: 48002525							
Site: New York		SSOW#:							
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)				
Pre-Carbon		1/21/15	1330	G	Water				
Outside Pump		1/21/15	1330	G	water				
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Deliverable Requested: I, II, III, IV, Other (specify)						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: <i>[Signature]</i>		Date/Time: 1/21/15 1430		Company: GGS		Received by: <i>[Signature]</i>		Date/Time: 1/21/15 1430	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.6 #1					



480-74495 Chain of Custody

TestAmerica
THE LEADER IN PERSONNEL TESTING

Sampler: <i>M. Kim</i>	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-43997-1177.1									
Phone: <i>716 860 4934</i>	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 1									
		Job #:										
Due Date Requested:		Analysis Requested										
TAT Requested (days): <i>STD</i>		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 M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)										
PO #: Purchase Order not requir		Other:										
WO #:												
Project #: 48002525												
SSOW#:												
Post-Ca												
Sample Date	Sample Time	Sample Type (C=comp, G=grab) BT=Tissue, A=Air	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.7 - Iron	8260B - (MOD) TCL list OL.M04.2	8021B - (MOD) STARS List - VOA - 8021	336.4 - Cyanide, Total	SM4600_H+ - pH	Total Number of containers	Special Instructions/Note:
1/21/15	1420	G	Water	N	N			/				
1/21/15	1420	G	Water	N	N			/				
1/21/15	1420	G	Water	N	N	/	/	/	/	/		
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
Poison B	Unknown	Radiological	Return To Client Disposal By Lab Archive For _____ Months									
Special Instructions/QC Requirements:												
Date:	Time:	Method of Shipment:										
Date/Time: 1/21/15 1430	Company: GS	Received by: [Signature]	Date/Time: 1/21/15 1430	Company: [Signature]								
Date/Time:	Company:	Received by:	Date/Time:	Company:								
Date/Time:	Company:	Received by:	Date/Time:	Company:								
Cooler Temperature(s) °C and Other Remarks: 2.1 / 1												

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-74493-1

Login Number: 74493

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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.	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.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-74493-1

Login Number: 74495

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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.	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.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-75579-1

Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Sampling Event: Qtrly Post-Carbon

Qtrly Pre-Carbon

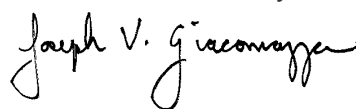
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

3/2/2015 10:49:21 AM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

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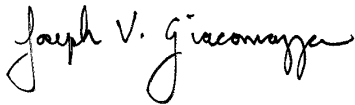
www.testamericainc.com

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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.

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.



Joe Giacomazza
Project Management Assistant II
3/2/2015 10:49:21 AM

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

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.

GC 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.

Metals

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
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Job ID: 480-75579-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-75579-1

Receipt

The samples were received on 2/18/2015 4:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.4° C and 1.4° C.

GC/MS VOA

Method(s) 8260C: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-75579-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for batch 228007 recovered outside control limits for the following analytes: Chloroethane, 1,1 Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 228007 recovered above the upper control limit for Chloroethane, and 1,1, Dichloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 480-228007/2).

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

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 227638 recovered above the upper control limit for Benzo(k)fluoranthene. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: (CCVIS 480-227638/3).

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

HPLC/IC

Method(s) 300.0: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-75579-1). 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 VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Inside Sump (480-75579-2), Post-Carbon-1 (480-75580-3), Pre-Carbon (480-75579-1). 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.

General Chemistry

Method(s) 335.4: The results reported for the following sample(s) do not concur with results previously reported for this site: Post-Carbon-3 (480-75580-1). Reanalysis was performed, and the result(s) confirmed.

Method(s) 9040C, SM 4500 H+ B: The following sample(s) was received outside of holding time: Post-Carbon-3 (480-75580-1).

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

Organic Prep

Case Narrative

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Job ID: 480-75579-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 227438.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 227437.

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-75579-1

Date Collected: 02/18/15 15:55

Matrix: Wastewater

Date Received: 02/18/15 16:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			02/19/15 19:32	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			02/19/15 19:32	200
1,1,2-Trichloroethane	ND		200	46	ug/L			02/19/15 19:32	200
1,1-Dichloroethane	ND		200	76	ug/L			02/19/15 19:32	200
1,1-Dichloroethene	ND		200	58	ug/L			02/19/15 19:32	200
1,2-Dichloroethane	ND		200	42	ug/L			02/19/15 19:32	200
1,2-Dichloroethene, Total	ND		400	160	ug/L			02/19/15 19:32	200
1,2-Dichloropropane	ND		200	140	ug/L			02/19/15 19:32	200
2-Hexanone	ND		1000	250	ug/L			02/19/15 19:32	200
2-Butanone (MEK)	ND		2000	260	ug/L			02/19/15 19:32	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			02/19/15 19:32	200
Acetone	ND		2000	600	ug/L			02/19/15 19:32	200
Benzene	13000		200	82	ug/L			02/19/15 19:32	200
Bromodichloromethane	ND		200	78	ug/L			02/19/15 19:32	200
Bromoform	ND		200	52	ug/L			02/19/15 19:32	200
Bromomethane	ND		200	140	ug/L			02/19/15 19:32	200
Carbon disulfide	ND		200	38	ug/L			02/19/15 19:32	200
Carbon tetrachloride	ND		200	54	ug/L			02/19/15 19:32	200
Chlorobenzene	ND		200	150	ug/L			02/19/15 19:32	200
Dibromochloromethane	ND		200	64	ug/L			02/19/15 19:32	200
Chloroethane	ND		200	64	ug/L			02/19/15 19:32	200
Chloroform	87 J		200	68	ug/L			02/19/15 19:32	200
Chloromethane	ND		200	70	ug/L			02/19/15 19:32	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			02/19/15 19:32	200
Ethylbenzene	1300		200	150	ug/L			02/19/15 19:32	200
Methylene Chloride	210		200	88	ug/L			02/19/15 19:32	200
Styrene	ND		200	150	ug/L			02/19/15 19:32	200
Tetrachloroethene	ND		200	72	ug/L			02/19/15 19:32	200
Toluene	3100		200	100	ug/L			02/19/15 19:32	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			02/19/15 19:32	200
Trichloroethene	ND		200	92	ug/L			02/19/15 19:32	200
Vinyl chloride	ND		200	180	ug/L			02/19/15 19:32	200
Vinyl acetate	ND		1000	170	ug/L			02/19/15 19:32	200
Xylenes, Total	610		400	130	ug/L			02/19/15 19:32	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		02/19/15 19:32	200
Toluene-d8 (Surr)	101		71 - 126		02/19/15 19:32	200
4-Bromofluorobenzene (Surr)	97		73 - 120		02/19/15 19:32	200

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	29 J		40	6.9	ug/L			02/19/15 11:41	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			02/19/15 11:41	200
Benzene	11000		40	4.7	ug/L			02/19/15 11:41	200
Ethylbenzene	1200		40	5.7	ug/L			02/19/15 11:41	200
Isopropylbenzene	ND		40	5.4	ug/L			02/19/15 11:41	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			02/19/15 11:41	200
m,p-Xylene	380		80	11	ug/L			02/19/15 11:41	200
n-Butylbenzene	ND		40	6.2	ug/L			02/19/15 11:41	200

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-75579-1

Date Collected: 02/18/15 15:55

Matrix: Wastewater

Date Received: 02/18/15 16:30

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			02/19/15 11:41	200
o-Xylene	230		40	5.4	ug/L			02/19/15 11:41	200
p-Cymene	ND		40	5.9	ug/L			02/19/15 11:41	200
sec-Butylbenzene	ND		40	4.1	ug/L			02/19/15 11:41	200
Toluene	2600		40	7.1	ug/L			02/19/15 11:41	200
Xylenes, Total	610		80	11	ug/L			02/19/15 11:41	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	109		63 - 145		02/19/15 11:41	200
4-Bromofluorobenzene	110		64 - 141		02/19/15 11:41	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	136000		500	100	ug/L		02/19/15 09:34	02/19/15 21:32	1
Iron	2330		50.0	19.3	ug/L		02/19/15 09:34	02/19/15 21:32	1
Magnesium	101000		200	43.4	ug/L		02/19/15 09:34	02/19/15 21:32	1
Potassium	4640		500	100	ug/L		02/19/15 09:34	02/19/15 21:32	1
Sodium	67800		1000	324	ug/L		02/19/15 09:34	02/19/15 21:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		10.0	5.6	mg/L			02/23/15 18:20	20
Sulfate	136		40.0	7.0	mg/L			02/23/15 18:20	20
Alkalinity, Total	507 B		100	40.0	mg/L			02/27/15 10:39	10

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Inside Sump

Lab Sample ID: 480-75579-2

Date Collected: 02/18/15 16:05

Matrix: Water

Date Received: 02/18/15 16:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	120		40	6.9	ug/L			02/19/15 12:15	200
1,3,5-Trimethylbenzene	35	J	40	30	ug/L			02/19/15 12:15	200
Ethylbenzene	2100		40	5.7	ug/L			02/19/15 12:15	200
Isopropylbenzene	15	J	40	5.4	ug/L			02/19/15 12:15	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			02/19/15 12:15	200
m,p-Xylene	1200		80	11	ug/L			02/19/15 12:15	200
n-Butylbenzene	ND		40	6.2	ug/L			02/19/15 12:15	200
n-Propylbenzene	ND		40	26	ug/L			02/19/15 12:15	200
o-Xylene	ND		40	5.4	ug/L			02/19/15 12:15	200
p-Cymene	ND		40	5.9	ug/L			02/19/15 12:15	200
sec-Butylbenzene	ND		40	4.1	ug/L			02/19/15 12:15	200
Toluene	7400		40	7.1	ug/L			02/19/15 12:15	200
Xylenes, Total	1200		80	11	ug/L			02/19/15 12:15	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 145		02/19/15 12:15	200
4-Bromofluorobenzene	108		64 - 141		02/19/15 12:15	200

Method: 8021B - Volatile Organic Compounds (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	25000		200	23	ug/L			02/19/15 13:07	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 145		02/19/15 13:07	1000
4-Bromofluorobenzene	109		64 - 141		02/19/15 13:07	1000

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-75580-1

Date Collected: 02/18/15 15:30

Matrix: Wastewater

Date Received: 02/18/15 16:30

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			02/21/15 04:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/21/15 04:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/21/15 04:34	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/21/15 04:34	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/21/15 04:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/21/15 04:34	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			02/21/15 04:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/21/15 04:34	1
2-Hexanone	ND		5.0	1.2	ug/L			02/21/15 04:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/21/15 04:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/21/15 04:34	1
Acetone	ND		10	3.0	ug/L			02/21/15 04:34	1
Benzene	ND		1.0	0.41	ug/L			02/21/15 04:34	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/21/15 04:34	1
Bromoform	ND		1.0	0.26	ug/L			02/21/15 04:34	1
Bromomethane	ND		1.0	0.69	ug/L			02/21/15 04:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/21/15 04:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/21/15 04:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/21/15 04:34	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/21/15 04:34	1
Chloroethane	ND		1.0	0.32	ug/L			02/21/15 04:34	1
Chloroform	ND		1.0	0.34	ug/L			02/21/15 04:34	1
Chloromethane	ND		1.0	0.35	ug/L			02/21/15 04:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/21/15 04:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/21/15 04:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/21/15 04:34	1
Styrene	ND		1.0	0.73	ug/L			02/21/15 04:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/21/15 04:34	1
Toluene	ND		1.0	0.51	ug/L			02/21/15 04:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/21/15 04:34	1
Trichloroethene	ND		1.0	0.46	ug/L			02/21/15 04:34	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/21/15 04:34	1
Vinyl acetate	ND		5.0	0.85	ug/L			02/21/15 04:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/21/15 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		66 - 137		02/21/15 04:34	1
Toluene-d8 (Surr)	97		71 - 126		02/21/15 04:34	1
4-Bromofluorobenzene (Surr)	96		73 - 120		02/21/15 04:34	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		4.9	0.59	ug/L		02/19/15 08:30	02/20/15 13:22	1
Acenaphthene	ND		4.9	0.40	ug/L		02/19/15 08:30	02/20/15 13:22	1
Acenaphthylene	ND		4.9	0.38	ug/L		02/19/15 08:30	02/20/15 13:22	1
Anthracene	ND		4.9	0.28	ug/L		02/19/15 08:30	02/20/15 13:22	1
Benzo[a]anthracene	ND		4.9	0.36	ug/L		02/19/15 08:30	02/20/15 13:22	1
Benzo[a]pyrene	ND		4.9	0.46	ug/L		02/19/15 08:30	02/20/15 13:22	1
Benzo[b]fluoranthene	ND		4.9	0.34	ug/L		02/19/15 08:30	02/20/15 13:22	1
Benzo[g,h,i]perylene	ND		4.9	0.35	ug/L		02/19/15 08:30	02/20/15 13:22	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-75580-1

Date Collected: 02/18/15 15:30

Matrix: Wastewater

Date Received: 02/18/15 16:30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		4.9	0.72	ug/L		02/19/15 08:30	02/20/15 13:22	1
Biphenyl	ND		4.9	0.64	ug/L		02/19/15 08:30	02/20/15 13:22	1
Bis(2-ethylhexyl) phthalate	ND		4.9	1.8	ug/L		02/19/15 08:30	02/20/15 13:22	1
Carbazole	ND		4.9	0.30	ug/L		02/19/15 08:30	02/20/15 13:22	1
Chrysene	ND		4.9	0.33	ug/L		02/19/15 08:30	02/20/15 13:22	1
Dibenz(a,h)anthracene	ND		4.9	0.41	ug/L		02/19/15 08:30	02/20/15 13:22	1
Dibenzofuran	ND		9.9	0.50	ug/L		02/19/15 08:30	02/20/15 13:22	1
Fluoranthene	ND		4.9	0.39	ug/L		02/19/15 08:30	02/20/15 13:22	1
Fluorene	ND		4.9	0.36	ug/L		02/19/15 08:30	02/20/15 13:22	1
Indeno[1,2,3-cd]pyrene	ND		4.9	0.46	ug/L		02/19/15 08:30	02/20/15 13:22	1
Naphthalene	ND		4.9	0.75	ug/L		02/19/15 08:30	02/20/15 13:22	1
Pentachlorophenol	ND		9.9	2.2	ug/L		02/19/15 08:30	02/20/15 13:22	1
Phenanthrene	ND		4.9	0.43	ug/L		02/19/15 08:30	02/20/15 13:22	1
Phenol	ND		4.9	0.38	ug/L		02/19/15 08:30	02/20/15 13:22	1
Pyrene	ND		4.9	0.34	ug/L		02/19/15 08:30	02/20/15 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	100		52 - 132	02/19/15 08:30	02/20/15 13:22	1
2-Fluorobiphenyl	93		48 - 120	02/19/15 08:30	02/20/15 13:22	1
2-Fluorophenol	60		20 - 120	02/19/15 08:30	02/20/15 13:22	1
Nitrobenzene-d5	89		46 - 120	02/19/15 08:30	02/20/15 13:22	1
p-Terphenyl-d14	103		67 - 150	02/19/15 08:30	02/20/15 13:22	1
Phenol-d5	47		16 - 120	02/19/15 08:30	02/20/15 13:22	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/19/15 15:00	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/19/15 15:00	1
Benzene	ND		0.20	0.023	ug/L			02/19/15 15:00	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/19/15 15:00	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/19/15 15:00	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/19/15 15:00	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/19/15 15:00	1
n-Butylbenzene	0.10	J	0.20	0.031	ug/L			02/19/15 15:00	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/19/15 15:00	1
o-Xylene	ND		0.20	0.027	ug/L			02/19/15 15:00	1
p-Cymene	ND		0.20	0.030	ug/L			02/19/15 15:00	1
sec-Butylbenzene	0.046	J	0.20	0.020	ug/L			02/19/15 15:00	1
Toluene	ND		0.20	0.036	ug/L			02/19/15 15:00	1
Xylenes, Total	ND		0.40	0.054	ug/L			02/19/15 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 145		02/19/15 15:00	1
4-Bromofluorobenzene	110		64 - 141		02/19/15 15:00	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.048	0.0064	ug/L		02/19/15 08:20	02/20/15 10:13	1
alpha-BHC	ND		0.048	0.0064	ug/L		02/19/15 08:20	02/20/15 10:13	1
beta-BHC	ND		0.048	0.024	ug/L		02/19/15 08:20	02/20/15 10:13	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-75580-1

Date Collected: 02/18/15 15:30

Matrix: Wastewater

Date Received: 02/18/15 16:30

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.048	0.0096	ug/L		02/19/15 08:20	02/20/15 10:13	1
gamma-BHC (Lindane)	ND		0.048	0.0058	ug/L		02/19/15 08:20	02/20/15 10:13	1
Chlordane (technical)	ND		0.48	0.28	ug/L		02/19/15 08:20	02/20/15 10:13	1
4,4'-DDD	ND		0.048	0.0089	ug/L		02/19/15 08:20	02/20/15 10:13	1
4,4'-DDE	ND		0.048	0.011	ug/L		02/19/15 08:20	02/20/15 10:13	1
4,4'-DDT	ND		0.048	0.011	ug/L		02/19/15 08:20	02/20/15 10:13	1
Dieldrin	ND		0.048	0.0095	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endosulfan I	ND		0.048	0.011	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endosulfan II	ND		0.048	0.012	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endrin	ND		0.048	0.013	ug/L		02/19/15 08:20	02/20/15 10:13	1
Endrin aldehyde	ND		0.048	0.016	ug/L		02/19/15 08:20	02/20/15 10:13	1
Heptachlor	ND		0.048	0.0082	ug/L		02/19/15 08:20	02/20/15 10:13	1
Heptachlor epoxide	ND		0.048	0.0051	ug/L		02/19/15 08:20	02/20/15 10:13	1
Toxaphene	ND		0.48	0.12	ug/L		02/19/15 08:20	02/20/15 10:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	87		23 - 120	02/19/15 08:20	02/20/15 10:13	1
Tetrachloro-m-xylene	74		36 - 120	02/19/15 08:20	02/20/15 10:13	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.7	J	10.0	5.6	ug/L		02/19/15 09:34	02/19/15 21:35	1
Iron	27.2	J	50.0	19.3	ug/L		02/19/15 09:34	02/19/15 21:35	1
Manganese	383		3.0	0.40	ug/L		02/19/15 09:34	02/19/15 21:35	1
Zinc	ND		10.0	1.5	ug/L		02/19/15 09:34	02/19/15 21:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		02/25/15 03:06	02/25/15 03:36	1
Cyanide, Total	0.022		0.010	0.0050	mg/L		02/23/15 12:25	02/24/15 11:25	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		02/25/15 20:39	02/26/15 11:34	1
Total Dissolved Solids	863		10.0	4.0	mg/L			02/24/15 21:39	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			02/20/15 09:12	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			02/20/15 16:31	1
pH	7.85	HF	0.100	0.100	SU			02/20/15 12:00	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Post-Carbon-2

Lab Sample ID: 480-75580-2

Date Collected: 02/18/15 15:40

Matrix: Water

Date Received: 02/18/15 16:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/19/15 15:34	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/19/15 15:34	1
Benzene	2.2		0.20	0.023	ug/L			02/19/15 15:34	1
Ethylbenzene	0.099	J	0.20	0.029	ug/L			02/19/15 15:34	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/19/15 15:34	1
Methyl tert-butyl ether	0.19	J	0.40	0.044	ug/L			02/19/15 15:34	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/19/15 15:34	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/19/15 15:34	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/19/15 15:34	1
o-Xylene	ND		0.20	0.027	ug/L			02/19/15 15:34	1
p-Cymene	ND		0.20	0.030	ug/L			02/19/15 15:34	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/19/15 15:34	1
Toluene	0.16	J	0.20	0.036	ug/L			02/19/15 15:34	1
Xylenes, Total	ND		0.40	0.054	ug/L			02/19/15 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	112		63 - 145		02/19/15 15:34	1
4-Bromofluorobenzene	112		64 - 141		02/19/15 15:34	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Post-Carbon-1

Lab Sample ID: 480-75580-3

Date Collected: 02/18/15 15:45

Matrix: Water

Date Received: 02/18/15 16:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		20	3.5	ug/L			02/19/15 16:08	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			02/19/15 16:08	100
Benzene	3400		20	2.3	ug/L			02/19/15 16:08	100
Ethylbenzene	110		20	2.9	ug/L			02/19/15 16:08	100
Isopropylbenzene	ND		20	2.7	ug/L			02/19/15 16:08	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			02/19/15 16:08	100
m,p-Xylene	33	J	40	5.4	ug/L			02/19/15 16:08	100
n-Butylbenzene	ND		20	3.1	ug/L			02/19/15 16:08	100
n-Propylbenzene	ND		20	13	ug/L			02/19/15 16:08	100
o-Xylene	20		20	2.7	ug/L			02/19/15 16:08	100
p-Cymene	ND		20	3.0	ug/L			02/19/15 16:08	100
sec-Butylbenzene	ND		20	2.0	ug/L			02/19/15 16:08	100
Toluene	330		20	3.6	ug/L			02/19/15 16:08	100
Xylenes, Total	53		40	5.4	ug/L			02/19/15 16:08	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108		63 - 145		02/19/15 16:08	100
4-Bromofluorobenzene	108		64 - 141		02/19/15 16:08	100

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Pre-Carbon

Date Collected: 02/18/15 15:55

Date Received: 02/18/15 16:30

Lab Sample ID: 480-75579-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	227476	02/19/15 19:32	LJF	TAL BUF
Total/NA	Analysis	8021B		200	227434	02/19/15 11:41	MAN	TAL BUF
Total/NA	Prep	200.7			227446	02/19/15 09:34	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	227658	02/19/15 21:32	AMH	TAL BUF
Total/NA	Analysis	300.0		20	227893	02/23/15 18:20	NDB	TAL BUF
Total/NA	Analysis	310.2		10	228598	02/27/15 10:39	NCH	TAL BUF

Client Sample ID: Inside Sump

Date Collected: 02/18/15 16:05

Date Received: 02/18/15 16:30

Lab Sample ID: 480-75579-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	227434	02/19/15 12:15	MAN	TAL BUF
Total/NA	Analysis	8021B	DL	1000	227434	02/19/15 13:07	MAN	TAL BUF

Client Sample ID: Post-Carbon-3

Date Collected: 02/18/15 15:30

Date Received: 02/18/15 16:30

Lab Sample ID: 480-75580-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	227775	02/21/15 04:34	LJF	TAL BUF
Total/NA	Prep	3510C			227438	02/19/15 08:30	TRG	TAL BUF
Total/NA	Analysis	8270D		1	227638	02/20/15 13:22	LMW	TAL BUF
Total/NA	Analysis	8021B		1	227434	02/19/15 15:00	MAN	TAL BUF
Total/NA	Prep	3510C			227437	02/19/15 08:20	TRG	TAL BUF
Total/NA	Analysis	608		1	227613	02/20/15 10:13	MAN	TAL BUF
Total/NA	Prep	200.7			227446	02/19/15 09:34	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	227658	02/19/15 21:35	AMH	TAL BUF
Total/NA	Prep	1664A			228130	02/25/15 03:06	LAW	TAL BUF
Total/NA	Analysis	1664A		1	228131	02/25/15 03:36	LAW	TAL BUF
Total/NA	Prep	Distill/CN			227906	02/23/15 12:25	MDL	TAL BUF
Total/NA	Analysis	335.4		1	228049	02/24/15 11:25	NCH	TAL BUF
Total/NA	Prep	Distill/Phenol			228294	02/25/15 20:39	CLT	TAL BUF
Total/NA	Analysis	420.4		1	228411	02/26/15 11:34	ELR	TAL BUF
Total/NA	Analysis	SM 2540C		1	228108	02/24/15 21:39	RS	TAL BUF
Total/NA	Analysis	SM 2540D		1	227755	02/20/15 16:31	RS	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	227702	02/20/15 12:00	MDL	TAL BUF
Total/NA	Analysis	SM 5210B		1	227688	02/20/15 09:12	MDL	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Client Sample ID: Post-Carbon-2

Lab Sample ID: 480-75580-2

Date Collected: 02/18/15 15:40

Matrix: Water

Date Received: 02/18/15 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	227434	02/19/15 15:34	MAN	TAL BUF

Client Sample ID: Post-Carbon-1

Lab Sample ID: 480-75580-3

Date Collected: 02/18/15 15:45

Matrix: Water

Date Received: 02/18/15 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	227434	02/19/15 16:08	MAN	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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-75579-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15 *

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

* Certification renewal pending - certification considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-75579-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
608	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
1664A	HEM and SGT-HEM	1664A	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
420.4	Phenolics, Total Recoverable	MCAWW	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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.

TestAmerica Job ID: 480-75579-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-75579-1	Pre-Carbon	Wastewater	02/18/15 15:55	02/18/15 16:30
480-75579-2	Inside Sump	Water	02/18/15 16:05	02/18/15 16:30
480-75580-1	Post-Carbon-3	Wastewater	02/18/15 15:30	02/18/15 16:30
480-75580-2	Post-Carbon-2	Water	02/18/15 15:40	02/18/15 16:30
480-75580-3	Post-Carbon-1	Water	02/18/15 15:45	02/18/15 16:30

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

TestAmerica
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480-75579 Chain of Custody

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-75579-1

Login Number: 75579

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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.	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	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-75579-1

Login Number: 75580

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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.	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	Yes: Samples checked, no residual chlorine detected

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-76820-1

Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Sampling Event: Monthly

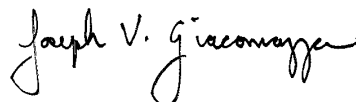
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

4/3/2015 11:44:45 AM

Joe Giacomazza, Project Management Assistant II

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Designee for

Brian Fischer, Manager of Project Management

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brian.fischer@testamericainc.com

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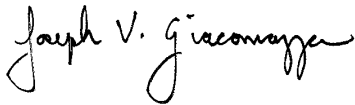
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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.



Joe Giacomazza
Project Management Assistant II
4/3/2015 11:44:45 AM

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Definitions/Glossary

Client: New York State D.E.C.

TestAmerica Job ID: 480-76820-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC 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
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Job ID: 480-76820-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-76820-1

Receipt

The samples were received on 3/18/2015 1:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8° C.

GC/MS VOA

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: (480-76820-1 MS), (480-76820-1 MSD), Pre-Carbon (480-76820-1). 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.

HPLC/IC

Method(s) 300.0: The following samples were diluted due to the nature of the sample matrix: (480-76371-7 MS), MW-18BR (480-76371-7), Post-Carbon-3 (480-76820-2), Pre-Carbon (480-76820-1). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted due to the abundance of non-target analytes: (480-76623-2 MS), 03-197-1 (480-76623-2). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-76825-2 MS), MWR-1BR (480-76825-2), Post-Carbon-3 (480-76820-2), Pre-Carbon (480-76820-1). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-76820-1 MS), Pre-Carbon (480-76820-1). 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 VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Outside Sump (480-76820-5), Post-Carbon-1 (480-76820-4), Pre-Carbon (480-76820-1). 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.

Metals

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

General Chemistry

Method(s) 335.4: The matrix spike (MS/MSD) precision for batch 232895 was outside control limits. Non-homogeneity are suspected. 2015-00752 WN5P001 (480-76922-3 MSD)

Method(s) 335.4: The results reported for the following sample(s) do not concur with results previously reported for this site: Post-Carbon-3 (480-76820-2). Reanalysis was performed, and the result(s) confirmed.

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample(s) has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon-3 (480-76820-2).

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-76820-1

Date Collected: 03/18/15 12:45

Matrix: Wastewater

Date Received: 03/18/15 13:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			03/23/15 12:51	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			03/23/15 12:51	100
1,1,2-Trichloroethane	ND		100	23	ug/L			03/23/15 12:51	100
1,1-Dichloroethane	ND		100	38	ug/L			03/23/15 12:51	100
1,1-Dichloroethene	ND		100	29	ug/L			03/23/15 12:51	100
1,2-Dichloroethane	ND		100	21	ug/L			03/23/15 12:51	100
1,2-Dichloroethene, Total	ND		200	81	ug/L			03/23/15 12:51	100
1,2-Dichloropropane	ND		100	72	ug/L			03/23/15 12:51	100
2-Hexanone	ND		500	120	ug/L			03/23/15 12:51	100
2-Butanone (MEK)	ND		1000	130	ug/L			03/23/15 12:51	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			03/23/15 12:51	100
Acetone	ND		1000	300	ug/L			03/23/15 12:51	100
Benzene	3900		100	41	ug/L			03/23/15 12:51	100
Bromodichloromethane	ND		100	39	ug/L			03/23/15 12:51	100
Bromoform	ND		100	26	ug/L			03/23/15 12:51	100
Bromomethane	ND	F2	100	69	ug/L			03/23/15 12:51	100
Carbon disulfide	ND		100	19	ug/L			03/23/15 12:51	100
Carbon tetrachloride	ND		100	27	ug/L			03/23/15 12:51	100
Chlorobenzene	ND		100	75	ug/L			03/23/15 12:51	100
Dibromochloromethane	ND		100	32	ug/L			03/23/15 12:51	100
Chloroethane	ND		100	32	ug/L			03/23/15 12:51	100
Chloroform	ND		100	34	ug/L			03/23/15 12:51	100
Chloromethane	ND		100	35	ug/L			03/23/15 12:51	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			03/23/15 12:51	100
Ethylbenzene	260		100	74	ug/L			03/23/15 12:51	100
Methylene Chloride	ND		100	44	ug/L			03/23/15 12:51	100
Styrene	ND		100	73	ug/L			03/23/15 12:51	100
Tetrachloroethene	ND		100	36	ug/L			03/23/15 12:51	100
Toluene	1100		100	51	ug/L			03/23/15 12:51	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			03/23/15 12:51	100
Trichloroethene	ND		100	46	ug/L			03/23/15 12:51	100
Vinyl chloride	ND		100	90	ug/L			03/23/15 12:51	100
Vinyl acetate	ND		500	85	ug/L			03/23/15 12:51	100
Xylenes, Total	110	J	200	66	ug/L			03/23/15 12:51	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		66 - 137		03/23/15 12:51	100
Toluene-d8 (Surr)	105		71 - 126		03/23/15 12:51	100
4-Bromofluorobenzene (Surr)	100		73 - 120		03/23/15 12:51	100

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	12	J	40	6.9	ug/L			03/19/15 19:38	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			03/19/15 19:38	200
Benzene	3200		40	4.7	ug/L			03/19/15 19:38	200
Ethylbenzene	220		40	5.7	ug/L			03/19/15 19:38	200
Isopropylbenzene	ND		40	5.4	ug/L			03/19/15 19:38	200
Methyl tert-butyl ether	22	J	80	8.7	ug/L			03/19/15 19:38	200
m,p-Xylene	110		80	11	ug/L			03/19/15 19:38	200
n-Butylbenzene	9.9	J	40	6.2	ug/L			03/19/15 19:38	200

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-76820-1

Date Collected: 03/18/15 12:45

Matrix: Wastewater

Date Received: 03/18/15 13:20

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			03/19/15 19:38	200
o-Xylene	64		40	5.4	ug/L			03/19/15 19:38	200
p-Cymene	ND		40	5.9	ug/L			03/19/15 19:38	200
sec-Butylbenzene	ND		40	4.1	ug/L			03/19/15 19:38	200
Toluene	840		40	7.1	ug/L			03/19/15 19:38	200
Xylenes, Total	170		80	11	ug/L			03/19/15 19:38	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		03/19/15 19:38	200
4-Bromofluorobenzene	98		64 - 141		03/19/15 19:38	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	127000		500	100	ug/L		03/23/15 08:20	03/23/15 20:57	1
Iron	799		50.0	19.3	ug/L		03/23/15 08:20	03/23/15 20:57	1
Magnesium	56700		200	43.4	ug/L		03/23/15 08:20	03/23/15 20:57	1
Potassium	3970		500	100	ug/L		03/23/15 08:20	03/23/15 20:57	1
Sodium	76300		1000	324	ug/L		03/23/15 08:20	03/23/15 20:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		5.0	2.8	mg/L			04/01/15 19:22	10
Sulfate	109		20.0	3.5	mg/L			03/31/15 12:53	10
Alkalinity, Total	486		100	40.0	mg/L			03/31/15 11:03	10

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-76820-2

Date Collected: 03/18/15 12:30

Matrix: Wastewater

Date Received: 03/18/15 13:20

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			03/23/15 13:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/23/15 13:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/23/15 13:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/23/15 13:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/23/15 13:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/23/15 13:15	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			03/23/15 13:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/23/15 13:15	1
2-Hexanone	ND		5.0	1.2	ug/L			03/23/15 13:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/23/15 13:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/23/15 13:15	1
Acetone	ND		10	3.0	ug/L			03/23/15 13:15	1
Benzene	ND		1.0	0.41	ug/L			03/23/15 13:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/23/15 13:15	1
Bromoform	ND		1.0	0.26	ug/L			03/23/15 13:15	1
Bromomethane	ND		1.0	0.69	ug/L			03/23/15 13:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/23/15 13:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/23/15 13:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/23/15 13:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/23/15 13:15	1
Chloroethane	ND		1.0	0.32	ug/L			03/23/15 13:15	1
Chloroform	ND		1.0	0.34	ug/L			03/23/15 13:15	1
Chloromethane	ND		1.0	0.35	ug/L			03/23/15 13:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/23/15 13:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/23/15 13:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/23/15 13:15	1
Styrene	ND		1.0	0.73	ug/L			03/23/15 13:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/23/15 13:15	1
Toluene	ND		1.0	0.51	ug/L			03/23/15 13:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/23/15 13:15	1
Trichloroethene	ND		1.0	0.46	ug/L			03/23/15 13:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/23/15 13:15	1
Vinyl acetate	ND		5.0	0.85	ug/L			03/23/15 13:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/23/15 13:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		66 - 137		03/23/15 13:15	1
Toluene-d8 (Surr)	106		71 - 126		03/23/15 13:15	1
4-Bromofluorobenzene (Surr)	98		73 - 120		03/23/15 13:15	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/19/15 20:12	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/15 20:12	1
Benzene	0.079	J	0.20	0.023	ug/L			03/19/15 20:12	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/19/15 20:12	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/15 20:12	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/19/15 20:12	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/19/15 20:12	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/15 20:12	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-76820-2

Date Collected: 03/18/15 12:30

Matrix: Wastewater

Date Received: 03/18/15 13:20

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/15 20:12	1
o-Xylene	ND		0.20	0.027	ug/L			03/19/15 20:12	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/15 20:12	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/15 20:12	1
Toluene	ND		0.20	0.036	ug/L			03/19/15 20:12	1
Xylenes, Total	ND		0.40	0.054	ug/L			03/19/15 20:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		03/19/15 20:12	1
4-Bromofluorobenzene	99		64 - 141		03/19/15 20:12	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	55.2		50.0	19.3	ug/L		03/23/15 08:20	03/23/15 21:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	144		2.5	1.4	mg/L			03/27/15 07:29	5
Sulfate	113		10.0	1.7	mg/L			03/31/15 13:01	5
Alkalinity, Total	354		100	40.0	mg/L			03/31/15 11:03	10
Cyanide, Total	0.094		0.010	0.0050	mg/L		03/27/15 13:31	03/28/15 15:22	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.57	HF	0.100	0.100	SU			03/23/15 12:03	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Post-Carbon-2

Lab Sample ID: 480-76820-3

Date Collected: 03/18/15 12:35

Matrix: Wastewater

Date Received: 03/18/15 13:20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/19/15 20:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/15 20:46	1
Benzene	33		0.20	0.023	ug/L			03/19/15 20:46	1
Ethylbenzene	0.18	J	0.20	0.029	ug/L			03/19/15 20:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/15 20:46	1
Methyl tert-butyl ether	0.56		0.40	0.044	ug/L			03/19/15 20:46	1
m,p-Xylene	0.070	J	0.40	0.054	ug/L			03/19/15 20:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/15 20:46	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/15 20:46	1
o-Xylene	0.040	J	0.20	0.027	ug/L			03/19/15 20:46	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/15 20:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/15 20:46	1
Toluene	1.2		0.20	0.036	ug/L			03/19/15 20:46	1
Xylenes, Total	0.11	J	0.40	0.054	ug/L			03/19/15 20:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		03/19/15 20:46	1
4-Bromofluorobenzene	100		64 - 141		03/19/15 20:46	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Post-Carbon-1

Lab Sample ID: 480-76820-4

Date Collected: 03/18/15 12:40

Matrix: Water

Date Received: 03/18/15 13:20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.7		2.0	0.35	ug/L			03/19/15 21:54	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			03/19/15 21:54	10
Ethylbenzene	57		2.0	0.29	ug/L			03/19/15 21:54	10
Isopropylbenzene	0.52	J	2.0	0.27	ug/L			03/19/15 21:54	10
Methyl tert-butyl ether	14		4.0	0.44	ug/L			03/19/15 21:54	10
m,p-Xylene	28		4.0	0.54	ug/L			03/19/15 21:54	10
n-Butylbenzene	ND		2.0	0.31	ug/L			03/19/15 21:54	10
n-Propylbenzene	ND		2.0	1.3	ug/L			03/19/15 21:54	10
o-Xylene	16		2.0	0.27	ug/L			03/19/15 21:54	10
p-Cymene	ND		2.0	0.30	ug/L			03/19/15 21:54	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			03/19/15 21:54	10
Toluene	250		2.0	0.36	ug/L			03/19/15 21:54	10
Xylenes, Total	44		4.0	0.54	ug/L			03/19/15 21:54	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 145		03/19/15 21:54	10
4-Bromofluorobenzene	102		64 - 141		03/19/15 21:54	10

Method: 8021B - Volatile Organic Compounds (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1900		10	1.2	ug/L			03/19/15 21:20	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 145		03/19/15 21:20	50
4-Bromofluorobenzene	102		64 - 141		03/19/15 21:20	50

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-76820-5

Date Collected: 03/18/15 12:50

Matrix: Water

Date Received: 03/18/15 13:20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	23	J	100	17	ug/L			03/19/15 22:29	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			03/19/15 22:29	500
Benzene	3800		100	12	ug/L			03/19/15 22:29	500
Ethylbenzene	330		100	14	ug/L			03/19/15 22:29	500
Isopropylbenzene	ND		100	14	ug/L			03/19/15 22:29	500
Methyl tert-butyl ether	ND		200	22	ug/L			03/19/15 22:29	500
m,p-Xylene	160	J	200	27	ug/L			03/19/15 22:29	500
n-Butylbenzene	ND		100	15	ug/L			03/19/15 22:29	500
n-Propylbenzene	ND		100	65	ug/L			03/19/15 22:29	500
o-Xylene	ND		100	14	ug/L			03/19/15 22:29	500
p-Cymene	ND		100	15	ug/L			03/19/15 22:29	500
sec-Butylbenzene	ND		100	10	ug/L			03/19/15 22:29	500
Toluene	1000		100	18	ug/L			03/19/15 22:29	500
Xylenes, Total	160	J	200	27	ug/L			03/19/15 22:29	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145		03/19/15 22:29	500
4-Bromofluorobenzene	97		64 - 141		03/19/15 22:29	500

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Pre-Carbon

Date Collected: 03/18/15 12:45

Date Received: 03/18/15 13:20

Lab Sample ID: 480-76820-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	231681	03/23/15 12:51	GTG	TAL BUF
Total/NA	Analysis	8021B		200	231251	03/19/15 19:38	JRL	TAL BUF
Total/NA	Prep	200.7			231602	03/23/15 08:20	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	231857	03/23/15 20:57	LMH	TAL BUF
Total/NA	Analysis	300.0		10	233592	04/01/15 19:22	CAS	TAL BUF
Total/NA	Analysis	300.0		10	233168	03/31/15 12:53	CAS	TAL BUF
Total/NA	Analysis	310.2		10	233340	03/31/15 11:03	NCH	TAL BUF

Client Sample ID: Post-Carbon-3

Date Collected: 03/18/15 12:30

Date Received: 03/18/15 13:20

Lab Sample ID: 480-76820-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	231681	03/23/15 13:15	GTG	TAL BUF
Total/NA	Analysis	8021B		1	231251	03/19/15 20:12	JRL	TAL BUF
Total/NA	Prep	200.7			231602	03/23/15 08:20	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	231857	03/23/15 21:19	LMH	TAL BUF
Total/NA	Analysis	300.0		5	232435	03/27/15 07:29	CAS	TAL BUF
Total/NA	Analysis	300.0		5	233168	03/31/15 13:01	CAS	TAL BUF
Total/NA	Analysis	310.2		10	233340	03/31/15 11:03	NCH	TAL BUF
Total/NA	Prep	Distill/CN			232756	03/27/15 13:31	EKB	TAL BUF
Total/NA	Analysis	335.4		1	232895	03/28/15 15:22	KC	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	231750	03/23/15 12:03	MDL	TAL BUF

Client Sample ID: Post-Carbon-2

Date Collected: 03/18/15 12:35

Date Received: 03/18/15 13:20

Lab Sample ID: 480-76820-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	231251	03/19/15 20:46	JRL	TAL BUF

Client Sample ID: Post-Carbon-1

Date Collected: 03/18/15 12:40

Date Received: 03/18/15 13:20

Lab Sample ID: 480-76820-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B	DL	50	231251	03/19/15 21:20	JRL	TAL BUF
Total/NA	Analysis	8021B		10	231251	03/19/15 21:54	JRL	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-76820-1

Client Sample ID: Outside Sump
Date Collected: 03/18/15 12:50
Date Received: 03/18/15 13:20

Lab Sample ID: 480-76820-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	231251	03/19/15 22:29	JRL	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.

TestAmerica Job ID: 480-76820-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-76820-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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.

TestAmerica Job ID: 480-76820-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-76820-1	Pre-Carbon	Wastewater	03/18/15 12:45	03/18/15 13:20
480-76820-2	Post-Carbon-3	Wastewater	03/18/15 12:30	03/18/15 13:20
480-76820-3	Post-Carbon-2	Wastewater	03/18/15 12:35	03/18/15 13:20
480-76820-4	Post-Carbon-1	Water	03/18/15 12:40	03/18/15 13:20
480-76820-5	Outside Sump	Water	03/18/15 12:50	03/18/15 13:20

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26



480-76820 Chain of Custody

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-76820-1

Login Number: 76820

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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.	False	No: No sample date and/or time on COC, logged in per container labels.
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.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No: No date or time on COC, logged in per container labels
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.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-78465-1

Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Sampling Event: Monthly

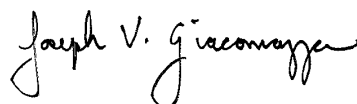
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

4/28/2015 8:54:59 PM

Joe Giacomazza, Project Management Assistant II

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Designee for

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(716)504-9835

brian.fischer@testamericainc.com

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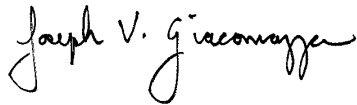
www.testamericainc.com

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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.

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.



Joe Giacomazza
Project Management Assistant II
4/28/2015 8:54:59 PM

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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Qualifiers

GC 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.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Job ID: 480-78465-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-78465-1

Receipt

The samples were received on 4/15/2015 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 238516 recovered above the upper control limit for 1,1,2,2-Tetrachloroethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following sample is impacted: Post-Carbon-3 (480-78465-2).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 238516 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated sample was non-detect for this analyte, the data have been reported. Post-Carbon-3 (480-78465-2)

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-78465-1). 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 VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-78465-1), Post-Carbon-2 (480-78465-3), Post-Carbon-1 (480-78465-4) and Outside Sump (480-78465-5). 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.

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon-3 (480-78465-2).

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-78465-1

Date Collected: 04/15/15 09:30

Matrix: Wastewater

Date Received: 04/15/15 10:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			04/25/15 14:19	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			04/25/15 14:19	500
Benzene	3900		100	12	ug/L			04/25/15 14:19	500
Ethylbenzene	100		100	14	ug/L			04/25/15 14:19	500
Isopropylbenzene	ND		100	14	ug/L			04/25/15 14:19	500
Methyl tert-butyl ether	ND		200	22	ug/L			04/25/15 14:19	500
m,p-Xylene	ND		200	27	ug/L			04/25/15 14:19	500
n-Butylbenzene	ND		100	15	ug/L			04/25/15 14:19	500
n-Propylbenzene	ND		100	65	ug/L			04/25/15 14:19	500
o-Xylene	ND		100	14	ug/L			04/25/15 14:19	500
p-Cymene	ND		100	15	ug/L			04/25/15 14:19	500
sec-Butylbenzene	ND		100	10	ug/L			04/25/15 14:19	500
Toluene	890		100	18	ug/L			04/25/15 14:19	500
Xylenes, Total	ND		200	27	ug/L			04/25/15 14:19	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		04/25/15 14:19	500
4-Bromofluorobenzene	100		64 - 141		04/25/15 14:19	500

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000	B	500	100	ug/L		04/16/15 12:05	04/17/15 16:42	1
Iron	4050		50.0	19.3	ug/L		04/16/15 12:05	04/17/15 16:42	1
Magnesium	70600		200	43.4	ug/L		04/16/15 12:05	04/17/15 16:42	1
Potassium	4210		500	100	ug/L		04/16/15 12:05	04/17/15 16:42	1
Sodium	65200		1000	324	ug/L		04/16/15 12:05	04/17/15 16:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103		5.0	2.8	mg/L			04/18/15 18:02	10
Sulfate	135		20.0	3.5	mg/L			04/18/15 18:02	10
Alkalinity, Total	533		60.0	24.0	mg/L			04/22/15 19:46	6

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-78465-2

Date Collected: 04/15/15 09:00

Matrix: Wastewater

Date Received: 04/15/15 10:30

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			04/25/15 00:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/25/15 00:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/25/15 00:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/25/15 00:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/25/15 00:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/25/15 00:55	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			04/25/15 00:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/25/15 00:55	1
2-Hexanone	ND		5.0	1.2	ug/L			04/25/15 00:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/25/15 00:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/25/15 00:55	1
Acetone	ND		10	3.0	ug/L			04/25/15 00:55	1
Benzene	ND		1.0	0.41	ug/L			04/25/15 00:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/25/15 00:55	1
Bromoform	ND		1.0	0.26	ug/L			04/25/15 00:55	1
Bromomethane	ND		1.0	0.69	ug/L			04/25/15 00:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/25/15 00:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/25/15 00:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/25/15 00:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/25/15 00:55	1
Chloroethane	ND		1.0	0.32	ug/L			04/25/15 00:55	1
Chloroform	ND		1.0	0.34	ug/L			04/25/15 00:55	1
Chloromethane	ND		1.0	0.35	ug/L			04/25/15 00:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/25/15 00:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/25/15 00:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/25/15 00:55	1
Styrene	ND		1.0	0.73	ug/L			04/25/15 00:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/25/15 00:55	1
Toluene	ND		1.0	0.51	ug/L			04/25/15 00:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/25/15 00:55	1
Trichloroethene	ND		1.0	0.46	ug/L			04/25/15 00:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/25/15 00:55	1
Vinyl acetate	ND		5.0	0.85	ug/L			04/25/15 00:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/25/15 00:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137		04/25/15 00:55	1
Toluene-d8 (Surr)	103		71 - 126		04/25/15 00:55	1
4-Bromofluorobenzene (Surr)	92		73 - 120		04/25/15 00:55	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			04/25/15 14:54	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/25/15 14:54	1
Benzene	ND		0.20	0.023	ug/L			04/25/15 14:54	1
Ethylbenzene	ND		0.20	0.029	ug/L			04/25/15 14:54	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/25/15 14:54	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/25/15 14:54	1
m,p-Xylene	ND		0.40	0.054	ug/L			04/25/15 14:54	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/25/15 14:54	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-78465-2

Date Collected: 04/15/15 09:00

Matrix: Wastewater

Date Received: 04/15/15 10:30

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			04/25/15 14:54	1
o-Xylene	ND		0.20	0.027	ug/L			04/25/15 14:54	1
p-Cymene	ND		0.20	0.030	ug/L			04/25/15 14:54	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/25/15 14:54	1
Toluene	ND		0.20	0.036	ug/L			04/25/15 14:54	1
Xylenes, Total	ND		0.40	0.054	ug/L			04/25/15 14:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145		04/25/15 14:54	1
4-Bromofluorobenzene	97		64 - 141		04/25/15 14:54	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	166		50.0	19.3	ug/L		04/16/15 12:05	04/17/15 16:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.29		0.010	0.0050	mg/L		04/21/15 11:02	04/22/15 13:09	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.34	HF	0.100	0.100	SU			04/16/15 15:40	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Client Sample ID: Post-Carbon-2

Lab Sample ID: 480-78465-3

Date Collected: 04/15/15 09:15

Matrix: Water

Date Received: 04/15/15 10:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.35	ug/L			04/25/15 15:28	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			04/25/15 15:28	10
Benzene	110		2.0	0.23	ug/L			04/25/15 15:28	10
Ethylbenzene	ND		2.0	0.29	ug/L			04/25/15 15:28	10
Isopropylbenzene	ND		2.0	0.27	ug/L			04/25/15 15:28	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			04/25/15 15:28	10
m,p-Xylene	ND		4.0	0.54	ug/L			04/25/15 15:28	10
n-Butylbenzene	ND		2.0	0.31	ug/L			04/25/15 15:28	10
n-Propylbenzene	ND		2.0	1.3	ug/L			04/25/15 15:28	10
o-Xylene	ND		2.0	0.27	ug/L			04/25/15 15:28	10
p-Cymene	ND		2.0	0.30	ug/L			04/25/15 15:28	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			04/25/15 15:28	10
Toluene	2.4		2.0	0.36	ug/L			04/25/15 15:28	10
Xylenes, Total	ND		4.0	0.54	ug/L			04/25/15 15:28	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		04/25/15 15:28	10
4-Bromofluorobenzene	98		64 - 141		04/25/15 15:28	10

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Client Sample ID: Post-Carbon-1

Lab Sample ID: 480-78465-4

Date Collected: 04/15/15 09:20

Matrix: Water

Date Received: 04/15/15 10:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			04/25/15 16:02	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			04/25/15 16:02	50
Benzene	2200		10	1.2	ug/L			04/25/15 16:02	50
Ethylbenzene	52		10	1.4	ug/L			04/25/15 16:02	50
Isopropylbenzene	ND		10	1.4	ug/L			04/25/15 16:02	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			04/25/15 16:02	50
m,p-Xylene	8.3	J	20	2.7	ug/L			04/25/15 16:02	50
n-Butylbenzene	ND		10	1.5	ug/L			04/25/15 16:02	50
n-Propylbenzene	ND		10	6.5	ug/L			04/25/15 16:02	50
o-Xylene	8.1	J	10	1.4	ug/L			04/25/15 16:02	50
p-Cymene	ND		10	1.5	ug/L			04/25/15 16:02	50
sec-Butylbenzene	ND		10	1.0	ug/L			04/25/15 16:02	50
Toluene	300		10	1.8	ug/L			04/25/15 16:02	50
Xylenes, Total	16	J	20	2.7	ug/L			04/25/15 16:02	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		04/25/15 16:02	50
4-Bromofluorobenzene	99		64 - 141		04/25/15 16:02	50

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-78465-5

Date Collected: 04/15/15 09:35

Matrix: Water

Date Received: 04/15/15 10:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			04/25/15 16:36	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			04/25/15 16:36	500
Benzene	4500		100	12	ug/L			04/25/15 16:36	500
Ethylbenzene	300		100	14	ug/L			04/25/15 16:36	500
Isopropylbenzene	ND		100	14	ug/L			04/25/15 16:36	500
Methyl tert-butyl ether	ND		200	22	ug/L			04/25/15 16:36	500
m,p-Xylene	ND		200	27	ug/L			04/25/15 16:36	500
n-Butylbenzene	ND		100	15	ug/L			04/25/15 16:36	500
n-Propylbenzene	ND		100	65	ug/L			04/25/15 16:36	500
o-Xylene	ND		100	14	ug/L			04/25/15 16:36	500
p-Cymene	ND		100	15	ug/L			04/25/15 16:36	500
sec-Butylbenzene	ND		100	10	ug/L			04/25/15 16:36	500
Toluene	1100		100	18	ug/L			04/25/15 16:36	500
Xylenes, Total	ND		200	27	ug/L			04/25/15 16:36	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		04/25/15 16:36	500
4-Bromofluorobenzene	99		64 - 141		04/25/15 16:36	500

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-78465-1

Client Sample ID: Pre-Carbon

Date Collected: 04/15/15 09:30

Date Received: 04/15/15 10:30

Lab Sample ID: 480-78465-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	238611	04/25/15 14:19	JRL	TAL BUF
Total/NA	Prep	200.7			236512	04/16/15 12:05	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	237041	04/17/15 16:42	SLB	TAL BUF
Total/NA	Analysis	300.0		10	236851	04/18/15 18:02	CAS	TAL BUF
Total/NA	Analysis	310.2		6	237963	04/22/15 19:46	MRF	TAL BUF

Client Sample ID: Post-Carbon-3

Date Collected: 04/15/15 09:00

Date Received: 04/15/15 10:30

Lab Sample ID: 480-78465-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	238516	04/25/15 00:55	SWO	TAL BUF
Total/NA	Analysis	8021B		1	238611	04/25/15 14:54	JRL	TAL BUF
Total/NA	Prep	200.7			236512	04/16/15 12:05	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	237041	04/17/15 16:45	SLB	TAL BUF
Total/NA	Prep	Distill/CN			237632	04/21/15 11:02	EKB	TAL BUF
Total/NA	Analysis	335.4		1	237873	04/22/15 13:09	KMF	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	236702	04/16/15 15:40	LED	TAL BUF

Client Sample ID: Post-Carbon-2

Date Collected: 04/15/15 09:15

Date Received: 04/15/15 10:30

Lab Sample ID: 480-78465-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	238611	04/25/15 15:28	JRL	TAL BUF

Client Sample ID: Post-Carbon-1

Date Collected: 04/15/15 09:20

Date Received: 04/15/15 10:30

Lab Sample ID: 480-78465-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	238611	04/25/15 16:02	JRL	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 04/15/15 09:35

Date Received: 04/15/15 10:30

Lab Sample ID: 480-78465-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	238611	04/25/15 16:36	JRL	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-78465-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-78465-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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.

TestAmerica Job ID: 480-78465-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-78465-1	Pre-Carbon	Wastewater	04/15/15 09:30	04/15/15 10:30
480-78465-2	Post-Carbon-3	Wastewater	04/15/15 09:00	04/15/15 10:30
480-78465-3	Post-Carbon-2	Water	04/15/15 09:15	04/15/15 10:30
480-78465-4	Post-Carbon-1	Water	04/15/15 09:20	04/15/15 10:30
480-78465-5	Outside Sump	Water	04/15/15 09:35	04/15/15 10:30

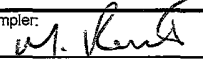

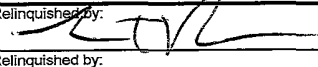
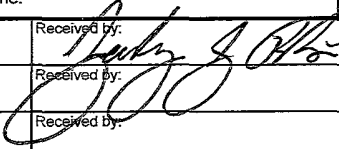
TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica

ENVIRONMENTAL TESTING

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: NYSDC-Gastown WWTP: Site# 915171/Gastow Event Desc: M Site: New York		Sampler:  Lab PM: Fischer, Brian J Phone: E-Mail: brian.fischer@testamericainc.com		<div style="text-align: center;">  480-78465 Chain of Custody </div>																																																																																																							
Analysis Due Date Requested: TAT Requested (days): PO #: Callout# 120597 WO #: Project #: 48002525 SSOW#: Project Name: NYSDC-Gastown WWTP: Site# 915171/Gastow Event Desc: M		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Performance MS/MSD (Yes or No)</th> <th>300.0_280 - (MOD) Local Method</th> <th>200.7 - (MOD) Local Method</th> <th>310.2 - Alkalinity, Total</th> <th>200.7 - Iron</th> <th>8260B - (MOD) TCL list OLM04.2</th> <th>8021B - (MOD) STARS List - VOA - 8021</th> <th>335.4 - Cyanide, Total</th> <th>SM4500_H+ - pH</th> </tr> <tr> <td>X</td> <td>X</td> <td>N</td> <td>D</td> <td>N</td> <td>D</td> <td>A</td> <td>A</td> <td>B</td> <td>N</td> </tr> </table>		Field Filtered Sample (Yes or No)	Performance MS/MSD (Yes or No)	300.0_280 - (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity, Total	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS List - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+ - pH	X	X	N	D	N	D	A	A	B	N	Observation 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 M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify) Other:																																																																																			
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Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code:	Field Filtered Sample (Yes or No)	Performance MS/MSD (Yes or No)	300.0_280 - (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity, Total	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS List - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+ - pH	Total Number of containers	Special Instructions/Note:																																																																																											
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Empty Kit Relinquished by:  Relinquished by: Relinquished by:		Date: 4/15/15 1030 Date/Time: Date/Time: Date/Time:		Company: G&S Company: Company: Company:		Time: Received by:  Received by: Received by:		Method of Shipment: Date/Time: 4/15/15 1030 Date/Time: Date/Time:		Company: TA BUC Company: Company:																																																																																																	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: #1 3.4																																																																																																							

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-78465-1

Login Number: 78465

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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.	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.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-80733-1

Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Sampling Event: Qtrly Post-Carbon

Qtrly Pre-Carbon

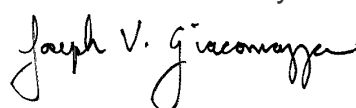
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

6/2/2015 10:45:57 AM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

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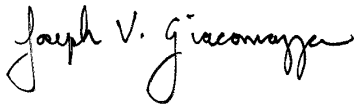
www.testamericainc.com

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.

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.



Joe Giacomazza
Project Management Assistant II
6/2/2015 10:45:57 AM

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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

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.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC 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.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Job ID: 480-80733-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-80733-1

Receipt

The samples were received on 5/20/2015 3:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.4° C and 3.4° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-245024 recovered outside acceptance criteria, low biased, for Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: Pre-Carbon (480-80733-1)

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-80733-1). 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/MS Semi VOA

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: Post-Carbon-3 (480-80735-1). These results have been reported and qualified.

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

HPLC/IC

Method(s) 300.0, SM 4110B: The following samples were reported with elevated reporting limits for all analytes: Pre-Carbon (480-80733-1) and (480-80733-C-1 MS). The samples were analyzed at a dilution based on screening results.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-80733-1), Outside Sump (480-80733-2), Post-Carbon-2 (480-80735-2) and Post-Carbon-1 (480-80735-3). Elevated reporting limits (RLs) are provided.

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Post-Carbon-1 (480-80735-3). 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) 608: The continuing calibration verification (CCV) associated with batch 244410 recovered above the upper control limit for Toxaphene and Chlordane (technical). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: Post-Carbon-3 (480-80735-1).

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.

General Chemistry

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 480-243972 are reported.

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes.

Case Narrative

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Job ID: 480-80733-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon-3 (480-80735-1).

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

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 243934.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 243939.

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Pre-Carbon

Date Collected: 05/20/15 14:00

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80733-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			05/29/15 06:41	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			05/29/15 06:41	200
1,1,2-Trichloroethane	ND		200	46	ug/L			05/29/15 06:41	200
1,1-Dichloroethane	ND		200	76	ug/L			05/29/15 06:41	200
1,1-Dichloroethene	ND		200	58	ug/L			05/29/15 06:41	200
1,2-Dichloroethane	ND		200	42	ug/L			05/29/15 06:41	200
1,2-Dichloroethene, Total	ND		400	160	ug/L			05/29/15 06:41	200
1,2-Dichloropropane	ND		200	140	ug/L			05/29/15 06:41	200
2-Hexanone	ND		1000	250	ug/L			05/29/15 06:41	200
2-Butanone (MEK)	ND		2000	260	ug/L			05/29/15 06:41	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			05/29/15 06:41	200
Acetone	ND		2000	600	ug/L			05/29/15 06:41	200
Benzene	7400		200	82	ug/L			05/29/15 06:41	200
Bromodichloromethane	ND		200	78	ug/L			05/29/15 06:41	200
Bromoform	ND		200	52	ug/L			05/29/15 06:41	200
Bromomethane	ND		200	140	ug/L			05/29/15 06:41	200
Carbon disulfide	ND		200	38	ug/L			05/29/15 06:41	200
Carbon tetrachloride	ND		200	54	ug/L			05/29/15 06:41	200
Chlorobenzene	ND		200	150	ug/L			05/29/15 06:41	200
Dibromochloromethane	ND		200	64	ug/L			05/29/15 06:41	200
Chloroethane	ND		200	64	ug/L			05/29/15 06:41	200
Chloroform	130	J	200	68	ug/L			05/29/15 06:41	200
Chloromethane	ND		200	70	ug/L			05/29/15 06:41	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			05/29/15 06:41	200
Ethylbenzene	450		200	150	ug/L			05/29/15 06:41	200
Methylene Chloride	ND		200	88	ug/L			05/29/15 06:41	200
Styrene	ND		200	150	ug/L			05/29/15 06:41	200
Tetrachloroethene	ND		200	72	ug/L			05/29/15 06:41	200
Toluene	1200		200	100	ug/L			05/29/15 06:41	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			05/29/15 06:41	200
Trichloroethene	ND		200	92	ug/L			05/29/15 06:41	200
Vinyl chloride	ND		200	180	ug/L			05/29/15 06:41	200
Vinyl acetate	ND		1000	170	ug/L			05/29/15 06:41	200
Xylenes, Total	ND		400	130	ug/L			05/29/15 06:41	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		05/29/15 06:41	200
Toluene-d8 (Surr)	98		71 - 126		05/29/15 06:41	200
4-Bromofluorobenzene (Surr)	95		73 - 120		05/29/15 06:41	200

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			05/21/15 17:40	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			05/21/15 17:40	500
Benzene	6500		100	12	ug/L			05/21/15 17:40	500
Ethylbenzene	310		100	14	ug/L			05/21/15 17:40	500
Isopropylbenzene	ND		100	14	ug/L			05/21/15 17:40	500
Methyl tert-butyl ether	ND		200	22	ug/L			05/21/15 17:40	500
m,p-Xylene	ND		200	27	ug/L			05/21/15 17:40	500
n-Butylbenzene	ND		100	15	ug/L			05/21/15 17:40	500

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Pre-Carbon

Date Collected: 05/20/15 14:00

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80733-1

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		100	65	ug/L			05/21/15 17:40	500
o-Xylene	ND		100	14	ug/L			05/21/15 17:40	500
p-Cymene	ND		100	15	ug/L			05/21/15 17:40	500
sec-Butylbenzene	ND		100	10	ug/L			05/21/15 17:40	500
Toluene	1000		100	18	ug/L			05/21/15 17:40	500
Xylenes, Total	ND		300	27	ug/L			05/21/15 17:40	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 145		05/21/15 17:40	500
4-Bromofluorobenzene	93		64 - 141		05/21/15 17:40	500

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	123000		500	100	ug/L		05/22/15 07:40	05/22/15 18:27	1
Iron	4960		50.0	19.3	ug/L		05/22/15 07:40	05/22/15 18:27	1
Magnesium	84700		200	43.4	ug/L		05/22/15 07:40	05/22/15 18:27	1
Potassium	4920		500	100	ug/L		05/22/15 07:40	05/22/15 18:27	1
Sodium	68500		1000	324	ug/L		05/22/15 07:40	05/22/15 18:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	125		10.0	5.6	mg/L			05/22/15 09:30	20
Sulfate	125		40.0	7.0	mg/L			05/22/15 09:30	20
Alkalinity, Total	637		70.0	28.0	mg/L			05/27/15 19:38	7

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Outside Sump

Date Collected: 05/20/15 14:15

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80733-2

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			05/21/15 18:14	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			05/21/15 18:14	500
Benzene	7800		100	12	ug/L			05/21/15 18:14	500
Ethylbenzene	630		100	14	ug/L			05/21/15 18:14	500
Isopropylbenzene	ND		100	14	ug/L			05/21/15 18:14	500
Methyl tert-butyl ether	ND		200	22	ug/L			05/21/15 18:14	500
m,p-Xylene	ND		200	27	ug/L			05/21/15 18:14	500
n-Butylbenzene	ND		100	15	ug/L			05/21/15 18:14	500
n-Propylbenzene	ND		100	65	ug/L			05/21/15 18:14	500
o-Xylene	16 J		100	14	ug/L			05/21/15 18:14	500
p-Cymene	ND		100	15	ug/L			05/21/15 18:14	500
sec-Butylbenzene	ND		100	10	ug/L			05/21/15 18:14	500
Toluene	1800		100	18	ug/L			05/21/15 18:14	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145					05/21/15 18:14	500
4-Bromofluorobenzene	94		64 - 141					05/21/15 18:14	500

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-3

Date Collected: 05/20/15 13:00

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80735-1

Matrix: Wastewater

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			05/29/15 18:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/29/15 18:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/29/15 18:34	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/29/15 18:34	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/29/15 18:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/29/15 18:34	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			05/29/15 18:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/29/15 18:34	1
2-Hexanone	ND		5.0	1.2	ug/L			05/29/15 18:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/29/15 18:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/29/15 18:34	1
Acetone	ND		10	3.0	ug/L			05/29/15 18:34	1
Benzene	ND		1.0	0.41	ug/L			05/29/15 18:34	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/29/15 18:34	1
Bromoform	ND		1.0	0.26	ug/L			05/29/15 18:34	1
Bromomethane	ND		1.0	0.69	ug/L			05/29/15 18:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/29/15 18:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/29/15 18:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/29/15 18:34	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/29/15 18:34	1
Chloroethane	ND		1.0	0.32	ug/L			05/29/15 18:34	1
Chloroform	ND		1.0	0.34	ug/L			05/29/15 18:34	1
Chloromethane	ND		1.0	0.35	ug/L			05/29/15 18:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/29/15 18:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/29/15 18:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/29/15 18:34	1
Styrene	ND		1.0	0.73	ug/L			05/29/15 18:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/29/15 18:34	1
Toluene	ND		1.0	0.51	ug/L			05/29/15 18:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/29/15 18:34	1
Trichloroethene	ND		1.0	0.46	ug/L			05/29/15 18:34	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/29/15 18:34	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/29/15 18:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/29/15 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		05/29/15 18:34	1
Toluene-d8 (Surr)	97		71 - 126		05/29/15 18:34	1
4-Bromofluorobenzene (Surr)	98		73 - 120		05/29/15 18:34	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		5.5	0.66	ug/L		05/21/15 14:50	05/22/15 17:42	1
Acenaphthene	ND		5.5	0.45	ug/L		05/21/15 14:50	05/22/15 17:42	1
Acenaphthylene	ND		5.5	0.42	ug/L		05/21/15 14:50	05/22/15 17:42	1
Anthracene	ND		5.5	0.31	ug/L		05/21/15 14:50	05/22/15 17:42	1
Benzo[a]anthracene	ND		5.5	0.39	ug/L		05/21/15 14:50	05/22/15 17:42	1
Benzo[a]pyrene	ND		5.5	0.52	ug/L		05/21/15 14:50	05/22/15 17:42	1
Benzo[b]fluoranthene	ND		5.5	0.37	ug/L		05/21/15 14:50	05/22/15 17:42	1
Benzo[g,h,i]perylene	ND		5.5	0.38	ug/L		05/21/15 14:50	05/22/15 17:42	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-3

Date Collected: 05/20/15 13:00

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80735-1

Matrix: Wastewater

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		5.5	0.80	ug/L		05/21/15 14:50	05/22/15 17:42	1
Biphenyl	ND		5.5	0.72	ug/L		05/21/15 14:50	05/22/15 17:42	1
Bis(2-ethylhexyl) phthalate	ND		5.5	2.0	ug/L		05/21/15 14:50	05/22/15 17:42	1
Carbazole	ND		5.5	0.33	ug/L		05/21/15 14:50	05/22/15 17:42	1
Chrysene	ND		5.5	0.36	ug/L		05/21/15 14:50	05/22/15 17:42	1
Dibenz(a,h)anthracene	ND		5.5	0.46	ug/L		05/21/15 14:50	05/22/15 17:42	1
Dibenzofuran	ND		11	0.56	ug/L		05/21/15 14:50	05/22/15 17:42	1
Fluoranthene	ND		5.5	0.44	ug/L		05/21/15 14:50	05/22/15 17:42	1
Fluorene	ND		5.5	0.39	ug/L		05/21/15 14:50	05/22/15 17:42	1
Indeno[1,2,3-cd]pyrene	ND		5.5	0.52	ug/L		05/21/15 14:50	05/22/15 17:42	1
Naphthalene	ND		5.5	0.83	ug/L		05/21/15 14:50	05/22/15 17:42	1
Pentachlorophenol	ND		11	2.4	ug/L		05/21/15 14:50	05/22/15 17:42	1
Phenanthrene	ND		5.5	0.48	ug/L		05/21/15 14:50	05/22/15 17:42	1
Phenol	ND		5.5	0.43	ug/L		05/21/15 14:50	05/22/15 17:42	1
Pyrene	ND		5.5	0.37	ug/L		05/21/15 14:50	05/22/15 17:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		52 - 132				05/21/15 14:50	05/22/15 17:42	1
2-Fluorobiphenyl	64		48 - 120				05/21/15 14:50	05/22/15 17:42	1
2-Fluorophenol	34		20 - 120				05/21/15 14:50	05/22/15 17:42	1
Nitrobenzene-d5	54		46 - 120				05/21/15 14:50	05/22/15 17:42	1
p-Terphenyl-d14	62	X	67 - 150				05/21/15 14:50	05/22/15 17:42	1
Phenol-d5	30		16 - 120				05/21/15 14:50	05/22/15 17:42	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			05/22/15 14:15	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/22/15 14:15	1
Benzene	ND		0.20	0.023	ug/L			05/22/15 14:15	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/22/15 14:15	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/22/15 14:15	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			05/22/15 14:15	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/22/15 14:15	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/22/15 14:15	1
n-Propylbenzene	ND		0.20	0.13	ug/L			05/22/15 14:15	1
o-Xylene	ND		0.20	0.027	ug/L			05/22/15 14:15	1
p-Cymene	ND		0.20	0.030	ug/L			05/22/15 14:15	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/22/15 14:15	1
Toluene	ND		0.20	0.036	ug/L			05/22/15 14:15	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/22/15 14:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145					05/22/15 14:15	1
4-Bromofluorobenzene	92		64 - 141					05/22/15 14:15	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.055	0.0073	ug/L		05/21/15 15:01	05/26/15 10:41	1
alpha-BHC	ND		0.055	0.0073	ug/L		05/21/15 15:01	05/26/15 10:41	1
beta-BHC	ND		0.055	0.027	ug/L		05/21/15 15:01	05/26/15 10:41	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-80735-1

Date Collected: 05/20/15 13:00

Matrix: Wastewater

Date Received: 05/20/15 15:45

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.055	0.011	ug/L		05/21/15 15:01	05/26/15 10:41	1
gamma-BHC (Lindane)	ND		0.055	0.0066	ug/L		05/21/15 15:01	05/26/15 10:41	1
Chlordane (technical)	ND		0.55	0.32	ug/L		05/21/15 15:01	05/26/15 10:41	1
4,4'-DDD	ND		0.055	0.010	ug/L		05/21/15 15:01	05/26/15 10:41	1
4,4'-DDE	ND		0.055	0.013	ug/L		05/21/15 15:01	05/26/15 10:41	1
4,4'-DDT	ND		0.055	0.012	ug/L		05/21/15 15:01	05/26/15 10:41	1
Dieldrin	ND		0.055	0.011	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endosulfan I	ND		0.055	0.012	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endosulfan II	ND		0.055	0.013	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endosulfan sulfate	ND		0.055	0.017	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endrin	ND		0.055	0.015	ug/L		05/21/15 15:01	05/26/15 10:41	1
Endrin aldehyde	ND		0.055	0.018	ug/L		05/21/15 15:01	05/26/15 10:41	1
Heptachlor	ND		0.055	0.0094	ug/L		05/21/15 15:01	05/26/15 10:41	1
Heptachlor epoxide	ND		0.055	0.0059	ug/L		05/21/15 15:01	05/26/15 10:41	1
Toxaphene	ND		0.55	0.13	ug/L		05/21/15 15:01	05/26/15 10:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	64		23 - 120	05/21/15 15:01	05/26/15 10:41	1
Tetrachloro-m-xylene	70		36 - 120	05/21/15 15:01	05/26/15 10:41	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10.0	5.6	ug/L		05/22/15 07:40	05/22/15 17:57	1
Iron	187		50.0	19.3	ug/L		05/22/15 07:40	05/22/15 17:57	1
Manganese	140	B	3.0	0.40	ug/L		05/22/15 07:40	05/22/15 17:57	1
Zinc	2.5	J B	10.0	1.5	ug/L		05/22/15 07:40	05/22/15 17:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		06/01/15 11:05	06/01/15 13:05	1
Cyanide, Total	0.31		0.010	0.0050	mg/L		05/21/15 17:25	05/26/15 13:10	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		05/27/15 15:10	05/28/15 14:49	1
Total Dissolved Solids	896		10.0	4.0	mg/L			05/26/15 04:42	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			05/21/15 15:47	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			05/22/15 17:05	1
pH	6.85	HF	0.100	0.100	SU			05/21/15 16:15	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-2

Date Collected: 05/20/15 13:05

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80735-2

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.35	ug/L			05/21/15 19:22	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			05/21/15 19:22	10
Benzene	260		2.0	0.23	ug/L			05/21/15 19:22	10
Ethylbenzene	ND		2.0	0.29	ug/L			05/21/15 19:22	10
Isopropylbenzene	ND		2.0	0.27	ug/L			05/21/15 19:22	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			05/21/15 19:22	10
m,p-Xylene	ND		4.0	0.54	ug/L			05/21/15 19:22	10
n-Butylbenzene	ND		2.0	0.31	ug/L			05/21/15 19:22	10
n-Propylbenzene	ND		2.0	1.3	ug/L			05/21/15 19:22	10
o-Xylene	ND		2.0	0.27	ug/L			05/21/15 19:22	10
p-Cymene	ND		2.0	0.30	ug/L			05/21/15 19:22	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			05/21/15 19:22	10
Toluene	8.8		2.0	0.36	ug/L			05/21/15 19:22	10
Xylenes, Total	ND		6.0	0.54	ug/L			05/21/15 19:22	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 145		05/21/15 19:22	10
4-Bromofluorobenzene	90		64 - 141		05/21/15 19:22	10

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-1

Lab Sample ID: 480-80735-3

Date Collected: 05/20/15 13:10

Matrix: Water

Date Received: 05/20/15 15:45

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			05/21/15 19:56	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			05/21/15 19:56	50
Ethylbenzene	56		10	1.4	ug/L			05/21/15 19:56	50
Isopropylbenzene	ND		10	1.4	ug/L			05/21/15 19:56	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			05/21/15 19:56	50
m,p-Xylene	ND		20	2.7	ug/L			05/21/15 19:56	50
n-Butylbenzene	ND		10	1.5	ug/L			05/21/15 19:56	50
n-Propylbenzene	ND		10	6.5	ug/L			05/21/15 19:56	50
o-Xylene	2.2 J		10	1.4	ug/L			05/21/15 19:56	50
p-Cymene	ND		10	1.5	ug/L			05/21/15 19:56	50
sec-Butylbenzene	ND		10	1.0	ug/L			05/21/15 19:56	50
Toluene	290		10	1.8	ug/L			05/21/15 19:56	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 145		05/21/15 19:56	50
4-Bromofluorobenzene	91		64 - 141		05/21/15 19:56	50

Method: 8021B - Volatile Organic Compounds (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3100		40	4.7	ug/L			05/22/15 14:49	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145		05/22/15 14:49	200
4-Bromofluorobenzene	95		64 - 141		05/22/15 14:49	200

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Pre-Carbon

Date Collected: 05/20/15 14:00

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80733-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	245024	05/29/15 06:41	LJF	TAL BUF
Total/NA	Analysis	8021B		500	243788	05/21/15 17:40	JRL	TAL BUF
Total/NA	Prep	200.7			243949	05/22/15 07:40	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	244364	05/22/15 18:27	LMH	TAL BUF
Total/NA	Analysis	300.0		20	243859	05/22/15 09:30	CAS	TAL BUF
Total/NA	Analysis	310.2		7	244809	05/27/15 19:38	MRF	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 05/20/15 14:15

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80733-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	243788	05/21/15 18:14	JRL	TAL BUF

Client Sample ID: Post-Carbon-3

Date Collected: 05/20/15 13:00

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80735-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	245096	05/29/15 18:34	GTG	TAL BUF
Total/NA	Prep	3510C			243934	05/21/15 14:50	CPH	TAL BUF
Total/NA	Analysis	8270D		1	244069	05/22/15 17:42	DMR	TAL BUF
Total/NA	Analysis	8021B		1	244065	05/22/15 14:15	JRL	TAL BUF
Total/NA	Prep	3510C			243939	05/21/15 15:01	CPH	TAL BUF
Total/NA	Analysis	608		1	244410	05/26/15 10:41	JRL	TAL BUF
Total/NA	Prep	200.7			243949	05/22/15 07:40	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	244364	05/22/15 17:57	LMH	TAL BUF
Total/NA	Prep	1664A			245458	06/01/15 11:05	MDL	TAL BUF
Total/NA	Analysis	1664A		1	245480	06/01/15 13:05	MDL	TAL BUF
Total/NA	Prep	Distill/CN			243967	05/21/15 17:25	NDB	TAL BUF
Total/NA	Analysis	335.4		1	244550	05/26/15 13:10	KMF	TAL BUF
Total/NA	Prep	Distill/Phenol			244742	05/27/15 15:10	STD	TAL BUF
Total/NA	Analysis	420.1		1	244974	05/28/15 14:49	EKB	TAL BUF
Total/NA	Analysis	SM 2540C		1	244328	05/26/15 04:42	ELR	TAL BUF
Total/NA	Analysis	SM 2540D		1	244216	05/22/15 17:05	KC	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	244056	05/21/15 16:15	MGH	TAL BUF
Total/NA	Analysis	SM 5210B		1	243972	05/21/15 15:47	LED	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Client Sample ID: Post-Carbon-2

Date Collected: 05/20/15 13:05

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80735-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	243788	05/21/15 19:22	JRL	TAL BUF

Client Sample ID: Post-Carbon-1

Date Collected: 05/20/15 13:10

Date Received: 05/20/15 15:45

Lab Sample ID: 480-80735-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	243788	05/21/15 19:56	JRL	TAL BUF
Total/NA	Analysis	8021B	DL	200	244065	05/22/15 14:49	JRL	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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
608	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
1664A	HEM and SGT-HEM	1664A	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
420.1	Phenolics, Total Recoverable	MCAWW	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-80733-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-80733-1	Pre-Carbon	Wastewater	05/20/15 14:00	05/20/15 15:45
480-80733-2	Outside Sump	Water	05/20/15 14:15	05/20/15 15:45
480-80735-1	Post-Carbon-3	Wastewater	05/20/15 13:00	05/20/15 15:45
480-80735-2	Post-Carbon-2	Wastewater	05/20/15 13:05	05/20/15 15:45
480-80735-3	Post-Carbon-1	Water	05/20/15 13:10	05/20/15 15:45

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

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[illegible]

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480-80735 Chain of Custody

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-80733-1

Login Number: 80733

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.	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	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-80733-1

Login Number: 80735

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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.	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	Yes: Samples checked, no residual chlorine detected

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-82405-1

Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

6/30/2015 1:23:06 PM

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

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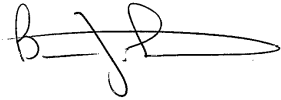
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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.



Brian Fischer
Manager of Project Management
6/30/2015 1:23:06 PM

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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Qualifiers

GC 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
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Job ID: 480-82405-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-82405-1

Comments

No additional comments.

Receipt

The samples were received on 6/17/2015 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS VOA

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

HPLC/IC

Method(s) 300.0, SM 4110B: The following samples were reported with elevated reporting limits for all analytes: Pre-Carbon (480-82405-4) and (480-82232-D-10). The sample was analyzed at a dilution based on conductivity screening results.

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.

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon-3 (480-82405-1).

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Client Sample ID: Post-Carbon-3

Date Collected: 06/17/15 13:30

Date Received: 06/17/15 15:30

Lab Sample ID: 480-82405-1

Matrix: Wastewater

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			06/25/15 16:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/25/15 16:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/25/15 16:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/25/15 16:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/25/15 16:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/25/15 16:36	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			06/25/15 16:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/25/15 16:36	1
2-Hexanone	ND		5.0	1.2	ug/L			06/25/15 16:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/25/15 16:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/25/15 16:36	1
Acetone	ND		10	3.0	ug/L			06/25/15 16:36	1
Benzene	ND		1.0	0.41	ug/L			06/25/15 16:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/25/15 16:36	1
Bromoform	ND		1.0	0.26	ug/L			06/25/15 16:36	1
Bromomethane	ND		1.0	0.69	ug/L			06/25/15 16:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/25/15 16:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/25/15 16:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/25/15 16:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/25/15 16:36	1
Chloroethane	ND		1.0	0.32	ug/L			06/25/15 16:36	1
Chloroform	1.9		1.0	0.34	ug/L			06/25/15 16:36	1
Chloromethane	ND		1.0	0.35	ug/L			06/25/15 16:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/25/15 16:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/25/15 16:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/25/15 16:36	1
Styrene	ND		1.0	0.73	ug/L			06/25/15 16:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/25/15 16:36	1
Toluene	ND		1.0	0.51	ug/L			06/25/15 16:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/25/15 16:36	1
Trichloroethene	ND		1.0	0.46	ug/L			06/25/15 16:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/25/15 16:36	1
Vinyl acetate	ND		5.0	0.85	ug/L			06/25/15 16:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/25/15 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		66 - 137		06/25/15 16:36	1
Toluene-d8 (Surr)	97		71 - 126		06/25/15 16:36	1
4-Bromofluorobenzene (Surr)	107		73 - 120		06/25/15 16:36	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.0045	0.00079	ug/L			06/18/15 15:17	1
1,3,5-Trimethylbenzene	ND		0.0045	0.0034	ug/L			06/18/15 15:17	1
Benzene	0.0029	J	0.0045	0.00053	ug/L			06/18/15 15:17	1
Ethylbenzene	ND		0.0045	0.00065	ug/L			06/18/15 15:17	1
Isopropylbenzene	ND		0.0045	0.00061	ug/L			06/18/15 15:17	1
Methyl tert-butyl ether	0.0024	J	0.0091	0.00099	ug/L			06/18/15 15:17	1
m,p-Xylene	ND		0.0091	0.0012	ug/L			06/18/15 15:17	1
n-Butylbenzene	ND		0.0045	0.00070	ug/L			06/18/15 15:17	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-82405-1

Date Collected: 06/17/15 13:30

Matrix: Wastewater

Date Received: 06/17/15 15:30

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.0045	0.0030	ug/L			06/18/15 15:17	1
o-Xylene	ND		0.0045	0.00061	ug/L			06/18/15 15:17	1
p-Cymene	ND		0.0045	0.00067	ug/L			06/18/15 15:17	1
sec-Butylbenzene	ND		0.0045	0.00046	ug/L			06/18/15 15:17	1
Toluene	ND		0.0045	0.00081	ug/L			06/18/15 15:17	1
Xylenes, Total	ND		0.0091	0.0012	ug/L			06/18/15 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145		06/18/15 15:17	1
4-Bromofluorobenzene	99		64 - 141		06/18/15 15:17	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	164		50.0	19.3	ug/L		06/18/15 10:26	06/19/15 15:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.34		0.010	0.0050	mg/L		06/19/15 10:00	06/22/15 11:44	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.24	HF	0.100	0.100	SU			06/18/15 10:39	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Client Sample ID: Post-Carbon-2

Lab Sample ID: 480-82405-2

Date Collected: 06/17/15 13:35

Matrix: Water

Date Received: 06/17/15 15:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.045	0.0079	ug/L			06/18/15 15:51	10
1,3,5-Trimethylbenzene	ND		0.045	0.034	ug/L			06/18/15 15:51	10
Benzene	5.7		0.045	0.0053	ug/L			06/18/15 15:51	10
Ethylbenzene	0.032	J	0.045	0.0065	ug/L			06/18/15 15:51	10
Isopropylbenzene	ND		0.045	0.0061	ug/L			06/18/15 15:51	10
Methyl tert-butyl ether	ND		0.091	0.0099	ug/L			06/18/15 15:51	10
m,p-Xylene	0.016	J	0.091	0.012	ug/L			06/18/15 15:51	10
n-Butylbenzene	ND		0.045	0.0070	ug/L			06/18/15 15:51	10
n-Propylbenzene	ND		0.045	0.030	ug/L			06/18/15 15:51	10
o-Xylene	ND		0.045	0.0061	ug/L			06/18/15 15:51	10
p-Cymene	ND		0.045	0.0067	ug/L			06/18/15 15:51	10
sec-Butylbenzene	ND		0.045	0.0046	ug/L			06/18/15 15:51	10
Toluene	0.22		0.045	0.0081	ug/L			06/18/15 15:51	10
Xylenes, Total	0.016	J	0.091	0.012	ug/L			06/18/15 15:51	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		06/18/15 15:51	10
4-Bromofluorobenzene	100		64 - 141		06/18/15 15:51	10

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Client Sample ID: Post-Carbon-1

Lab Sample ID: 480-82405-3

Date Collected: 06/17/15 13:40

Matrix: Water

Date Received: 06/17/15 15:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.046	J	0.23	0.039	ug/L			06/18/15 16:26	50
1,3,5-Trimethylbenzene	ND		0.23	0.17	ug/L			06/18/15 16:26	50
Benzene	40		0.23	0.026	ug/L			06/18/15 16:26	50
Ethylbenzene	1.7		0.23	0.033	ug/L			06/18/15 16:26	50
Isopropylbenzene	ND		0.23	0.031	ug/L			06/18/15 16:26	50
Methyl tert-butyl ether	ND		0.45	0.050	ug/L			06/18/15 16:26	50
m,p-Xylene	0.61		0.45	0.061	ug/L			06/18/15 16:26	50
n-Butylbenzene	ND		0.23	0.035	ug/L			06/18/15 16:26	50
n-Propylbenzene	ND		0.23	0.15	ug/L			06/18/15 16:26	50
o-Xylene	0.37		0.23	0.031	ug/L			06/18/15 16:26	50
p-Cymene	ND		0.23	0.034	ug/L			06/18/15 16:26	50
sec-Butylbenzene	ND		0.23	0.023	ug/L			06/18/15 16:26	50
Toluene	5.6		0.23	0.040	ug/L			06/18/15 16:26	50
Xylenes, Total	0.98		0.45	0.061	ug/L			06/18/15 16:26	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		06/18/15 16:26	50
4-Bromofluorobenzene	102		64 - 141		06/18/15 16:26	50

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Client Sample ID: Pre-Carbon

Date Collected: 06/17/15 13:45

Date Received: 06/17/15 15:30

Lab Sample ID: 480-82405-4

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.91	0.16	ug/L			06/18/15 17:00	200
1,3,5-Trimethylbenzene	ND		0.91	0.68	ug/L			06/18/15 17:00	200
Benzene	66		0.91	0.11	ug/L			06/18/15 17:00	200
Ethylbenzene	6.4		0.91	0.13	ug/L			06/18/15 17:00	200
Isopropylbenzene	ND		0.91	0.12	ug/L			06/18/15 17:00	200
Methyl tert-butyl ether	ND		1.8	0.20	ug/L			06/18/15 17:00	200
m,p-Xylene	0.70 J		1.8	0.25	ug/L			06/18/15 17:00	200
n-Butylbenzene	ND		0.91	0.14	ug/L			06/18/15 17:00	200
n-Propylbenzene	ND		0.91	0.59	ug/L			06/18/15 17:00	200
o-Xylene	1.0		0.91	0.12	ug/L			06/18/15 17:00	200
p-Cymene	ND		0.91	0.13	ug/L			06/18/15 17:00	200
sec-Butylbenzene	ND		0.91	0.093	ug/L			06/18/15 17:00	200
Toluene	14		0.91	0.16	ug/L			06/18/15 17:00	200
Xylenes, Total	1.7 J		1.8	0.25	ug/L			06/18/15 17:00	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		06/18/15 17:00	200
4-Bromofluorobenzene	100		64 - 141		06/18/15 17:00	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	140000		500	100	ug/L		06/18/15 10:26	06/19/15 15:56	1
Iron	1750		50.0	19.3	ug/L		06/18/15 10:26	06/19/15 15:56	1
Magnesium	73600		200	43.4	ug/L		06/18/15 10:26	06/19/15 15:56	1
Potassium	4650		500	100	ug/L		06/18/15 10:26	06/19/15 15:56	1
Sodium	71300		1000	324	ug/L		06/18/15 10:26	06/19/15 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		10.0	5.6	mg/L			06/18/15 20:35	20
Sulfate	133		40.0	7.0	mg/L			06/18/15 20:35	20
Alkalinity, Total	473		60.0	24.0	mg/L			06/29/15 20:17	6

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Client Sample ID: Inside/Outside Sump

Lab Sample ID: 480-82405-5

Date Collected: 06/17/15 14:00

Matrix: Water

Date Received: 06/17/15 15:30

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.28		0.23	0.039	ug/L			06/18/15 17:34	50
1,3,5-Trimethylbenzene	ND		0.23	0.17	ug/L			06/18/15 17:34	50
Ethylbenzene	8.3		0.23	0.033	ug/L			06/18/15 17:34	50
Isopropylbenzene	ND		0.23	0.031	ug/L			06/18/15 17:34	50
Methyl tert-butyl ether	ND		0.45	0.050	ug/L			06/18/15 17:34	50
m,p-Xylene	2.9		0.45	0.061	ug/L			06/18/15 17:34	50
n-Butylbenzene	ND		0.23	0.035	ug/L			06/18/15 17:34	50
n-Propylbenzene	ND		0.23	0.15	ug/L			06/18/15 17:34	50
o-Xylene	1.6		0.23	0.031	ug/L			06/18/15 17:34	50
p-Cymene	ND		0.23	0.034	ug/L			06/18/15 17:34	50
sec-Butylbenzene	ND		0.23	0.023	ug/L			06/18/15 17:34	50
Toluene	17		0.23	0.040	ug/L			06/18/15 17:34	50
Xylenes, Total	4.5		0.45	0.061	ug/L			06/18/15 17:34	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145		06/18/15 17:34	50
4-Bromofluorobenzene	96		64 - 141		06/18/15 17:34	50

Method: 8021B - Volatile Organic Compounds (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	87		0.91	0.11	ug/L			06/22/15 16:28	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 145		06/22/15 16:28	200
4-Bromofluorobenzene	93		64 - 141		06/22/15 16:28	200

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Client Sample ID: Post-Carbon-3

Date Collected: 06/17/15 13:30

Date Received: 06/17/15 15:30

Lab Sample ID: 480-82405-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	250113	06/25/15 16:36	CDC	TAL BUF
Total/NA	Analysis	8021B		1	248789	06/18/15 15:17	JRL	TAL BUF
Total/NA	Prep	200.7			248790	06/18/15 10:26	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	249341	06/19/15 15:53	AMH	TAL BUF
Total/NA	Prep	Distill/CN			249102	06/19/15 10:00	NDB	TAL BUF
Total/NA	Analysis	335.4		1	249427	06/22/15 11:44	KMF	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	248906	06/18/15 10:39	NDB	TAL BUF

Client Sample ID: Post-Carbon-2

Date Collected: 06/17/15 13:35

Date Received: 06/17/15 15:30

Lab Sample ID: 480-82405-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	248789	06/18/15 15:51	JRL	TAL BUF

Client Sample ID: Post-Carbon-1

Date Collected: 06/17/15 13:40

Date Received: 06/17/15 15:30

Lab Sample ID: 480-82405-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	248789	06/18/15 16:26	JRL	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 06/17/15 13:45

Date Received: 06/17/15 15:30

Lab Sample ID: 480-82405-4

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	248789	06/18/15 17:00	JRL	TAL BUF
Total/NA	Prep	200.7			248790	06/18/15 10:26	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	249341	06/19/15 15:56	AMH	TAL BUF
Total/NA	Analysis	300.0		20	248807	06/18/15 20:35	CAS	TAL BUF
Total/NA	Analysis	310.2		6	250847	06/29/15 20:17	LED	TAL BUF

Client Sample ID: Inside/Outside Sump

Date Collected: 06/17/15 14:00

Date Received: 06/17/15 15:30

Lab Sample ID: 480-82405-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	248789	06/18/15 17:34	JRL	TAL BUF
Total/NA	Analysis	8021B	DL	200	249310	06/22/15 16:28	JRL	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Laboratory References:

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

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Certification Summary

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-82405-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-82405-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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.

TestAmerica Job ID: 480-82405-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-82405-1	Post-Carbon-3	Wastewater	06/17/15 13:30	06/17/15 15:30
480-82405-2	Post-Carbon-2	Water	06/17/15 13:35	06/17/15 15:30
480-82405-3	Post-Carbon-1	Water	06/17/15 13:40	06/17/15 15:30
480-82405-4	Pre-Carbon	Wastewater	06/17/15 13:45	06/17/15 15:30
480-82405-5	Inside/Outside Sump	Water	06/17/15 14:00	06/17/15 15:30

Buffalo

10 Hazelwood Drive

Amherst, NY 14228



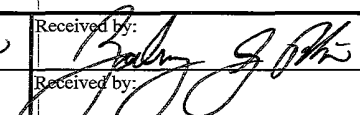
phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Glenn May (NYSDEC)		Site Contact: Thomas Palmer		Date: 6/17/15		COC No:							
Groundwater & Environmental Services, Inc		Tel/Fax: (716) 851-7220		Lab Contact: B. Fischer		Carrier:		1 of 1 COCs							
495 Aero Drive Suite 3		Analysis Turnaround Time						Job No.							
Cheektowaga, NY 14225		Calendar (C) or Work Days (W)						SDG No.							
(800) 287-7857 Phone		TAT if different from Below													
(866) 902-2187 FAX		<input checked="" type="checkbox"/> 2 weeks													
Project Name: NYSDEC Gatown WWTP		<input type="checkbox"/> 1 week													
Site: 915171		<input type="checkbox"/> 2 days													
P O # Callout 120597		<input type="checkbox"/> 1 day													
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	300.0_28D (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+ pH	Sample Specific Notes:
Post-Carbon 3	6/17	1330	Grab	W	9	N				X	X	X	X	X	
Post-Carbon 2	6/17	1335	Grab	W	3	N						X			
Post-Carbon 1	6/17	1340	Grab	W	3	N						X			
Pre-Carbon	6/17	1345	Grab	W	6	N	X	X	X			X			
Inside / Outside Sump	6/17	1400	Grab	W	3	N						X			
 480-82405 Chain of Custody															
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other															
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Special Instructions/QC Requirements & Comments:															
Relinquished by: 		Company: GGS		Date/Time: 6/17 1500		Received by: 		Company: TA BUFF		Date/Time: 6/17/15 1530					
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:					
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:					

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07/06/2015

1 3.6

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-82405-1

Login Number: 82405

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.	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	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-84881-1

Client Project/Site: NYSDEC-Gastown WWTP: Site# 915171

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Glenn May



Authorized for release by:

8/11/2015 12:28:32 PM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

LINKS

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results through

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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.

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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
8/11/2015 12:28:32 PM



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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC 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.

Metals

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
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
B	Compound was found in the blank and sample.

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: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Job ID: 480-84881-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-84881-1

Receipt

The samples were received on 7/31/2015 2:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.6° C and 9.3° C.

Receipt Exceptions

Samples received at the laboratory outside the required temperature criteria are considered acceptable since they were collected and submitted to the laboratory on the same day and there is evidence that the chilling process had begun.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-257571 recovered above the upper control limit for several analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: Post-Carbon 3 (480-84881-1) and Pre-Carbon (480-84881-4).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-257571 recovered outside control limits for the following analytes: Bromoform and Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-84881-4). 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/MS Semi VOA

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

HPLC/IC

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-84881-4), (480-84918-W-7), (480-84918-W-7 MS) and (480-84918-W-7 MSD). 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

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-84881-4) and Outside Sump (480-84881-5). 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) 608: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl was decreased and slightly exceeded 15% on the RTXCLPII column, indicating a low bias. The following sample is impacted: Post-Carbon 3 (480-84881-1).

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.

General Chemistry

Method(s) SM 2540C: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: Post-Carbon 3 (480-84881-1). The reporting limits (RLs) have been adjusted proportionately.

Case Narrative

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Job ID: 480-84881-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) SM 5210B: The USB dilution water D.O. depletion was greater than 0.2 mg/L but less than the reporting limit of 2.0 mg/L. The associated sample results in batch 480-256597 are reported.

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-84881-1).

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

Organic Prep

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Post-Carbon 3

Date Collected: 07/31/15 09:30

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-1

Matrix: Wastewater

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			08/07/15 16:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/07/15 16:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/07/15 16:58	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/07/15 16:58	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/07/15 16:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/07/15 16:58	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			08/07/15 16:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/07/15 16:58	1
2-Hexanone	ND		5.0	1.2	ug/L			08/07/15 16:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/07/15 16:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/07/15 16:58	1
Acetone	ND		10	3.0	ug/L			08/07/15 16:58	1
Benzene	ND		1.0	0.41	ug/L			08/07/15 16:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/07/15 16:58	1
Bromoform	ND	*	1.0	0.26	ug/L			08/07/15 16:58	1
Bromomethane	ND		1.0	0.69	ug/L			08/07/15 16:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/07/15 16:58	1
Carbon tetrachloride	ND	*	1.0	0.27	ug/L			08/07/15 16:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/07/15 16:58	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/07/15 16:58	1
Chloroethane	ND		1.0	0.32	ug/L			08/07/15 16:58	1
Chloroform	ND		1.0	0.34	ug/L			08/07/15 16:58	1
Chloromethane	ND		1.0	0.35	ug/L			08/07/15 16:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/07/15 16:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/07/15 16:58	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/07/15 16:58	1
Styrene	ND		1.0	0.73	ug/L			08/07/15 16:58	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/07/15 16:58	1
Toluene	ND		1.0	0.51	ug/L			08/07/15 16:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/07/15 16:58	1
Trichloroethene	ND		1.0	0.46	ug/L			08/07/15 16:58	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/07/15 16:58	1
Vinyl acetate	ND		5.0	0.85	ug/L			08/07/15 16:58	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/07/15 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		66 - 137		08/07/15 16:58	1
Toluene-d8 (Surr)	77		71 - 126		08/07/15 16:58	1
4-Bromofluorobenzene (Surr)	93		73 - 120		08/07/15 16:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		5.0	0.60	ug/L		08/04/15 14:18	08/05/15 18:58	1
Acenaphthene	ND		5.0	0.41	ug/L		08/04/15 14:18	08/05/15 18:58	1
Acenaphthylene	ND		5.0	0.38	ug/L		08/04/15 14:18	08/05/15 18:58	1
Anthracene	ND		5.0	0.28	ug/L		08/04/15 14:18	08/05/15 18:58	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		08/04/15 14:18	08/05/15 18:58	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		08/04/15 14:18	08/05/15 18:58	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		08/04/15 14:18	08/05/15 18:58	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		08/04/15 14:18	08/05/15 18:58	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-84881-1

Date Collected: 07/31/15 09:30

Matrix: Wastewater

Date Received: 07/31/15 14:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		08/04/15 14:18	08/05/15 18:58	1
Biphenyl	ND		5.0	0.66	ug/L		08/04/15 14:18	08/05/15 18:58	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		08/04/15 14:18	08/05/15 18:58	1
Carbazole	ND		5.0	0.30	ug/L		08/04/15 14:18	08/05/15 18:58	1
Chrysene	ND		5.0	0.33	ug/L		08/04/15 14:18	08/05/15 18:58	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		08/04/15 14:18	08/05/15 18:58	1
Dibenzofuran	ND		10	0.51	ug/L		08/04/15 14:18	08/05/15 18:58	1
Fluoranthene	ND		5.0	0.40	ug/L		08/04/15 14:18	08/05/15 18:58	1
Fluorene	ND		5.0	0.36	ug/L		08/04/15 14:18	08/05/15 18:58	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		08/04/15 14:18	08/05/15 18:58	1
Naphthalene	ND		5.0	0.76	ug/L		08/04/15 14:18	08/05/15 18:58	1
Pentachlorophenol	ND		10	2.2	ug/L		08/04/15 14:18	08/05/15 18:58	1
Phenanthrene	ND		5.0	0.44	ug/L		08/04/15 14:18	08/05/15 18:58	1
Phenol	ND		5.0	0.39	ug/L		08/04/15 14:18	08/05/15 18:58	1
Pyrene	ND		5.0	0.34	ug/L		08/04/15 14:18	08/05/15 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		52 - 132	08/04/15 14:18	08/05/15 18:58	1
2-Fluorobiphenyl	89		48 - 120	08/04/15 14:18	08/05/15 18:58	1
2-Fluorophenol	45		20 - 120	08/04/15 14:18	08/05/15 18:58	1
Nitrobenzene-d5	80		46 - 120	08/04/15 14:18	08/05/15 18:58	1
p-Terphenyl-d14	91		67 - 150	08/04/15 14:18	08/05/15 18:58	1
Phenol-d5	33		16 - 120	08/04/15 14:18	08/05/15 18:58	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/03/15 11:02	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/03/15 11:02	1
Benzene	ND		0.20	0.023	ug/L			08/03/15 11:02	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/03/15 11:02	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/03/15 11:02	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/03/15 11:02	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/03/15 11:02	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/03/15 11:02	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/03/15 11:02	1
o-Xylene	ND		0.20	0.027	ug/L			08/03/15 11:02	1
p-Cymene	ND		0.20	0.030	ug/L			08/03/15 11:02	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/03/15 11:02	1
Toluene	ND		0.20	0.036	ug/L			08/03/15 11:02	1
Xylenes, Total	ND		0.40	0.054	ug/L			08/03/15 11:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 145		08/03/15 11:02	1
4-Bromofluorobenzene	92		64 - 141		08/03/15 11:02	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.049	0.0064	ug/L		08/03/15 14:37	08/05/15 15:14	1
alpha-BHC	ND		0.049	0.0064	ug/L		08/03/15 14:37	08/05/15 15:14	1
beta-BHC	ND		0.049	0.024	ug/L		08/03/15 14:37	08/05/15 15:14	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-84881-1

Date Collected: 07/31/15 09:30

Matrix: Wastewater

Date Received: 07/31/15 14:00

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.049	0.0097	ug/L		08/03/15 14:37	08/05/15 15:14	1
gamma-BHC (Lindane)	ND		0.049	0.0058	ug/L		08/03/15 14:37	08/05/15 15:14	1
Chlordane (technical)	ND		0.49	0.28	ug/L		08/03/15 14:37	08/05/15 15:14	1
4,4'-DDD	ND		0.049	0.0089	ug/L		08/03/15 14:37	08/05/15 15:14	1
4,4'-DDE	ND		0.049	0.011	ug/L		08/03/15 14:37	08/05/15 15:14	1
4,4'-DDT	ND		0.049	0.011	ug/L		08/03/15 14:37	08/05/15 15:14	1
Dieldrin	ND		0.049	0.0095	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endosulfan I	ND		0.049	0.011	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endosulfan II	ND		0.049	0.012	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endosulfan sulfate	ND		0.049	0.015	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endrin	ND		0.049	0.013	ug/L		08/03/15 14:37	08/05/15 15:14	1
Endrin aldehyde	ND		0.049	0.016	ug/L		08/03/15 14:37	08/05/15 15:14	1
Heptachlor	ND		0.049	0.0082	ug/L		08/03/15 14:37	08/05/15 15:14	1
Heptachlor epoxide	ND		0.049	0.0051	ug/L		08/03/15 14:37	08/05/15 15:14	1
Toxaphene	ND		0.49	0.12	ug/L		08/03/15 14:37	08/05/15 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	53		23 - 120	08/03/15 14:37	08/05/15 15:14	1
Tetrachloro-m-xylene	76		36 - 120	08/03/15 14:37	08/05/15 15:14	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	32.5	J	50.0	19.3	ug/L		08/04/15 08:00	08/04/15 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0	1.4	mg/L		08/07/15 12:57	08/07/15 13:08	1
Cyanide, Total	0.064	B	0.010	0.0050	mg/L		08/04/15 10:35	08/05/15 11:11	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		08/03/15 13:32	08/04/15 07:32	1
Total Dissolved Solids	924		20.0	8.0	mg/L			08/04/15 09:30	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			08/01/15 09:03	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			08/02/15 08:19	1
pH	7.56	HF	0.100	0.100	SU			08/03/15 18:23	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Post-Carbon 2

Date Collected: 07/31/15 09:35

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-2

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/03/15 15:41	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/03/15 15:41	1
Benzene	0.051	J	0.20	0.023	ug/L			08/03/15 15:41	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/03/15 15:41	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/03/15 15:41	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/03/15 15:41	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/03/15 15:41	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/03/15 15:41	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/03/15 15:41	1
o-Xylene	ND		0.20	0.027	ug/L			08/03/15 15:41	1
p-Cymene	ND		0.20	0.030	ug/L			08/03/15 15:41	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/03/15 15:41	1
Toluene	ND		0.20	0.036	ug/L			08/03/15 15:41	1
Xylenes, Total	ND		0.40	0.054	ug/L			08/03/15 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 145		08/03/15 15:41	1
4-Bromofluorobenzene	95		64 - 141		08/03/15 15:41	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Post-Carbon 1

Date Collected: 07/31/15 09:40

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-3

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/03/15 16:15	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/03/15 16:15	1
Benzene	33		0.20	0.023	ug/L			08/03/15 16:15	1
Ethylbenzene	0.61		0.20	0.029	ug/L			08/03/15 16:15	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/03/15 16:15	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/03/15 16:15	1
m,p-Xylene	0.43		0.40	0.054	ug/L			08/03/15 16:15	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/03/15 16:15	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/03/15 16:15	1
o-Xylene	0.37		0.20	0.027	ug/L			08/03/15 16:15	1
p-Cymene	ND		0.20	0.030	ug/L			08/03/15 16:15	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/03/15 16:15	1
Toluene	2.7		0.20	0.036	ug/L			08/03/15 16:15	1
Xylenes, Total	0.80		0.40	0.054	ug/L			08/03/15 16:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 145		08/03/15 16:15	1
4-Bromofluorobenzene	92		64 - 141		08/03/15 16:15	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Pre-Carbon

Date Collected: 07/31/15 09:45

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-4

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			08/07/15 17:21	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			08/07/15 17:21	200
1,1,2-Trichloroethane	ND		200	46	ug/L			08/07/15 17:21	200
1,1-Dichloroethane	ND		200	76	ug/L			08/07/15 17:21	200
1,1-Dichloroethene	ND		200	58	ug/L			08/07/15 17:21	200
1,2-Dichloroethane	ND		200	42	ug/L			08/07/15 17:21	200
1,2-Dichloroethene, Total	ND		400	160	ug/L			08/07/15 17:21	200
1,2-Dichloropropane	ND		200	140	ug/L			08/07/15 17:21	200
2-Hexanone	ND		1000	250	ug/L			08/07/15 17:21	200
2-Butanone (MEK)	ND		2000	260	ug/L			08/07/15 17:21	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			08/07/15 17:21	200
Acetone	ND		2000	600	ug/L			08/07/15 17:21	200
Benzene	5300		200	82	ug/L			08/07/15 17:21	200
Bromodichloromethane	ND		200	78	ug/L			08/07/15 17:21	200
Bromoform	ND	*	200	52	ug/L			08/07/15 17:21	200
Bromomethane	ND		200	140	ug/L			08/07/15 17:21	200
Carbon disulfide	ND		200	38	ug/L			08/07/15 17:21	200
Carbon tetrachloride	ND	*	200	54	ug/L			08/07/15 17:21	200
Chlorobenzene	ND		200	150	ug/L			08/07/15 17:21	200
Dibromochloromethane	ND		200	64	ug/L			08/07/15 17:21	200
Chloroethane	ND		200	64	ug/L			08/07/15 17:21	200
Chloroform	ND		200	68	ug/L			08/07/15 17:21	200
Chloromethane	ND		200	70	ug/L			08/07/15 17:21	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			08/07/15 17:21	200
Ethylbenzene	250		200	150	ug/L			08/07/15 17:21	200
Methylene Chloride	ND		200	88	ug/L			08/07/15 17:21	200
Styrene	ND		200	150	ug/L			08/07/15 17:21	200
Tetrachloroethene	ND		200	72	ug/L			08/07/15 17:21	200
Toluene	870		200	100	ug/L			08/07/15 17:21	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			08/07/15 17:21	200
Trichloroethene	ND		200	92	ug/L			08/07/15 17:21	200
Vinyl chloride	ND		200	180	ug/L			08/07/15 17:21	200
Vinyl acetate	ND		1000	170	ug/L			08/07/15 17:21	200
Xylenes, Total	170	J	400	130	ug/L			08/07/15 17:21	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		66 - 137		08/07/15 17:21	200
Toluene-d8 (Surr)	80		71 - 126		08/07/15 17:21	200
4-Bromofluorobenzene (Surr)	96		73 - 120		08/07/15 17:21	200

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	16	J	40	6.9	ug/L			08/03/15 15:07	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			08/03/15 15:07	200
Benzene	5200		40	4.7	ug/L			08/03/15 15:07	200
Ethylbenzene	240		40	5.7	ug/L			08/03/15 15:07	200
Isopropylbenzene	ND		40	5.4	ug/L			08/03/15 15:07	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			08/03/15 15:07	200
m,p-Xylene	160		80	11	ug/L			08/03/15 15:07	200
n-Butylbenzene	ND		40	6.2	ug/L			08/03/15 15:07	200

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Pre-Carbon

Date Collected: 07/31/15 09:45

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-4

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			08/03/15 15:07	200
o-Xylene	ND		40	5.4	ug/L			08/03/15 15:07	200
p-Cymene	ND		40	5.9	ug/L			08/03/15 15:07	200
sec-Butylbenzene	ND		40	4.1	ug/L			08/03/15 15:07	200
Toluene	870		40	7.1	ug/L			08/03/15 15:07	200
Xylenes, Total	160		80	11	ug/L			08/03/15 15:07	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 145		08/03/15 15:07	200
4-Bromofluorobenzene	89		64 - 141		08/03/15 15:07	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	144000		500	100	ug/L		08/04/15 08:00	08/04/15 15:54	1
Iron	3680		50.0	19.3	ug/L		08/04/15 08:00	08/04/15 15:54	1
Magnesium	83500		200	43.4	ug/L		08/04/15 08:00	08/04/15 15:54	1
Potassium	4480		500	100	ug/L		08/04/15 08:00	08/04/15 15:54	1
Sodium	76300		1000	324	ug/L		08/04/15 08:00	08/04/15 15:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		10.0	5.6	mg/L			08/03/15 17:44	20
Sulfate	155		40.0	7.0	mg/L			08/03/15 17:44	20
Alkalinity, Total	530		60.0	24.0	mg/L			08/05/15 19:51	6

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Outside Sump

Date Collected: 07/31/15 10:00

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-5

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			08/03/15 13:19	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			08/03/15 13:19	500
Benzene	6500		100	12	ug/L			08/03/15 13:19	500
Ethylbenzene	530		100	14	ug/L			08/03/15 13:19	500
Isopropylbenzene	ND		100	14	ug/L			08/03/15 13:19	500
Methyl tert-butyl ether	ND		200	22	ug/L			08/03/15 13:19	500
m,p-Xylene	200		200	27	ug/L			08/03/15 13:19	500
n-Butylbenzene	ND		100	15	ug/L			08/03/15 13:19	500
n-Propylbenzene	ND		100	65	ug/L			08/03/15 13:19	500
o-Xylene	ND		100	14	ug/L			08/03/15 13:19	500
p-Cymene	ND		100	15	ug/L			08/03/15 13:19	500
sec-Butylbenzene	ND		100	10	ug/L			08/03/15 13:19	500
Toluene	1100		100	18	ug/L			08/03/15 13:19	500
Xylenes, Total	200		200	27	ug/L			08/03/15 13:19	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145		08/03/15 13:19	500
4-Bromofluorobenzene	95		64 - 141		08/03/15 13:19	500

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Post-Carbon 3

Date Collected: 07/31/15 09:30

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	257571	08/07/15 16:58	SWO	TAL BUF
Total/NA	Prep	3510C			256962	08/04/15 14:18	VNP	TAL BUF
Total/NA	Analysis	8270D		1	257114	08/05/15 18:58	DMR	TAL BUF
Total/NA	Analysis	8021B		1	256634	08/03/15 11:02	MAN	TAL BUF
Total/NA	Prep	3510C			256764	08/03/15 14:37	GVF	TAL BUF
Total/NA	Analysis	608		1	257168	08/05/15 15:14	MAN	TAL BUF
Total/NA	Prep	200.7			256765	08/04/15 08:00	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	257047	08/04/15 15:51	LMH	TAL BUF
Total/NA	Prep	1664A			257611	08/07/15 12:57	MDL	TAL BUF
Total/NA	Analysis	1664A		1	257614	08/07/15 13:08	MDL	TAL BUF
Total/NA	Prep	Distill/CN			256922	08/04/15 10:35	NDB	TAL BUF
Total/NA	Analysis	335.4		1	257137	08/05/15 11:11	KMF	TAL BUF
Total/NA	Prep	Distill/Phenol			256739	08/03/15 13:32	GMG	TAL BUF
Total/NA	Analysis	420.1		1	256835	08/04/15 07:32	EKB	TAL BUF
Total/NA	Analysis	SM 2540C		1	256889	08/04/15 09:30	EKB	TAL BUF
Total/NA	Analysis	SM 2540D		1	256612	08/02/15 08:19	EKB	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	256899	08/03/15 18:23	KMF	TAL BUF
Total/NA	Analysis	SM 5210B		1	256597	08/01/15 09:03	NCH	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 07/31/15 09:35

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	256634	08/03/15 15:41	MAN	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 07/31/15 09:40

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	256634	08/03/15 16:15	MAN	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 07/31/15 09:45

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-4

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	257571	08/07/15 17:21	SWO	TAL BUF
Total/NA	Analysis	8021B		200	256634	08/03/15 15:07	MAN	TAL BUF
Total/NA	Prep	200.7			256765	08/04/15 08:00	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	257047	08/04/15 15:54	LMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Client Sample ID: Pre-Carbon

Date Collected: 07/31/15 09:45

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-4

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	256712	08/03/15 17:44	CAS	TAL BUF
Total/NA	Analysis	310.2		6	257269	08/05/15 19:51	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 07/31/15 10:00

Date Received: 07/31/15 14:00

Lab Sample ID: 480-84881-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	256634	08/03/15 13:19	MAN	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: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

Client: New York State D.E.C.
Project/Site: NYSDEC-Gastown WWTP: Site# 915171

TestAmerica Job ID: 480-84881-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
608	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
1664A	HEM and SGT-HEM	1664A	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
420.1	Phenolics, Total Recoverable	MCAWW	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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.

TestAmerica Job ID: 480-84881-1

Project/Site: NYSDEC-Gastown WWTP: Site# 915171

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-84881-1	Post-Carbon 3	Wastewater	07/31/15 09:30	07/31/15 14:00
480-84881-2	Post-Carbon 2	Wastewater	07/31/15 09:35	07/31/15 14:00
480-84881-3	Post-Carbon 1	Wastewater	07/31/15 09:40	07/31/15 14:00
480-84881-4	Pre-Carbon	Wastewater	07/31/15 09:45	07/31/15 14:00
480-84881-5	Outside Sump	Water	07/31/15 10:00	07/31/15 14:00

Buffalo

10 Hazelwood Drive

Amherst, NY 14228


phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Glenn May (NYSDEC)		Site Contact: Thomas Palmer		Date: 7/31/15		COC No:															
Groundwater & Environmental Services, Inc		Tel/Fax: (716) 851-7220		Lab Contact: B. Fischer		Carrier:		1 of 1 COCs															
495 Aero Drive Suite 3		Analysis Turnaround Time						Job No.															
Cheektowaga, NY 14225		Calendar (C) or Work Days (W)						SDG No.															
(800) 287-7857 Phone		TAT if different from Below																					
(866) 902-2187 FAX		<input checked="" type="checkbox"/> 2 weeks																					
Project Name: NYSDEC Gatown WWTP		<input type="checkbox"/> 1 week																					
Site: 915171		<input type="checkbox"/> 2 days																					
P O # Callout 120597		<input type="checkbox"/> 1 day																					
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	300.0_2SD (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	82.60B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+-pH	1664A_Cale - Oil & Grease	420.4 - Phenolics, Total Recoverable	608_Pest - Priority Pollutant Pesticides	5210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids	2540C_Caled - Total Dissolved Solids	Sample Specific Notes:		
Post-Carbon 3	7/31/15	0930	Grab	W	19	N				X	X	X	X	X	X	X	X	X	X	X			
Post-Carbon 2		0935	Grab	W	3	N						X											
Post-Carbon 1		0940	Grab	W	3	N						X											
Pre-Carbon		0945	Grab	W	9	N	X	X	X		X	X											
Outside Sump		1000	Grab	W	3	N						X											
 480-84881 Chain of Custody																							
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other																							
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>											Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months												
Special Instructions/QC Requirements & Comments:																							
Relinquished by: <i>Thomas Palmer</i>		Company: <i>GES</i>		Date/Time: <i>7/31/15 1400</i>		Received by: <i>Thomas Palmer</i>		Company: <i>GES</i>		Date/Time: <i>7/31/15 1400</i>		Received by: <i>Thomas Palmer</i>		Company: <i>GES</i>		Date/Time: <i>7/31/15 1400</i>		Received by: <i>Thomas Palmer</i>		Company: <i>GES</i>		Date/Time: <i>7/31/15 1400</i>	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-84881-1

Login Number: 84881

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.	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	Yes: Samples checked, no residual chlorine detected

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-86774-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

9/17/2015 12:31:03 PM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

LINKS

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results through

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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.

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
9/17/2015 12:31:03 PM





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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Qualifiers

GC 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
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Job ID: 480-86774-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-86774-1

Receipt

The samples were received on 9/4/2015 3:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

GC/MS VOA

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

HPLC/IC

Method(s) 300.0, SM 4110B: The following sample was diluted to bring the concentration of target analytes within the calibration range: PRE-CARBON (480-86774-4). 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 VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: POST-CARBON 1 (480-86774-3), PRE-CARBON (480-86774-4) and INSIDE/OUTSIDE SUMP (480-86774-5). 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.

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: POST-CARBON 3 (480-86774-1).

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Client Sample ID: POST-CARBON 3

Lab Sample ID: 480-86774-1

Date Collected: 09/04/15 12:00

Matrix: Water

Date Received: 09/04/15 15:10

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			09/12/15 16:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/12/15 16:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/12/15 16:00	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/12/15 16:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/12/15 16:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/12/15 16:00	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			09/12/15 16:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/12/15 16:00	1
2-Hexanone	ND		5.0	1.2	ug/L			09/12/15 16:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/12/15 16:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/12/15 16:00	1
Acetone	ND		10	3.0	ug/L			09/12/15 16:00	1
Benzene	ND		1.0	0.41	ug/L			09/12/15 16:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/12/15 16:00	1
Bromoform	ND		1.0	0.26	ug/L			09/12/15 16:00	1
Bromomethane	ND		1.0	0.69	ug/L			09/12/15 16:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/12/15 16:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/12/15 16:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/12/15 16:00	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/12/15 16:00	1
Chloroethane	ND		1.0	0.32	ug/L			09/12/15 16:00	1
Chloroform	ND		1.0	0.34	ug/L			09/12/15 16:00	1
Chloromethane	ND		1.0	0.35	ug/L			09/12/15 16:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/12/15 16:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/12/15 16:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/12/15 16:00	1
Styrene	ND		1.0	0.73	ug/L			09/12/15 16:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/12/15 16:00	1
Toluene	ND		1.0	0.51	ug/L			09/12/15 16:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/12/15 16:00	1
Trichloroethene	ND		1.0	0.46	ug/L			09/12/15 16:00	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/12/15 16:00	1
Vinyl acetate	ND		5.0	0.85	ug/L			09/12/15 16:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/12/15 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 137		09/12/15 16:00	1
Toluene-d8 (Surr)	92		71 - 126		09/12/15 16:00	1
4-Bromofluorobenzene (Surr)	97		73 - 120		09/12/15 16:00	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			09/14/15 16:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/14/15 16:46	1
Benzene	ND		0.20	0.023	ug/L			09/14/15 16:46	1
Ethylbenzene	ND		0.20	0.029	ug/L			09/14/15 16:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/14/15 16:46	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/14/15 16:46	1
m,p-Xylene	ND		0.40	0.054	ug/L			09/14/15 16:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/14/15 16:46	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Client Sample ID: POST-CARBON 3

Lab Sample ID: 480-86774-1

Date Collected: 09/04/15 12:00

Matrix: Water

Date Received: 09/04/15 15:10

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			09/14/15 16:46	1
o-Xylene	ND		0.20	0.027	ug/L			09/14/15 16:46	1
p-Cymene	ND		0.20	0.030	ug/L			09/14/15 16:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/14/15 16:46	1
Toluene	ND		0.20	0.036	ug/L			09/14/15 16:46	1
Xylenes, Total	ND		0.40	0.054	ug/L			09/14/15 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		63 - 145		09/14/15 16:46	1
4-Bromofluorobenzene	81		64 - 141		09/14/15 16:46	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	255		50.0	19.3	ug/L		09/10/15 07:30	09/10/15 21:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.55		0.020	0.010	mg/L		09/06/15 10:03	09/08/15 13:30	2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.39	HF	0.100	0.100	SU			09/08/15 13:34	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Client Sample ID: POST-CARBON 2

Lab Sample ID: 480-86774-2

Date Collected: 09/04/15 12:05

Matrix: Water

Date Received: 09/04/15 15:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			09/14/15 16:14	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/14/15 16:14	1
Benzene	0.078	J	0.20	0.023	ug/L			09/14/15 16:14	1
Ethylbenzene	ND		0.20	0.029	ug/L			09/14/15 16:14	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/14/15 16:14	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/14/15 16:14	1
m,p-Xylene	ND		0.40	0.054	ug/L			09/14/15 16:14	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/14/15 16:14	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/14/15 16:14	1
o-Xylene	ND		0.20	0.027	ug/L			09/14/15 16:14	1
p-Cymene	ND		0.20	0.030	ug/L			09/14/15 16:14	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/14/15 16:14	1
Toluene	ND		0.20	0.036	ug/L			09/14/15 16:14	1
Xylenes, Total	ND		0.40	0.054	ug/L			09/14/15 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		63 - 145		09/14/15 16:14	1
4-Bromofluorobenzene	80		64 - 141		09/14/15 16:14	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Client Sample ID: POST-CARBON 1

Lab Sample ID: 480-86774-3

Date Collected: 09/04/15 12:10

Matrix: Water

Date Received: 09/04/15 15:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.35	ug/L			09/14/15 17:50	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			09/14/15 17:50	10
Benzene	41		2.0	0.23	ug/L			09/14/15 17:50	10
Ethylbenzene	ND		2.0	0.29	ug/L			09/14/15 17:50	10
Isopropylbenzene	ND		2.0	0.27	ug/L			09/14/15 17:50	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			09/14/15 17:50	10
m,p-Xylene	ND		4.0	0.54	ug/L			09/14/15 17:50	10
n-Butylbenzene	ND		2.0	0.31	ug/L			09/14/15 17:50	10
n-Propylbenzene	ND		2.0	1.3	ug/L			09/14/15 17:50	10
o-Xylene	ND		2.0	0.27	ug/L			09/14/15 17:50	10
p-Cymene	ND		2.0	0.30	ug/L			09/14/15 17:50	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			09/14/15 17:50	10
Toluene	2.8		2.0	0.36	ug/L			09/14/15 17:50	10
Xylenes, Total	ND		4.0	0.54	ug/L			09/14/15 17:50	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	82		63 - 145		09/14/15 17:50	10
4-Bromofluorobenzene	83		64 - 141		09/14/15 17:50	10

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Client Sample ID: PRE-CARBON

Date Collected: 09/04/15 12:15

Date Received: 09/04/15 15:10

Lab Sample ID: 480-86774-4

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	26	J	100	17	ug/L			09/14/15 14:22	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			09/14/15 14:22	500
Benzene	9100		100	12	ug/L			09/14/15 14:22	500
Ethylbenzene	230		100	14	ug/L			09/14/15 14:22	500
Isopropylbenzene	ND		100	14	ug/L			09/14/15 14:22	500
Methyl tert-butyl ether	ND		200	22	ug/L			09/14/15 14:22	500
m,p-Xylene	180	J	200	27	ug/L			09/14/15 14:22	500
n-Butylbenzene	ND		100	15	ug/L			09/14/15 14:22	500
n-Propylbenzene	ND		100	65	ug/L			09/14/15 14:22	500
o-Xylene	98	J	100	14	ug/L			09/14/15 14:22	500
p-Cymene	ND		100	15	ug/L			09/14/15 14:22	500
sec-Butylbenzene	ND		100	10	ug/L			09/14/15 14:22	500
Toluene	1300		100	18	ug/L			09/14/15 14:22	500
Xylenes, Total	280		200	27	ug/L			09/14/15 14:22	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	80		63 - 145		09/14/15 14:22	500
<i>4-Bromofluorobenzene</i>	76		64 - 141		09/14/15 14:22	500

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	121000		500	100	ug/L		09/10/15 07:30	09/10/15 21:38	1
Iron	7330		50.0	19.3	ug/L		09/10/15 07:30	09/10/15 21:38	1
Magnesium	103000		200	43.4	ug/L		09/10/15 07:30	09/10/15 21:38	1
Potassium	5190		500	100	ug/L		09/10/15 07:30	09/10/15 21:38	1
Sodium	73500		1000	324	ug/L		09/10/15 07:30	09/10/15 21:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		10.0	5.6	mg/L			09/08/15 15:57	20
Sulfate	104		40.0	7.0	mg/L			09/08/15 15:57	20
Alkalinity, Total	563		100	40.0	mg/L			09/10/15 16:00	10

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Client Sample ID: INSIDE/OUTSIDE SUMP

Lab Sample ID: 480-86774-5

Date Collected: 09/04/15 12:30

Matrix: Water

Date Received: 09/04/15 15:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	88		40	6.9	ug/L			09/14/15 13:50	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			09/14/15 13:50	200
Ethylbenzene	1900		40	5.7	ug/L			09/14/15 13:50	200
Isopropylbenzene	14	J	40	5.4	ug/L			09/14/15 13:50	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			09/14/15 13:50	200
m,p-Xylene	760		80	11	ug/L			09/14/15 13:50	200
n-Butylbenzene	ND		40	6.2	ug/L			09/14/15 13:50	200
n-Propylbenzene	ND		40	26	ug/L			09/14/15 13:50	200
o-Xylene	ND		40	5.4	ug/L			09/14/15 13:50	200
p-Cymene	ND		40	5.9	ug/L			09/14/15 13:50	200
sec-Butylbenzene	ND		40	4.1	ug/L			09/14/15 13:50	200
Toluene	3900		40	7.1	ug/L			09/14/15 13:50	200
Xylenes, Total	760		80	11	ug/L			09/14/15 13:50	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 145		09/14/15 13:50	200
4-Bromofluorobenzene	85		64 - 141		09/14/15 13:50	200

Method: 8021B - Volatile Organic Compounds (GC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	21000		200	23	ug/L			09/14/15 17:18	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		63 - 145		09/14/15 17:18	1000
4-Bromofluorobenzene	84		64 - 141		09/14/15 17:18	1000

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Client Sample ID: POST-CARBON 3

Date Collected: 09/04/15 12:00

Date Received: 09/04/15 15:10

Lab Sample ID: 480-86774-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	263217	09/12/15 16:00	GVF	TAL BUF
Total/NA	Analysis	8021B		1	263390	09/14/15 16:46	JRL	TAL BUF
Total/NA	Prep	200.7			262680	09/10/15 07:30	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	263044	09/10/15 21:35	TRB	TAL BUF
Total/NA	Prep	Distill/CN			262270	09/06/15 10:03	MDL	TAL BUF
Total/NA	Analysis	335.4		2	262434	09/08/15 13:30	KMF	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	262443	09/08/15 13:34	DCB	TAL BUF

Client Sample ID: POST-CARBON 2

Date Collected: 09/04/15 12:05

Date Received: 09/04/15 15:10

Lab Sample ID: 480-86774-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	263390	09/14/15 16:14	JRL	TAL BUF

Client Sample ID: POST-CARBON 1

Date Collected: 09/04/15 12:10

Date Received: 09/04/15 15:10

Lab Sample ID: 480-86774-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	263390	09/14/15 17:50	JRL	TAL BUF

Client Sample ID: PRE-CARBON

Date Collected: 09/04/15 12:15

Date Received: 09/04/15 15:10

Lab Sample ID: 480-86774-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	263390	09/14/15 14:22	JRL	TAL BUF
Total/NA	Prep	200.7			262680	09/10/15 07:30	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	263044	09/10/15 21:38	TRB	TAL BUF
Total/NA	Analysis	300.0		20	262402	09/08/15 15:57	CAS	TAL BUF
Total/NA	Analysis	310.2		10	262960	09/10/15 16:00	LED	TAL BUF

Client Sample ID: INSIDE/OUTSIDE SUMP

Date Collected: 09/04/15 12:30

Date Received: 09/04/15 15:10

Lab Sample ID: 480-86774-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	263390	09/14/15 13:50	JRL	TAL BUF
Total/NA	Analysis	8021B	DL	1000	263390	09/14/15 17:18	JRL	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Laboratory References:

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

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Certification Summary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Water	1,2-Dichloroethene, Total
SM 4500 H+ B		Water	pH

Method Summary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: Gastown WWTP #915171

TestAmerica Job ID: 480-86774-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-86774-1	POST-CARBON 3	Water	09/04/15 12:00	09/04/15 15:10
480-86774-2	POST-CARBON 2	Water	09/04/15 12:05	09/04/15 15:10
480-86774-3	POST-CARBON 1	Water	09/04/15 12:10	09/04/15 15:10
480-86774-4	PRE-CARBON	Water	09/04/15 12:15	09/04/15 15:10
480-86774-5	INSIDE/OUTSIDE SUMP	Water	09/04/15 12:30	09/04/15 15:10

10 Hazelwood Drive

phone 716.504.9852 fax 716.691.7991

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-86774-1

Login Number: 86774

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.	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	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-88499-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

10/19/2015 1:43:13 PM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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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.

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
10/19/2015 1:43:13 PM





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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Qualifiers

GC 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.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
B	Compound was found in the blank and sample.

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: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Job ID: 480-88499-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-88499-1

Receipt

The samples were received on 10/6/2015 1:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

GC/MS VOA

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-88499-4). 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 VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-88499-3), Pre-Carbon (480-88499-4) and Inside/Outside Sump (480-88499-5). 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.

Metals

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

General Chemistry

Method(s) SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-88499-1).

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Client Sample ID: Post-Carbon 3

Date Collected: 10/06/15 12:15

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-1

Matrix: Wastewater

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			10/16/15 06:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/16/15 06:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/16/15 06:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/16/15 06:12	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/16/15 06:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/16/15 06:12	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			10/16/15 06:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/16/15 06:12	1
2-Hexanone	ND		5.0	1.2	ug/L			10/16/15 06:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/16/15 06:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/16/15 06:12	1
Acetone	ND		10	3.0	ug/L			10/16/15 06:12	1
Benzene	ND		1.0	0.41	ug/L			10/16/15 06:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/16/15 06:12	1
Bromoform	ND		1.0	0.26	ug/L			10/16/15 06:12	1
Bromomethane	ND		1.0	0.69	ug/L			10/16/15 06:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/16/15 06:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/16/15 06:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/16/15 06:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/16/15 06:12	1
Chloroethane	ND		1.0	0.32	ug/L			10/16/15 06:12	1
Chloroform	ND		1.0	0.34	ug/L			10/16/15 06:12	1
Chloromethane	ND		1.0	0.35	ug/L			10/16/15 06:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/16/15 06:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/16/15 06:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/16/15 06:12	1
Styrene	ND		1.0	0.73	ug/L			10/16/15 06:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/16/15 06:12	1
Toluene	ND		1.0	0.51	ug/L			10/16/15 06:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/16/15 06:12	1
Trichloroethene	ND		1.0	0.46	ug/L			10/16/15 06:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/16/15 06:12	1
Vinyl acetate	ND		5.0	0.85	ug/L			10/16/15 06:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/16/15 06:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137		10/16/15 06:12	1
Toluene-d8 (Surr)	98		71 - 126		10/16/15 06:12	1
4-Bromofluorobenzene (Surr)	97		73 - 120		10/16/15 06:12	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			10/07/15 16:52	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/07/15 16:52	1
Benzene	ND		0.20	0.023	ug/L			10/07/15 16:52	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/07/15 16:52	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/07/15 16:52	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/07/15 16:52	1
m,p-Xylene	ND		0.40	0.054	ug/L			10/07/15 16:52	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/07/15 16:52	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-88499-1

Date Collected: 10/06/15 12:15

Matrix: Wastewater

Date Received: 10/06/15 13:00

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			10/07/15 16:52	1
o-Xylene	ND		0.20	0.027	ug/L			10/07/15 16:52	1
p-Cymene	ND		0.20	0.030	ug/L			10/07/15 16:52	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/07/15 16:52	1
Toluene	ND		0.20	0.036	ug/L			10/07/15 16:52	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/07/15 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		63 - 145		10/07/15 16:52	1
4-Bromofluorobenzene	75		64 - 141		10/07/15 16:52	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	222		50.0	19.3	ug/L		10/07/15 11:10	10/08/15 11:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.54	B	0.020	0.010	mg/L		10/07/15 16:40	10/08/15 11:16	2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.52	HF	0.100	0.100	SU			10/06/15 21:10	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Client Sample ID: Post-Carbon 2

Date Collected: 10/06/15 12:20

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-2

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			10/08/15 13:29	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/08/15 13:29	1
Benzene	0.054	J	0.20	0.023	ug/L			10/08/15 13:29	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/08/15 13:29	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/08/15 13:29	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/08/15 13:29	1
m,p-Xylene	ND		0.40	0.054	ug/L			10/08/15 13:29	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/08/15 13:29	1
n-Propylbenzene	ND		0.20	0.13	ug/L			10/08/15 13:29	1
o-Xylene	ND		0.20	0.027	ug/L			10/08/15 13:29	1
p-Cymene	ND		0.20	0.030	ug/L			10/08/15 13:29	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/08/15 13:29	1
Toluene	ND		0.20	0.036	ug/L			10/08/15 13:29	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/08/15 13:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	79		63 - 145		10/08/15 13:29	1
4-Bromofluorobenzene	78		64 - 141		10/08/15 13:29	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Client Sample ID: Post-Carbon 1

Date Collected: 10/06/15 12:25

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-3

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.17	ug/L			10/08/15 14:01	5
1,3,5-Trimethylbenzene	ND		1.0	0.75	ug/L			10/08/15 14:01	5
Benzene	57		1.0	0.12	ug/L			10/08/15 14:01	5
Ethylbenzene	ND		1.0	0.14	ug/L			10/08/15 14:01	5
Isopropylbenzene	ND		1.0	0.14	ug/L			10/08/15 14:01	5
Methyl tert-butyl ether	ND		2.0	0.22	ug/L			10/08/15 14:01	5
m,p-Xylene	ND		2.0	0.27	ug/L			10/08/15 14:01	5
n-Butylbenzene	ND		1.0	0.15	ug/L			10/08/15 14:01	5
n-Propylbenzene	ND		1.0	0.65	ug/L			10/08/15 14:01	5
o-Xylene	ND		1.0	0.14	ug/L			10/08/15 14:01	5
p-Cymene	ND		1.0	0.15	ug/L			10/08/15 14:01	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			10/08/15 14:01	5
Toluene	1.0		1.0	0.18	ug/L			10/08/15 14:01	5
Xylenes, Total	ND		3.0	0.27	ug/L			10/08/15 14:01	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		10/08/15 14:01	5
4-Bromofluorobenzene	99		64 - 141		10/08/15 14:01	5

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Client Sample ID: Pre-Carbon

Date Collected: 10/06/15 12:30

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-4

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	17	J	40	6.9	ug/L			10/07/15 18:28	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			10/07/15 18:28	200
Benzene	6900		40	4.7	ug/L			10/07/15 18:28	200
Ethylbenzene	72		40	5.7	ug/L			10/07/15 18:28	200
Isopropylbenzene	ND		40	5.4	ug/L			10/07/15 18:28	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			10/07/15 18:28	200
m,p-Xylene	180		80	11	ug/L			10/07/15 18:28	200
n-Butylbenzene	ND		40	6.2	ug/L			10/07/15 18:28	200
n-Propylbenzene	ND		40	26	ug/L			10/07/15 18:28	200
o-Xylene	170		40	5.4	ug/L			10/07/15 18:28	200
p-Cymene	ND		40	5.9	ug/L			10/07/15 18:28	200
sec-Butylbenzene	ND		40	4.1	ug/L			10/07/15 18:28	200
Toluene	1000		40	7.1	ug/L			10/07/15 18:28	200
Xylenes, Total	350		120	11	ug/L			10/07/15 18:28	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	105		63 - 145		10/07/15 18:28	200
<i>4-Bromofluorobenzene</i>	103		64 - 141		10/07/15 18:28	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	129000	B	500	100	ug/L		10/07/15 11:10	10/08/15 11:46	1
Iron	4000		50.0	19.3	ug/L		10/07/15 11:10	10/08/15 11:46	1
Magnesium	82900		200	43.4	ug/L		10/07/15 11:10	10/08/15 11:46	1
Potassium	4840		500	100	ug/L		10/07/15 11:10	10/08/15 11:46	1
Sodium	80200		1000	324	ug/L		10/07/15 11:10	10/08/15 11:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	137		10.0	5.6	mg/L			10/07/15 17:27	20
Sulfate	135		40.0	7.0	mg/L			10/07/15 17:27	20
Alkalinity, Total	514		100	40.0	mg/L			10/09/15 11:14	10

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Client Sample ID: Inside/Outside Sump

Lab Sample ID: 480-88499-5

Date Collected: 10/06/15 12:45

Matrix: Water

Date Received: 10/06/15 13:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	34	J	100	17	ug/L			10/07/15 19:00	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			10/07/15 19:00	500
Benzene	11000		100	12	ug/L			10/07/15 19:00	500
Ethylbenzene	860		100	14	ug/L			10/07/15 19:00	500
Isopropylbenzene	ND		100	14	ug/L			10/07/15 19:00	500
Methyl tert-butyl ether	ND		200	22	ug/L			10/07/15 19:00	500
m,p-Xylene	370		200	27	ug/L			10/07/15 19:00	500
n-Butylbenzene	ND		100	15	ug/L			10/07/15 19:00	500
n-Propylbenzene	ND		100	65	ug/L			10/07/15 19:00	500
o-Xylene	450		100	14	ug/L			10/07/15 19:00	500
p-Cymene	ND		100	15	ug/L			10/07/15 19:00	500
sec-Butylbenzene	ND		100	10	ug/L			10/07/15 19:00	500
Toluene	2100		100	18	ug/L			10/07/15 19:00	500
Xylenes, Total	820		300	27	ug/L			10/07/15 19:00	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		63 - 145		10/07/15 19:00	500
4-Bromofluorobenzene	105		64 - 141		10/07/15 19:00	500

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Client Sample ID: Post-Carbon 3

Date Collected: 10/06/15 12:15

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	269099	10/16/15 06:12	LJF	TAL BUF
Total/NA	Analysis	8021B		1	267436	10/07/15 16:52	JRL	TAL BUF
Total/NA	Prep	200.7			267387	10/07/15 11:10	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	267852	10/08/15 11:43	AMH	TAL BUF
Total/NA	Prep	Distill/CN			267519	10/07/15 16:40	CLT	TAL BUF
Total/NA	Analysis	335.4		2	267668	10/08/15 11:16	KMF	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	267293	10/06/15 21:10	MGH	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 10/06/15 12:20

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	267436	10/08/15 13:29	JRL	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 10/06/15 12:25

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		5	267436	10/08/15 14:01	JRL	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 10/06/15 12:30

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-4

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	267436	10/07/15 18:28	JRL	TAL BUF
Total/NA	Prep	200.7			267387	10/07/15 11:10	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	267852	10/08/15 11:46	AMH	TAL BUF
Total/NA	Analysis	300.0		20	267378	10/07/15 17:27	CAS	TAL BUF
Total/NA	Analysis	310.2		10	267977	10/09/15 11:14	CEA	TAL BUF

Client Sample ID: Inside/Outside Sump

Date Collected: 10/06/15 12:45

Date Received: 10/06/15 13:00

Lab Sample ID: 480-88499-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	267436	10/07/15 19:00	JRL	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: Gastown WWTP #915171

TestAmerica Job ID: 480-88499-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-88499-1	Post-Carbon 3	Wastewater	10/06/15 12:15	10/06/15 13:00
480-88499-2	Post-Carbon 2	Wastewater	10/06/15 12:20	10/06/15 13:00
480-88499-3	Post-Carbon 1	Wastewater	10/06/15 12:25	10/06/15 13:00
480-88499-4	Pre-Carbon	Wastewater	10/06/15 12:30	10/06/15 13:00
480-88499-5	Inside/Outside Sump	Water	10/06/15 12:45	10/06/15 13:00

Buffalo

10 Hazelwood Drive

Amherst, NY 14228

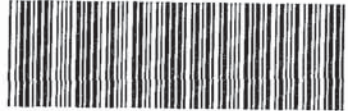
phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Glenn May (NYSDEC)		Site Contact: Thomas Palmer		Date: 10/6/15		COC No:						
Groundwater & Environmental Services, Inc		Tel/Fax: (716) 851-7220		Lab Contact: B. Fischer		Carrier:		1 of 1 COCs						
495 Aero Drive Suite 3		Analysis Turnaround Time						Job No.						
Cheektowaga, NY 14225		Calendar (C) or Work Days (W)						SDG No.						
(800) 287-7857 Phone		TAT if different from Below												
(866) 902-2187 FAX		<input checked="" type="checkbox"/> 2 weeks												
Project Name: NYSDEC Gatown WWTP		<input type="checkbox"/> 1 week												
Site: 915171		<input type="checkbox"/> 2 days												
P O # Callout 120597		<input type="checkbox"/> 1 day												
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	300.0_28D (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	82.60B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	SM4500 H+ - pH	Sample Specific Notes:
Post-Carbon 3	10/6	1215	Grab	W	9	N			X	X	X	X	X	
Post-Carbon 2	10/6	1220	Grab	W	3	N					X			
Post-Carbon 1	10/6	1225	Grab	W	3	N					X			
Pre-Carbon	10/6	1230	Grab	W	6	N	X	X	X		X			
Inside / Outside Sump	10/6	1245	Grab	W	3	N					X			
 480-88499 Chain of Custody														
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other														
Possible Hazard Identification														
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>														
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)														
<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months														
Special Instructions/QC Requirements & Comments:														
<div style="text-align: right; font-size: 2em; font-weight: bold;">Temp 5.0#1</div>														
Relinquished by:	Company:		Date/Time:		Received by:		Company:		Date/Time:					
Relinquished by:	Company:		Date/Time:		Received by:		Company:		Date/Time:					
Relinquished by:	Company:		Date/Time:		Received by:		Company:		Date/Time:					

Form No. CA-C-WI-002, dated 04/07/2011

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-88499-1

Login Number: 88499

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.	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	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-92248-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Quarterly

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

12/21/2015 11:57:09 PM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

LINKS

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www.testamericainc.com

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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
- 11

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
12/21/2015 11:57:09 PM



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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC 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.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
B	Compound was found in the blank and sample.
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: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Job ID: 480-92248-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-92248-1

Receipt

The samples were received on 12/7/2015 3:05 PM; 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: Pre-Carbon (480-92248-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-280407 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8260C: Due to the coelution of n-butyl Acetate with 2-Hexanone in the full spike solution, 2-Hexanone exceeded control limits in the laboratory control sample (LCS) associated with batch 480-280474. The following sample is impacted: Post-Carbon 3 (480-92248-1).

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

GC/MS Semi VOA

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-92248-3). 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

Method(s) 8021B: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: Post-Carbon 2 (480-92248-2).

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-92248-3) and Inside/Outside Sump (480-92248-4). 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.

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-92248-1).

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

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Post-Carbon 3

Date Collected: 12/07/15 11:30

Date Received: 12/07/15 15:05

Lab Sample ID: 480-92248-1

Matrix: Wastewater

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			12/18/15 14:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/18/15 14:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/18/15 14:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/18/15 14:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/18/15 14:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/18/15 14:29	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			12/18/15 14:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/18/15 14:29	1
2-Hexanone	ND	*	5.0	1.2	ug/L			12/18/15 14:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/18/15 14:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/18/15 14:29	1
Acetone	ND		10	3.0	ug/L			12/18/15 14:29	1
Benzene	ND		1.0	0.41	ug/L			12/18/15 14:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/18/15 14:29	1
Bromoform	ND		1.0	0.26	ug/L			12/18/15 14:29	1
Bromomethane	ND		1.0	0.69	ug/L			12/18/15 14:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/18/15 14:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/18/15 14:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/18/15 14:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/18/15 14:29	1
Chloroethane	ND		1.0	0.32	ug/L			12/18/15 14:29	1
Chloroform	ND		1.0	0.34	ug/L			12/18/15 14:29	1
Chloromethane	ND		1.0	0.35	ug/L			12/18/15 14:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/18/15 14:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/18/15 14:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/18/15 14:29	1
Styrene	ND		1.0	0.73	ug/L			12/18/15 14:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/18/15 14:29	1
Toluene	ND		1.0	0.51	ug/L			12/18/15 14:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/18/15 14:29	1
Trichloroethene	ND		1.0	0.46	ug/L			12/18/15 14:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/18/15 14:29	1
Vinyl acetate	ND		5.0	0.85	ug/L			12/18/15 14:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/18/15 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137		12/18/15 14:29	1
Toluene-d8 (Surr)	101		71 - 126		12/18/15 14:29	1
4-Bromofluorobenzene (Surr)	99		73 - 120		12/18/15 14:29	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		12/08/15 13:48	12/15/15 13:49	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/08/15 13:48	12/15/15 13:49	1
Acenaphthene	ND		5.0	0.41	ug/L		12/08/15 13:48	12/15/15 13:49	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/08/15 13:48	12/15/15 13:49	1
Anthracene	ND		5.0	0.28	ug/L		12/08/15 13:48	12/15/15 13:49	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		12/08/15 13:48	12/15/15 13:49	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		12/08/15 13:48	12/15/15 13:49	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		12/08/15 13:48	12/15/15 13:49	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-92248-1

Date Collected: 12/07/15 11:30

Matrix: Wastewater

Date Received: 12/07/15 15:05

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		12/08/15 13:48	12/15/15 13:49	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		12/08/15 13:48	12/15/15 13:49	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		12/08/15 13:48	12/15/15 13:49	1
Carbazole	ND		5.0	0.30	ug/L		12/08/15 13:48	12/15/15 13:49	1
Chrysene	ND		5.0	0.33	ug/L		12/08/15 13:48	12/15/15 13:49	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/08/15 13:48	12/15/15 13:49	1
Dibenzofuran	ND		10	0.51	ug/L		12/08/15 13:48	12/15/15 13:49	1
Fluoranthene	ND		5.0	0.40	ug/L		12/08/15 13:48	12/15/15 13:49	1
Fluorene	ND		5.0	0.36	ug/L		12/08/15 13:48	12/15/15 13:49	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		12/08/15 13:48	12/15/15 13:49	1
Naphthalene	ND		5.0	0.76	ug/L		12/08/15 13:48	12/15/15 13:49	1
Pentachlorophenol	ND		10	2.2	ug/L		12/08/15 13:48	12/15/15 13:49	1
Phenanthrene	ND		5.0	0.44	ug/L		12/08/15 13:48	12/15/15 13:49	1
Phenol	ND		5.0	0.39	ug/L		12/08/15 13:48	12/15/15 13:49	1
Pyrene	ND		5.0	0.34	ug/L		12/08/15 13:48	12/15/15 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	51		46 - 120	12/08/15 13:48	12/15/15 13:49	1
2-Fluorobiphenyl	50		48 - 120	12/08/15 13:48	12/15/15 13:49	1
p-Terphenyl-d14	79		67 - 150	12/08/15 13:48	12/15/15 13:49	1
Phenol-d5	28		16 - 120	12/08/15 13:48	12/15/15 13:49	1
2-Fluorophenol	37		20 - 120	12/08/15 13:48	12/15/15 13:49	1
2,4,6-Tribromophenol	69		52 - 132	12/08/15 13:48	12/15/15 13:49	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			12/08/15 13:29	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			12/08/15 13:29	1
Benzene	ND		0.20	0.023	ug/L			12/08/15 13:29	1
Ethylbenzene	ND		0.20	0.029	ug/L			12/08/15 13:29	1
Isopropylbenzene	ND		0.20	0.027	ug/L			12/08/15 13:29	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			12/08/15 13:29	1
m,p-Xylene	ND		0.40	0.054	ug/L			12/08/15 13:29	1
n-Butylbenzene	ND		0.20	0.031	ug/L			12/08/15 13:29	1
n-Propylbenzene	ND		0.20	0.13	ug/L			12/08/15 13:29	1
o-Xylene	ND		0.20	0.027	ug/L			12/08/15 13:29	1
p-Cymene	ND		0.20	0.030	ug/L			12/08/15 13:29	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			12/08/15 13:29	1
Toluene	0.091	J	0.20	0.036	ug/L			12/08/15 13:29	1
Xylenes, Total	ND		0.60	0.054	ug/L			12/08/15 13:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145		12/08/15 13:29	1
4-Bromofluorobenzene	96		64 - 141		12/08/15 13:29	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.050	0.0066	ug/L		12/08/15 13:59	12/09/15 17:37	1
alpha-BHC	ND		0.050	0.0066	ug/L		12/08/15 13:59	12/09/15 17:37	1
beta-BHC	ND		0.050	0.025	ug/L		12/08/15 13:59	12/09/15 17:37	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-92248-1

Date Collected: 12/07/15 11:30

Matrix: Wastewater

Date Received: 12/07/15 15:05

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.050	0.010	ug/L		12/08/15 13:59	12/09/15 17:37	1
gamma-BHC (Lindane)	ND		0.050	0.0060	ug/L		12/08/15 13:59	12/09/15 17:37	1
Chlordane (technical)	ND		0.50	0.29	ug/L		12/08/15 13:59	12/09/15 17:37	1
4,4'-DDD	ND		0.050	0.0092	ug/L		12/08/15 13:59	12/09/15 17:37	1
4,4'-DDE	ND		0.050	0.012	ug/L		12/08/15 13:59	12/09/15 17:37	1
4,4'-DDT	ND		0.050	0.011	ug/L		12/08/15 13:59	12/09/15 17:37	1
Dieldrin	ND		0.050	0.0098	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endosulfan I	ND		0.050	0.011	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endosulfan II	ND		0.050	0.012	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endrin	ND		0.050	0.014	ug/L		12/08/15 13:59	12/09/15 17:37	1
Endrin aldehyde	ND		0.050	0.016	ug/L		12/08/15 13:59	12/09/15 17:37	1
Heptachlor	ND		0.050	0.0085	ug/L		12/08/15 13:59	12/09/15 17:37	1
Heptachlor epoxide	ND		0.050	0.0053	ug/L		12/08/15 13:59	12/09/15 17:37	1
Toxaphene	ND		0.50	0.12	ug/L		12/08/15 13:59	12/09/15 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	89		23 - 120	12/08/15 13:59	12/09/15 17:37	1
Tetrachloro-m-xylene	75		36 - 120	12/08/15 13:59	12/09/15 17:37	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	128		50.0	19.3	ug/L		12/08/15 10:15	12/08/15 21:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.1	1.4	mg/L		12/14/15 10:55	12/14/15 14:34	1
Cyanide, Total	0.28		0.010	0.0050	mg/L		12/10/15 15:14	12/11/15 12:41	1
Phenolics, Total Recoverable	0.0059	J B	0.010	0.0050	mg/L		12/14/15 15:30	12/15/15 11:04	1
Total Dissolved Solids	743		10.0	4.0	mg/L			12/10/15 11:33	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			12/08/15 16:17	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			12/09/15 09:51	1
pH	7.48	HF	0.100	0.100	SU			12/08/15 14:59	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-92248-2

Date Collected: 12/07/15 11:35

Matrix: Water

Date Received: 12/07/15 15:05

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			12/08/15 14:01	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			12/08/15 14:01	1
Benzene	ND		0.20	0.023	ug/L			12/08/15 14:01	1
Ethylbenzene	ND		0.20	0.029	ug/L			12/08/15 14:01	1
Isopropylbenzene	ND		0.20	0.027	ug/L			12/08/15 14:01	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			12/08/15 14:01	1
m,p-Xylene	ND		0.40	0.054	ug/L			12/08/15 14:01	1
n-Butylbenzene	ND		0.20	0.031	ug/L			12/08/15 14:01	1
n-Propylbenzene	ND		0.20	0.13	ug/L			12/08/15 14:01	1
o-Xylene	ND		0.20	0.027	ug/L			12/08/15 14:01	1
p-Cymene	ND		0.20	0.030	ug/L			12/08/15 14:01	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			12/08/15 14:01	1
Toluene	ND		0.20	0.036	ug/L			12/08/15 14:01	1
Xylenes, Total	ND		0.60	0.054	ug/L			12/08/15 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145		12/08/15 14:01	1
4-Bromofluorobenzene	93		64 - 141		12/08/15 14:01	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Pre-Carbon

Date Collected: 12/07/15 11:40

Date Received: 12/07/15 15:05

Lab Sample ID: 480-92248-3

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			12/18/15 01:11	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			12/18/15 01:11	200
1,1,2-Trichloroethane	ND		200	46	ug/L			12/18/15 01:11	200
1,1-Dichloroethane	ND		200	76	ug/L			12/18/15 01:11	200
1,1-Dichloroethene	ND		200	58	ug/L			12/18/15 01:11	200
1,2-Dichloroethane	ND		200	42	ug/L			12/18/15 01:11	200
1,2-Dichloroethene, Total	ND		400	160	ug/L			12/18/15 01:11	200
1,2-Dichloropropane	ND		200	140	ug/L			12/18/15 01:11	200
2-Hexanone	ND		1000	250	ug/L			12/18/15 01:11	200
2-Butanone (MEK)	ND		2000	260	ug/L			12/18/15 01:11	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			12/18/15 01:11	200
Acetone	ND		2000	600	ug/L			12/18/15 01:11	200
Benzene	6000		200	82	ug/L			12/18/15 01:11	200
Bromodichloromethane	ND		200	78	ug/L			12/18/15 01:11	200
Bromoform	ND		200	52	ug/L			12/18/15 01:11	200
Bromomethane	ND		200	140	ug/L			12/18/15 01:11	200
Carbon disulfide	ND		200	38	ug/L			12/18/15 01:11	200
Carbon tetrachloride	ND		200	54	ug/L			12/18/15 01:11	200
Chlorobenzene	ND		200	150	ug/L			12/18/15 01:11	200
Dibromochloromethane	ND		200	64	ug/L			12/18/15 01:11	200
Chloroethane	ND		200	64	ug/L			12/18/15 01:11	200
Chloroform	ND		200	68	ug/L			12/18/15 01:11	200
Chloromethane	ND		200	70	ug/L			12/18/15 01:11	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			12/18/15 01:11	200
Ethylbenzene	ND		200	150	ug/L			12/18/15 01:11	200
Methylene Chloride	ND		200	88	ug/L			12/18/15 01:11	200
Styrene	ND		200	150	ug/L			12/18/15 01:11	200
Tetrachloroethene	ND		200	72	ug/L			12/18/15 01:11	200
Toluene	800		200	100	ug/L			12/18/15 01:11	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			12/18/15 01:11	200
Trichloroethene	ND		200	92	ug/L			12/18/15 01:11	200
Vinyl chloride	ND		200	180	ug/L			12/18/15 01:11	200
Vinyl acetate	ND		1000	170	ug/L			12/18/15 01:11	200
Xylenes, Total	130	J	400	130	ug/L			12/18/15 01:11	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		12/18/15 01:11	200
Toluene-d8 (Surr)	95		71 - 126		12/18/15 01:11	200
4-Bromofluorobenzene (Surr)	98		73 - 120		12/18/15 01:11	200

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	12	J	40	6.9	ug/L			12/08/15 14:32	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			12/08/15 14:32	200
Benzene	5800		40	4.7	ug/L			12/08/15 14:32	200
Ethylbenzene	68		40	5.7	ug/L			12/08/15 14:32	200
Isopropylbenzene	ND		40	5.4	ug/L			12/08/15 14:32	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			12/08/15 14:32	200
m,p-Xylene	140		80	11	ug/L			12/08/15 14:32	200
n-Butylbenzene	ND		40	6.2	ug/L			12/08/15 14:32	200

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Pre-Carbon

Date Collected: 12/07/15 11:40

Date Received: 12/07/15 15:05

Lab Sample ID: 480-92248-3

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			12/08/15 14:32	200
o-Xylene	89		40	5.4	ug/L			12/08/15 14:32	200
p-Cymene	ND		40	5.9	ug/L			12/08/15 14:32	200
sec-Butylbenzene	ND		40	4.1	ug/L			12/08/15 14:32	200
Toluene	820		40	7.1	ug/L			12/08/15 14:32	200
Xylenes, Total	230		120	11	ug/L			12/08/15 14:32	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145					12/08/15 14:32	200
4-Bromofluorobenzene	95		64 - 141					12/08/15 14:32	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	123000	B	500	100	ug/L		12/08/15 10:15	12/08/15 21:35	1
Iron	736		50.0	19.3	ug/L		12/08/15 10:15	12/08/15 21:35	1
Magnesium	84400		200	43.4	ug/L		12/08/15 10:15	12/08/15 21:35	1
Potassium	4420		500	100	ug/L		12/08/15 10:15	12/08/15 21:35	1
Sodium	69600		1000	324	ug/L		12/08/15 10:15	12/08/15 21:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		10.0	5.6	mg/L			12/11/15 12:33	20
Sulfate	135		40.0	7.0	mg/L			12/11/15 12:33	20
Alkalinity, Total	561		100	40.0	mg/L			12/15/15 20:58	10

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Inside/Outside Sump

Date Collected: 12/07/15 11:45

Date Received: 12/07/15 15:05

Lab Sample ID: 480-92248-4

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	35	J	40	6.9	ug/L			12/08/15 15:04	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			12/08/15 15:04	200
Benzene	11000		40	4.7	ug/L			12/08/15 15:04	200
Ethylbenzene	880		40	5.7	ug/L			12/08/15 15:04	200
Isopropylbenzene	ND		40	5.4	ug/L			12/08/15 15:04	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			12/08/15 15:04	200
m,p-Xylene	330		80	11	ug/L			12/08/15 15:04	200
n-Butylbenzene	ND		40	6.2	ug/L			12/08/15 15:04	200
n-Propylbenzene	ND		40	26	ug/L			12/08/15 15:04	200
o-Xylene	170		40	5.4	ug/L			12/08/15 15:04	200
p-Cymene	ND		40	5.9	ug/L			12/08/15 15:04	200
sec-Butylbenzene	ND		40	4.1	ug/L			12/08/15 15:04	200
Toluene	1800		40	7.1	ug/L			12/08/15 15:04	200
Xylenes, Total	500		120	11	ug/L			12/08/15 15:04	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 145		12/08/15 15:04	200
4-Bromofluorobenzene	95		64 - 141		12/08/15 15:04	200

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Post-Carbon 3

Date Collected: 12/07/15 11:30

Date Received: 12/07/15 15:05

Lab Sample ID: 480-92248-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	280474	12/18/15 14:29	SWO	TAL BUF
Total/NA	Prep	3510C			278699	12/08/15 13:48	CPH	TAL BUF
Total/NA	Analysis	8270D		1	279817	12/15/15 13:49	PJQ	TAL BUF
Total/NA	Analysis	8021B		1	278632	12/08/15 13:29	JRL	TAL BUF
Total/NA	Prep	3510C			278701	12/08/15 13:59	JIL	TAL BUF
Total/NA	Analysis	608		1	278922	12/09/15 17:37	MAN	TAL BUF
Total/NA	Prep	200.7			278630	12/08/15 10:15	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	278793	12/08/15 21:18	AMH	TAL BUF
Total/NA	Prep	1664A			279610	12/14/15 10:55	DSC	TAL BUF
Total/NA	Analysis	1664A		1	279649	12/14/15 14:34	DSC	TAL BUF
Total/NA	Prep	Distill/CN			279185	12/10/15 15:14	SER	TAL BUF
Total/NA	Analysis	335.4		1	279383	12/11/15 12:41	ZRJ	TAL BUF
Total/NA	Prep	Distill/Phenol			279698	12/14/15 15:30	CLT	TAL BUF
Total/NA	Analysis	420.1		1	279841	12/15/15 11:04	ELR	TAL BUF
Total/NA	Analysis	SM 2540C		1	279123	12/10/15 11:33	EKB	TAL BUF
Total/NA	Analysis	SM 2540D		1	278843	12/09/15 09:51	MGH	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	278721	12/08/15 14:59	JJK	TAL BUF
Total/NA	Analysis	SM 5210B		1	278765	12/08/15 16:17	CLT	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 12/07/15 11:35

Date Received: 12/07/15 15:05

Lab Sample ID: 480-92248-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	278632	12/08/15 14:01	JRL	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 12/07/15 11:40

Date Received: 12/07/15 15:05

Lab Sample ID: 480-92248-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	280407	12/18/15 01:11	GTG	TAL BUF
Total/NA	Analysis	8021B		200	278632	12/08/15 14:32	JRL	TAL BUF
Total/NA	Prep	200.7			278630	12/08/15 10:15	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	278793	12/08/15 21:35	AMH	TAL BUF
Total/NA	Analysis	300.0		20	279120	12/11/15 12:33	CAS	TAL BUF
Total/NA	Analysis	310.2		10	279930	12/15/15 20:58	CEA	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Client Sample ID: Inside/Outside Sump

Lab Sample ID: 480-92248-4

Date Collected: 12/07/15 11:45

Matrix: Wastewater

Date Received: 12/07/15 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	278632	12/08/15 15:04	JRL	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: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
608	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
1664A	HEM and SGT-HEM	1664A	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
420.1	Phenolics, Total Recoverable	MCAWW	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: Gastown WWTP #915171

TestAmerica Job ID: 480-92248-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-92248-1	Post-Carbon 3	Wastewater	12/07/15 11:30	12/07/15 15:05
480-92248-2	Post-Carbon 2	Water	12/07/15 11:35	12/07/15 15:05
480-92248-3	Pre-Carbon	Wastewater	12/07/15 11:40	12/07/15 15:05
480-92248-4	Inside/Outside Sump	Wastewater	12/07/15 11:45	12/07/15 15:05

10 Hazelwood Drive

phone 716.504.9852 fax 716.691.7991

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Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-92248-1

Login Number: 92248

List Number: 1

Creator: Janish, Carl 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.	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.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-93299-1

Client Project/Site: Gastown WWTP #915171


For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

1/8/2016 12:52:32 PM

Joe Giacomazza, Project Management Assistant II

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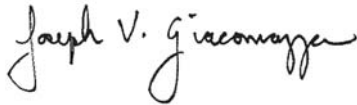
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions 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.

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.



Joe Giacomazza
Project Management Assistant II
1/8/2016 12:52:32 PM



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Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC 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
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Job ID: 480-93299-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-93299-1

Receipt

The samples were received on 12/30/2015 10:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) for batch analytical batch 480-282422 recovered outside control limits for the following analyte: Acetone. These analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-93299-1).

Method(s) 8260C: Due to the co-elution of 2-Chloro-1,3-butadiene with Vinyl acetate in the full spike solution, Vinyl Acetate exceeded control limits in the laboratory control sample (LCS) associated with batch 480-282422 . The following sample is impacted: Post-Carbon 3 (480-93299-1).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-93299-3). 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

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-93299-3) and Inside/outside sump (480-93299-4). 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.

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-93299-1).

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

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Client Sample ID: Post-Carbon 3

Date Collected: 12/30/15 10:00

Date Received: 12/30/15 10:55

Lab Sample ID: 480-93299-1

Matrix: Wastewater

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			01/06/16 12:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/06/16 12:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/06/16 12:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/06/16 12:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/06/16 12:54	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/06/16 12:54	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			01/06/16 12:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/06/16 12:54	1
2-Hexanone	ND		5.0	1.2	ug/L			01/06/16 12:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/06/16 12:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/06/16 12:54	1
Acetone	ND	*	10	3.0	ug/L			01/06/16 12:54	1
Benzene	ND		1.0	0.41	ug/L			01/06/16 12:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/06/16 12:54	1
Bromoform	ND		1.0	0.26	ug/L			01/06/16 12:54	1
Bromomethane	ND		1.0	0.69	ug/L			01/06/16 12:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/06/16 12:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/06/16 12:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/06/16 12:54	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/06/16 12:54	1
Chloroethane	ND		1.0	0.32	ug/L			01/06/16 12:54	1
Chloroform	ND		1.0	0.34	ug/L			01/06/16 12:54	1
Chloromethane	ND		1.0	0.35	ug/L			01/06/16 12:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/06/16 12:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/06/16 12:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/06/16 12:54	1
Styrene	ND		1.0	0.73	ug/L			01/06/16 12:54	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/06/16 12:54	1
Toluene	ND		1.0	0.51	ug/L			01/06/16 12:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/06/16 12:54	1
Trichloroethene	ND		1.0	0.46	ug/L			01/06/16 12:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/06/16 12:54	1
Vinyl acetate	ND	*	5.0	0.85	ug/L			01/06/16 12:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/06/16 12:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		66 - 137		01/06/16 12:54	1
Toluene-d8 (Surr)	95		71 - 126		01/06/16 12:54	1
4-Bromofluorobenzene (Surr)	103		73 - 120		01/06/16 12:54	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			01/04/16 16:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/04/16 16:46	1
Benzene	ND		0.20	0.023	ug/L			01/04/16 16:46	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/04/16 16:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/04/16 16:46	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/04/16 16:46	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/04/16 16:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/04/16 16:46	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-93299-1

Date Collected: 12/30/15 10:00

Matrix: Wastewater

Date Received: 12/30/15 10:55

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			01/04/16 16:46	1
o-Xylene	ND		0.20	0.027	ug/L			01/04/16 16:46	1
p-Cymene	ND		0.20	0.030	ug/L			01/04/16 16:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/04/16 16:46	1
Toluene	ND		0.20	0.036	ug/L			01/04/16 16:46	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/04/16 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145		01/04/16 16:46	1
4-Bromofluorobenzene	97		64 - 141		01/04/16 16:46	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	64.2		50.0	19.3	ug/L		12/31/15 06:57	12/31/15 12:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.10		0.010	0.0050	mg/L		12/31/15 10:00	01/02/16 11:21	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.73	HF	0.100	0.100	SU			12/31/15 12:14	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Client Sample ID: Post-Carbon 2

Date Collected: 12/30/15 10:05

Date Received: 12/30/15 10:55

Lab Sample ID: 480-93299-2

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			01/04/16 17:18	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/04/16 17:18	1
Benzene	0.18	J	0.20	0.023	ug/L			01/04/16 17:18	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/04/16 17:18	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/04/16 17:18	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/04/16 17:18	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/04/16 17:18	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/04/16 17:18	1
n-Propylbenzene	ND		0.20	0.13	ug/L			01/04/16 17:18	1
o-Xylene	ND		0.20	0.027	ug/L			01/04/16 17:18	1
p-Cymene	ND		0.20	0.030	ug/L			01/04/16 17:18	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/04/16 17:18	1
Toluene	ND		0.20	0.036	ug/L			01/04/16 17:18	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/04/16 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		63 - 145		01/04/16 17:18	1
4-Bromofluorobenzene	102		64 - 141		01/04/16 17:18	1

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Client Sample ID: Pre-Carbon

Date Collected: 12/30/15 10:15

Date Received: 12/30/15 10:55

Lab Sample ID: 480-93299-3

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		40	6.9	ug/L			01/04/16 17:50	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			01/04/16 17:50	200
Benzene	110		40	4.7	ug/L			01/04/16 17:50	200
Ethylbenzene	ND		40	5.7	ug/L			01/04/16 17:50	200
Isopropylbenzene	ND		40	5.4	ug/L			01/04/16 17:50	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			01/04/16 17:50	200
m,p-Xylene	ND		80	11	ug/L			01/04/16 17:50	200
n-Butylbenzene	ND		40	6.2	ug/L			01/04/16 17:50	200
n-Propylbenzene	ND		40	26	ug/L			01/04/16 17:50	200
o-Xylene	8.4	J	40	5.4	ug/L			01/04/16 17:50	200
p-Cymene	ND		40	5.9	ug/L			01/04/16 17:50	200
sec-Butylbenzene	ND		40	4.1	ug/L			01/04/16 17:50	200
Toluene	7.8	J	40	7.1	ug/L			01/04/16 17:50	200
Xylenes, Total	ND		120	11	ug/L			01/04/16 17:50	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		01/04/16 17:50	200
4-Bromofluorobenzene	96		64 - 141		01/04/16 17:50	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95900		500	100	ug/L		12/31/15 06:57	12/31/15 13:02	1
Iron	192		50.0	19.3	ug/L		12/31/15 06:57	12/31/15 13:02	1
Magnesium	39700		200	43.4	ug/L		12/31/15 06:57	12/31/15 13:02	1
Potassium	3350		500	100	ug/L		12/31/15 06:57	12/31/15 13:02	1
Sodium	51400		1000	324	ug/L		12/31/15 06:57	12/31/15 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.9		1.0	0.56	mg/L			01/06/16 09:45	2
Sulfate	113		4.0	0.70	mg/L			01/06/16 09:45	2
Alkalinity, Total	363		50.0	20.0	mg/L			01/04/16 21:32	5

TestAmerica Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Client Sample ID: Inside/outside sump

Lab Sample ID: 480-93299-4

Date Collected: 12/30/15 10:30

Matrix: Water

Date Received: 12/30/15 10:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		40	6.9	ug/L			01/04/16 18:22	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			01/04/16 18:22	200
Benzene	1400		40	4.7	ug/L			01/04/16 18:22	200
Ethylbenzene	97		40	5.7	ug/L			01/04/16 18:22	200
Isopropylbenzene	ND		40	5.4	ug/L			01/04/16 18:22	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			01/04/16 18:22	200
m,p-Xylene	28 J		80	11	ug/L			01/04/16 18:22	200
n-Butylbenzene	ND		40	6.2	ug/L			01/04/16 18:22	200
n-Propylbenzene	ND		40	26	ug/L			01/04/16 18:22	200
o-Xylene	ND		40	5.4	ug/L			01/04/16 18:22	200
p-Cymene	ND		40	5.9	ug/L			01/04/16 18:22	200
sec-Butylbenzene	ND		40	4.1	ug/L			01/04/16 18:22	200
Toluene	220		40	7.1	ug/L			01/04/16 18:22	200
Xylenes, Total	28 J		120	11	ug/L			01/04/16 18:22	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145		01/04/16 18:22	200
4-Bromofluorobenzene	93		64 - 141		01/04/16 18:22	200

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Client Sample ID: Post-Carbon 3

Date Collected: 12/30/15 10:00

Date Received: 12/30/15 10:55

Lab Sample ID: 480-93299-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	282422	01/06/16 12:54	SWO	TAL BUF
Total/NA	Analysis	8021B		1	282184	01/04/16 16:46	MRB	TAL BUF
Total/NA	Prep	200.7			281910	12/31/15 06:57	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	282153	12/31/15 12:36	AMH	TAL BUF
Total/NA	Prep	Distill/CN			282040	12/31/15 10:00	JJK	TAL BUF
Total/NA	Analysis	335.4		1	282101	01/02/16 11:21	ZRJ	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	282053	12/31/15 12:14	JJK	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 12/30/15 10:05

Date Received: 12/30/15 10:55

Lab Sample ID: 480-93299-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	282184	01/04/16 17:18	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 12/30/15 10:15

Date Received: 12/30/15 10:55

Lab Sample ID: 480-93299-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	282184	01/04/16 17:50	MRB	TAL BUF
Total/NA	Prep	200.7			281910	12/31/15 06:57	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	282153	12/31/15 13:02	AMH	TAL BUF
Total/NA	Analysis	300.0		2	282400	01/06/16 09:45	CAS	TAL BUF
Total/NA	Analysis	310.2		5	282246	01/04/16 21:32	CEA	TAL BUF

Client Sample ID: Inside/outside sump

Date Collected: 12/30/15 10:30

Date Received: 12/30/15 10:55

Lab Sample ID: 480-93299-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	282184	01/04/16 18:22	MRB	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: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8021B		Wastewater	m,p-Xylene
8021B		Wastewater	o-Xylene
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene
8260C		Wastewater	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

Client: New York State D.E.C.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: Gastown WWTP #915171

TestAmerica Job ID: 480-93299-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-93299-1	Post-Carbon 3	Wastewater	12/30/15 10:00	12/30/15 10:55
480-93299-2	Post-Carbon 2	Wastewater	12/30/15 10:05	12/30/15 10:55
480-93299-3	Pre-Carbon	Wastewater	12/30/15 10:15	12/30/15 10:55
480-93299-4	Inside/outside sump	Water	12/30/15 10:30	12/30/15 10:55

10 Hazelwood Drive

Amherst, NY 14228
phone 716.504.9852 fax 716.691.7991

Chain of Custody Record



480-93299 Chain of Custody

[illegible]

Form No. CA-C-WI-002, dated 04/07/2011

3.0 Hz

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-93299-1

Login Number: 93299

List Number: 1

Creator: Wallace, Cameron

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.	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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	