

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

**2017 LAB REPORTS
FOR THE GROUNDWATER COLLECTION
& TREATMENT SYSTEM**

All lab reports for 2017 are available.

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-112538-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

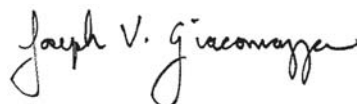
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

1/27/2017 4:35:45 PM

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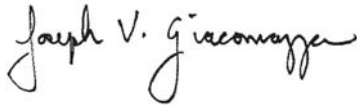
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Results relate only to the items tested and the sample(s) as received by the laboratory.

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
1/27/2017 4:35:45 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-112538-1

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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
□	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: 480-112538-1

Job ID: 480-112538-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-112538-1

Receipt

The samples were received on 1/20/2017 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

GC/MS VOA

Method(s) 8260C: The results reported for the following samples do not concur with results previously reported for this site: Post-Carbon 3 (480-112538-1). Reanalysis was performed, and the result confirmed.

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 (480-112538-2). 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 (480-112538-2), Post-Carbon 1 (480-112538-4) and OUTSIDE SUMP (480-112538-5). 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) 335.4: The results reported for the following sample do not concur with results previously reported for this site: Post-Carbon 3 (480-112538-1). 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 has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-112538-1).

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: 480-112538-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-112538-1

Date Collected: 01/20/17 14:30

Matrix: Wastewater

Date Received: 01/20/17 15:25

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			01/25/17 03:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/25/17 03:21	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/25/17 03:21	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/25/17 03:21	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/25/17 03:21	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/25/17 03:21	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			01/25/17 03:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/25/17 03:21	1
2-Hexanone	ND		5.0	1.2	ug/L			01/25/17 03:21	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/25/17 03:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/25/17 03:21	1
Acetone	ND		10	3.0	ug/L			01/25/17 03:21	1
Benzene	ND		1.0	0.41	ug/L			01/25/17 03:21	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/25/17 03:21	1
Bromoform	ND		1.0	0.26	ug/L			01/25/17 03:21	1
Bromomethane	ND		1.0	0.69	ug/L			01/25/17 03:21	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/25/17 03:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/25/17 03:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/25/17 03:21	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/25/17 03:21	1
Chloroethane	ND		1.0	0.32	ug/L			01/25/17 03:21	1
Chloroform	ND		1.0	0.34	ug/L			01/25/17 03:21	1
Chloromethane	ND		1.0	0.35	ug/L			01/25/17 03:21	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/25/17 03:21	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/25/17 03:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/25/17 03:21	1
Styrene	ND		1.0	0.73	ug/L			01/25/17 03:21	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/25/17 03:21	1
Toluene	ND		1.0	0.51	ug/L			01/25/17 03:21	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/25/17 03:21	1
Trichloroethene	ND		1.0	0.46	ug/L			01/25/17 03:21	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/25/17 03:21	1
Vinyl acetate	ND		5.0	0.85	ug/L			01/25/17 03:21	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/25/17 03:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		01/25/17 03:21	1
Toluene-d8 (Surr)	101		80 - 120		01/25/17 03:21	1
4-Bromofluorobenzene (Surr)	99		73 - 120		01/25/17 03:21	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			01/23/17 18:33	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/23/17 18:33	1
Benzene	ND		0.20	0.023	ug/L			01/23/17 18:33	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/23/17 18:33	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/23/17 18:33	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/23/17 18:33	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/23/17 18:33	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/23/17 18:33	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-112538-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-112538-1

Date Collected: 01/20/17 14:30

Matrix: Wastewater

Date Received: 01/20/17 15:25

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			01/23/17 18:33	1
o-Xylene	ND		0.20	0.027	ug/L			01/23/17 18:33	1
p-Cymene	ND		0.20	0.030	ug/L			01/23/17 18:33	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/23/17 18:33	1
Toluene	ND		0.20	0.036	ug/L			01/23/17 18:33	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/23/17 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129		01/23/17 18:33	1
4-Bromofluorobenzene	93		64 - 128		01/23/17 18:33	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	38.6	J	50.0	19.3	ug/L		01/23/17 09:35	01/24/17 01:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0050	mg/L		01/24/17 15:31	01/25/17 10:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6	HF	0.1	0.1	SU			01/23/17 12:59	1

Client Sample Results

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

TestAmerica Job ID: 480-112538-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-112538-2

Date Collected: 01/20/17 14:45

Matrix: Wastewater

Date Received: 01/20/17 15:25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	12	J	20	3.5	ug/L			01/23/17 16:24	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			01/23/17 16:24	100
Benzene	2000		20	2.3	ug/L			01/23/17 16:24	100
Ethylbenzene	150		20	2.9	ug/L			01/23/17 16:24	100
Isopropylbenzene	ND		20	2.7	ug/L			01/23/17 16:24	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			01/23/17 16:24	100
m,p-Xylene	80		40	5.4	ug/L			01/23/17 16:24	100
n-Butylbenzene	ND		20	3.1	ug/L			01/23/17 16:24	100
n-Propylbenzene	ND		20	13	ug/L			01/23/17 16:24	100
o-Xylene	43		20	2.7	ug/L			01/23/17 16:24	100
p-Cymene	ND		20	3.0	ug/L			01/23/17 16:24	100
sec-Butylbenzene	ND		20	2.0	ug/L			01/23/17 16:24	100
Toluene	410		20	3.6	ug/L			01/23/17 16:24	100
Xylenes, Total	120		60	5.4	ug/L			01/23/17 16:24	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	101		63 - 129		01/23/17 16:24	100
<i>4-Bromofluorobenzene</i>	92		64 - 128		01/23/17 16:24	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	131000	B	500	100	ug/L		01/23/17 09:35	01/24/17 01:25	1
Iron	1030		50.0	19.3	ug/L		01/23/17 09:35	01/24/17 01:25	1
Magnesium	48900		200	43.4	ug/L		01/23/17 09:35	01/24/17 01:25	1
Potassium	3840		500	100	ug/L		01/23/17 09:35	01/24/17 01:25	1
Sodium	59500		1000	324	ug/L		01/23/17 09:35	01/24/17 01:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		10.0	5.6	mg/L			01/24/17 03:03	20
Sulfate	179	B	40.0	7.0	mg/L			01/24/17 03:03	20
Alkalinity, Total	369		50.0	20.0	mg/L			01/24/17 12:22	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-112538-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-112538-3

Date Collected: 01/20/17 14:35

Matrix: Water

Date Received: 01/20/17 15:25

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			01/23/17 18:00	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/23/17 18:00	1
Benzene	0.029	J	0.20	0.023	ug/L			01/23/17 18:00	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/23/17 18:00	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/23/17 18:00	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/23/17 18:00	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/23/17 18:00	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/23/17 18:00	1
n-Propylbenzene	ND		0.20	0.13	ug/L			01/23/17 18:00	1
o-Xylene	ND		0.20	0.027	ug/L			01/23/17 18:00	1
p-Cymene	ND		0.20	0.030	ug/L			01/23/17 18:00	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/23/17 18:00	1
Toluene	ND		0.20	0.036	ug/L			01/23/17 18:00	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/23/17 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129		01/23/17 18:00	1
4-Bromofluorobenzene	89		64 - 128		01/23/17 18:00	1

Client Sample Results

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

TestAmerica Job ID: 480-112538-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-112538-4

Date Collected: 01/20/17 14:40

Matrix: Water

Date Received: 01/20/17 15:25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.4	J	5.0	0.87	ug/L			01/23/17 16:56	25
1,3,5-Trimethylbenzene	ND		5.0	3.8	ug/L			01/23/17 16:56	25
Benzene	270		5.0	0.58	ug/L			01/23/17 16:56	25
Ethylbenzene	18		5.0	0.72	ug/L			01/23/17 16:56	25
Isopropylbenzene	ND		5.0	0.68	ug/L			01/23/17 16:56	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			01/23/17 16:56	25
m,p-Xylene	10		10	1.4	ug/L			01/23/17 16:56	25
n-Butylbenzene	ND		5.0	0.77	ug/L			01/23/17 16:56	25
n-Propylbenzene	ND		5.0	3.3	ug/L			01/23/17 16:56	25
o-Xylene	6.3		5.0	0.68	ug/L			01/23/17 16:56	25
p-Cymene	ND		5.0	0.74	ug/L			01/23/17 16:56	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			01/23/17 16:56	25
Toluene	55		5.0	0.89	ug/L			01/23/17 16:56	25
Xylenes, Total	16		15	1.4	ug/L			01/23/17 16:56	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129		01/23/17 16:56	25
4-Bromofluorobenzene	91		64 - 128		01/23/17 16:56	25

Client Sample Results

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

TestAmerica Job ID: 480-112538-1

Client Sample ID: OUTSIDE SUMP

Lab Sample ID: 480-112538-5

Date Collected: 01/20/17 15:00

Matrix: Water

Date Received: 01/20/17 15:25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	33	J	100	17	ug/L			01/23/17 17:29	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			01/23/17 17:29	500
Benzene	2900		100	12	ug/L			01/23/17 17:29	500
Ethylbenzene	200		100	14	ug/L			01/23/17 17:29	500
Isopropylbenzene	ND		100	14	ug/L			01/23/17 17:29	500
Methyl tert-butyl ether	ND		200	22	ug/L			01/23/17 17:29	500
m,p-Xylene	89	J	200	27	ug/L			01/23/17 17:29	500
n-Butylbenzene	ND		100	15	ug/L			01/23/17 17:29	500
n-Propylbenzene	ND		100	65	ug/L			01/23/17 17:29	500
o-Xylene	49	J	100	14	ug/L			01/23/17 17:29	500
p-Cymene	ND		100	15	ug/L			01/23/17 17:29	500
sec-Butylbenzene	ND		100	10	ug/L			01/23/17 17:29	500
Toluene	510		100	18	ug/L			01/23/17 17:29	500
Xylenes, Total	140	J	300	27	ug/L			01/23/17 17:29	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129		01/23/17 17:29	500
4-Bromofluorobenzene	91		64 - 128		01/23/17 17:29	500

Lab Chronicle

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

TestAmerica Job ID: 480-112538-1

Client Sample ID: Post-Carbon 3

Date Collected: 01/20/17 14:30

Date Received: 01/20/17 15:25

Lab Sample ID: 480-112538-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	341263	01/25/17 03:21	RJF	TAL BUF
Total/NA	Analysis	8021B		1	340975	01/23/17 18:33	MRB	TAL BUF
Total/NA	Prep	200.7			340984	01/23/17 09:35	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	341169	01/24/17 01:21	LMH	TAL BUF
Total/NA	Prep	Distill/CN			341240	01/24/17 15:31	JCL	TAL BUF
Total/NA	Analysis	335.4		1	341351	01/25/17 10:22	KRT	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	341060	01/23/17 12:59	CEA	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 01/20/17 14:45

Date Received: 01/20/17 15:25

Lab Sample ID: 480-112538-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	340975	01/23/17 16:24	MRB	TAL BUF
Total/NA	Prep	200.7			340984	01/23/17 09:35	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	341169	01/24/17 01:25	LMH	TAL BUF
Total/NA	Analysis	300.0		20	341085	01/24/17 03:03	CAV	TAL BUF
Total/NA	Analysis	310.2		5	341221	01/24/17 12:22	LED	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 01/20/17 14:35

Date Received: 01/20/17 15:25

Lab Sample ID: 480-112538-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	340975	01/23/17 18:00	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 01/20/17 14:40

Date Received: 01/20/17 15:25

Lab Sample ID: 480-112538-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		25	340975	01/23/17 16:56	MRB	TAL BUF

Client Sample ID: OUTSIDE SUMP

Date Collected: 01/20/17 15:00

Date Received: 01/20/17 15:25

Lab Sample ID: 480-112538-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	340975	01/23/17 17:29	MRB	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: 480-112538-1

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	03-31-17 *

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.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

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: 480-112538-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-112538-1	Post-Carbon 3	Wastewater	01/20/17 14:30	01/20/17 15:25
480-112538-2	Pre-Carbon	Wastewater	01/20/17 14:45	01/20/17 15:25
480-112538-3	Post-Carbon 2	Water	01/20/17 14:35	01/20/17 15:25
480-112538-4	Post-Carbon 1	Water	01/20/17 14:40	01/20/17 15:25
480-112538-5	OUTSIDE SUMP	Water	01/20/17 15:00	01/20/17 15:25

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1/27/2017

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-112538-1

Login Number: 112538

List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	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: 480-113916-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

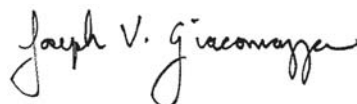
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

3/7/2017 2:45:24 PM

Joe Giacomazza, Project Management Assistant II

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Designee for

Orlette Johnson, Senior Project Manager

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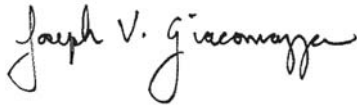
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions 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
3/7/2017 2:45:24 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-113916-1

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.

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: 480-113916-1

Job ID: 480-113916-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-113916-1

Receipt

The samples were received on 2/24/2017 1:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-345334 recovered above the upper control limit for 2-Hexanone. 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 (480-113916-1).

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 due to the abundance of non-target analytes: Pre-Carbon (480-113916-2). 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 diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-113916-2) and OUTSIDE SUMP (480-113916-5). 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 (480-113916-1).

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: 480-113916-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-113916-1

Date Collected: 02/24/17 12:30

Matrix: Wastewater

Date Received: 02/24/17 13:50

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			02/26/17 14:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/17 14:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/17 14:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/26/17 14:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/17 14:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/17 14:25	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			02/26/17 14:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/17 14:25	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/17 14:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/17 14:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/17 14:25	1
Acetone	4.3	J	10	3.0	ug/L			02/26/17 14:25	1
Benzene	ND		1.0	0.41	ug/L			02/26/17 14:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/17 14:25	1
Bromoform	ND		1.0	0.26	ug/L			02/26/17 14:25	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/17 14:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/17 14:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/17 14:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/17 14:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/17 14:25	1
Chloroethane	ND		1.0	0.32	ug/L			02/26/17 14:25	1
Chloroform	ND		1.0	0.34	ug/L			02/26/17 14:25	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/17 14:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/17 14:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/17 14:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/17 14:25	1
Styrene	ND		1.0	0.73	ug/L			02/26/17 14:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/17 14:25	1
Toluene	ND		1.0	0.51	ug/L			02/26/17 14:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/17 14:25	1
Trichloroethene	ND		1.0	0.46	ug/L			02/26/17 14:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/26/17 14:25	1
Vinyl acetate	ND		5.0	0.85	ug/L			02/26/17 14:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/17 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		02/26/17 14:25	1
Toluene-d8 (Surr)	100		80 - 120		02/26/17 14:25	1
4-Bromofluorobenzene (Surr)	106		73 - 120		02/26/17 14:25	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			02/26/17 00:04	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/26/17 00:04	1
Benzene	0.069	J	0.20	0.023	ug/L			02/26/17 00:04	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/26/17 00:04	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/26/17 00:04	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/26/17 00:04	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/26/17 00:04	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/26/17 00:04	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-113916-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-113916-1

Date Collected: 02/24/17 12:30

Matrix: Wastewater

Date Received: 02/24/17 13:50

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			02/26/17 00:04	1
o-Xylene	ND		0.20	0.027	ug/L			02/26/17 00:04	1
p-Cymene	ND		0.20	0.030	ug/L			02/26/17 00:04	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/26/17 00:04	1
Toluene	ND		0.20	0.036	ug/L			02/26/17 00:04	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/26/17 00:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129		02/26/17 00:04	1
4-Bromofluorobenzene	92		64 - 128		02/26/17 00:04	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0	19.3	ug/L		02/27/17 09:40	02/27/17 17:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0050	mg/L		02/28/17 04:05	03/01/17 10:12	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6	HF	0.1	0.1	SU			02/26/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 480-113916-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-113916-2

Date Collected: 02/24/17 12:45

Matrix: Wastewater

Date Received: 02/24/17 13:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.0		2.0	0.35	ug/L			02/28/17 14:55	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			02/28/17 14:55	10
Benzene	980		10	1.2	ug/L			03/01/17 15:26	50
Ethylbenzene	84		2.0	0.29	ug/L			02/28/17 14:55	10
Isopropylbenzene	ND		2.0	0.27	ug/L			02/28/17 14:55	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			02/28/17 14:55	10
m,p-Xylene	44		4.0	0.54	ug/L			02/28/17 14:55	10
n-Butylbenzene	ND		2.0	0.31	ug/L			02/28/17 14:55	10
n-Propylbenzene	ND		2.0	1.3	ug/L			02/28/17 14:55	10
o-Xylene	25		2.0	0.27	ug/L			02/28/17 14:55	10
p-Cymene	ND		2.0	0.30	ug/L			02/28/17 14:55	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			02/28/17 14:55	10
Toluene	210		2.0	0.36	ug/L			02/28/17 14:55	10
Xylenes, Total	69		6.0	0.54	ug/L			02/28/17 14:55	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	93		63 - 129		02/28/17 14:55	10
<i>a,a,a-Trifluorotoluene</i>	92		63 - 129		03/01/17 15:26	50
<i>4-Bromofluorobenzene</i>	88		64 - 128		02/28/17 14:55	10
<i>4-Bromofluorobenzene</i>	85		64 - 128		03/01/17 15:26	50

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	86400		500	100	ug/L		02/27/17 09:40	02/27/17 17:39	1
Iron	628		50.0	19.3	ug/L		02/27/17 09:40	02/27/17 17:39	1
Magnesium	34000		200	43.4	ug/L		02/27/17 09:40	02/27/17 17:39	1
Potassium	2480		500	100	ug/L		02/27/17 09:40	02/27/17 17:39	1
Sodium	42900		1000	324	ug/L		02/27/17 09:40	02/27/17 17:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.3		10.0	5.6	mg/L			03/01/17 21:42	20
Sulfate	90.7		40.0	7.0	mg/L			03/01/17 21:42	20
Alkalinity, Total	282		50.0	20.0	mg/L			03/06/17 13:14	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-113916-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-113916-3

Date Collected: 02/24/17 12:35

Matrix: Wastewater

Date Received: 02/24/17 13:50

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			02/28/17 13:51	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/28/17 13:51	1
Benzene	0.057	J	0.20	0.023	ug/L			02/28/17 13:51	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/28/17 13:51	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/28/17 13:51	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/28/17 13:51	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/28/17 13:51	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/28/17 13:51	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/28/17 13:51	1
o-Xylene	ND		0.20	0.027	ug/L			02/28/17 13:51	1
p-Cymene	ND		0.20	0.030	ug/L			02/28/17 13:51	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/28/17 13:51	1
Toluene	0.037	J	0.20	0.036	ug/L			02/28/17 13:51	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/28/17 13:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 129		02/28/17 13:51	1
4-Bromofluorobenzene	86		64 - 128		02/28/17 13:51	1

Client Sample Results

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

TestAmerica Job ID: 480-113916-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-113916-4

Date Collected: 02/24/17 12:40

Matrix: Water

Date Received: 02/24/17 13:50

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			02/28/17 14:23	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/28/17 14:23	1
Benzene	ND		0.20	0.023	ug/L			02/28/17 14:23	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/28/17 14:23	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/28/17 14:23	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/28/17 14:23	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/28/17 14:23	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/28/17 14:23	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/28/17 14:23	1
o-Xylene	ND		0.20	0.027	ug/L			02/28/17 14:23	1
p-Cymene	ND		0.20	0.030	ug/L			02/28/17 14:23	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/28/17 14:23	1
Toluene	ND		0.20	0.036	ug/L			02/28/17 14:23	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/28/17 14:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 129		02/28/17 14:23	1
4-Bromofluorobenzene	85		64 - 128		02/28/17 14:23	1

Client Sample Results

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

TestAmerica Job ID: 480-113916-1

Client Sample ID: OUTSIDE SUMP

Lab Sample ID: 480-113916-5

Date Collected: 02/24/17 12:55

Matrix: Water

Date Received: 02/24/17 13:50

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			02/25/17 21:56	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			02/25/17 21:56	500
Benzene	2300		100	12	ug/L			02/25/17 21:56	500
Ethylbenzene	210		100	14	ug/L			02/25/17 21:56	500
Isopropylbenzene	ND		100	14	ug/L			02/25/17 21:56	500
Methyl tert-butyl ether	ND		200	22	ug/L			02/25/17 21:56	500
m,p-Xylene	85 J		200	27	ug/L			02/25/17 21:56	500
n-Butylbenzene	ND		100	15	ug/L			02/25/17 21:56	500
n-Propylbenzene	ND		100	65	ug/L			02/25/17 21:56	500
o-Xylene	ND		100	14	ug/L			02/25/17 21:56	500
p-Cymene	ND		100	15	ug/L			02/25/17 21:56	500
sec-Butylbenzene	ND		100	10	ug/L			02/25/17 21:56	500
Toluene	450		100	18	ug/L			02/25/17 21:56	500
Xylenes, Total	85 J		300	27	ug/L			02/25/17 21:56	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 129		02/25/17 21:56	500
4-Bromofluorobenzene	89		64 - 128		02/25/17 21:56	500

Lab Chronicle

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

TestAmerica Job ID: 480-113916-1

Client Sample ID: Post-Carbon 3

Date Collected: 02/24/17 12:30

Date Received: 02/24/17 13:50

Lab Sample ID: 480-113916-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	345334	02/26/17 14:25	NEA	TAL BUF
Total/NA	Analysis	8021B		1	345325	02/26/17 00:04	JLS	TAL BUF
Total/NA	Prep	200.7			345380	02/27/17 09:40	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	345524	02/27/17 17:22	LMH	TAL BUF
Total/NA	Prep	Distill/CN			345539	02/28/17 04:05	LAW	TAL BUF
Total/NA	Analysis	335.4		1	345772	03/01/17 10:12	KRT	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	345338	02/26/17 13:37	CEA	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 02/24/17 12:45

Date Received: 02/24/17 13:50

Lab Sample ID: 480-113916-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	345483	02/28/17 14:55	JLS	TAL BUF
Total/NA	Analysis	8021B		50	345700	03/01/17 15:26	JLS	TAL BUF
Total/NA	Prep	200.7			345380	02/27/17 09:40	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	345524	02/27/17 17:39	LMH	TAL BUF
Total/NA	Analysis	300.0		20	345801	03/01/17 21:42	DMR	TAL BUF
Total/NA	Analysis	310.2		5	346326	03/06/17 13:14	CEA	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 02/24/17 12:35

Date Received: 02/24/17 13:50

Lab Sample ID: 480-113916-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	345483	02/28/17 13:51	JLS	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 02/24/17 12:40

Date Received: 02/24/17 13:50

Lab Sample ID: 480-113916-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	345483	02/28/17 14:23	JLS	TAL BUF

Client Sample ID: OUTSIDE SUMP

Date Collected: 02/24/17 12:55

Date Received: 02/24/17 13:50

Lab Sample ID: 480-113916-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	345325	02/25/17 21:56	JLS	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-113916-1

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: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

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	03-31-17 *

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.
Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

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: 480-113916-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-113916-1	Post-Carbon 3	Wastewater	02/24/17 12:30	02/24/17 13:50
480-113916-2	Pre-Carbon	Wastewater	02/24/17 12:45	02/24/17 13:50
480-113916-3	Post-Carbon 2	Wastewater	02/24/17 12:35	02/24/17 13:50
480-113916-4	Post-Carbon 1	Water	02/24/17 12:40	02/24/17 13:50
480-113916-5	OUTSIDE SUMP	Water	02/24/17 12:55	02/24/17 13:50

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.

[illegible]

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

#3 2.0°C

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-113916-1

Login Number: 113916

List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Invoice/Credit No.	48292883	Invoice Date	March 30, 2017
Terms	See Below	Federal Tax ID	23-2919996
Remit to	TestAmerica Laboratories, Inc. PO BOX 204290, Dallas, TX 75320-4290		

Bill to:
New York State D.E.C. Attn: Richard Dana 625 Broadway Albany, NY 12233-4500

Ship to:
New York State D.E.C. 270 Michigan Avenue Buffalo, NY 14203

P.O. Number	W.O. Number	Contract Number	Work Ordered by
CallOut ID 120597		C008010	Mr. Richard Dana
Job Description	Site Name	SDG Number	Invoice Contact
See below	Gastown WWTP		Mr. Richard Dana

Job No.	Item #	Job Description	Sample Date	Quantity	Unit Price	Amount
		Method/Test Description				
J114759-1		Gastown WWTP #915171	03/17/2017			
	SS-03-C	8021B - Gastown - VOA - 8021		5.00	115.00	575.00
	SS-07-C	8260C - Gastown - VOA - 8260		1.00	169.00	169.00
	WT-27-C	SM 4500 H+ B - pH		1.00	6.00	6.00
	WT-61-C	200.7 - Preparation, Total Metals		2.00	11.00	22.00
	WT-40-C	200.7 Rev 4.4 - Calcium		1.00	12.00	12.00
	WT-44-C	200.7 Rev 4.4 - Iron		1.00	12.00	12.00
	WT-44-C	200.7 Rev 4.4 - Metals (ICP) - Fe		1.00	12.00	12.00
	WT-46-C	200.7 Rev 4.4 - Magnesium		1.00	12.00	12.00
	WT-50-C	200.7 Rev 4.4 - Potassium		1.00	12.00	12.00
	WT-53-C	200.7 Rev 4.4 - Sodium		1.00	12.00	12.00
	WT-04-C	310.2 - Alkalinity		1.00	10.38	10.38
	WT-06-C	300.0 - Chloride		1.00	13.00	13.00

TestAmerica Buffalo - 10 Hazelwood Drive, Amherst, NY 14228-2298

Invoice/Credit No.		48292883		Invoice Date		March 30, 2017	
Terms		See Below		Federal Tax ID		23-2919996	
Remit to		TestAmerica Laboratories, Inc. PO BOX 204290, Dallas, TX 75320-4290					
Job No.	Item #	Job Description		Sample Date	Quantity	Unit Price	Amount
		Method/Test Description					
	WT-21-C	300.0 - Sulfate			1.00	15.00	15.00
	WT-68-C	335.4 - Cyanide, Total			1.00	30.00	30.00
		NYS DEC 2012 3.16% C.P.I. PRICE ADJUSTMENT					941.21
		NYS DEC 2013 2.07% C.P.I. PRICE ADJUSTMENT					960.69
		NYS DEC 2014 1.46% C.P.I. PRICE ADJUSTMENT					974.72
		NYS DEC 2015 1.62% C.P.I. PRICE ADJUSTMENT					990.51
		NYS DEC 2016 0.12% C.P.I. PRICE ADJUSTMENT					991.70
		With TestAmerica DEC NYS Multiplier 32%					317.34
Project Number		Client Number		Project Manager		Subtotal	\$317.34
48002525		107596		Orlette Johnson			
Latest Sample Receipt Date		Latest Report Date		Phone Number		Total	\$317.34
03/17/2017		03/30/2017		(484) 685-0864			

For proper credit, please include invoice number on all remittance.

TestAmerica Buffalo - 10 Hazelwood Drive, Amherst, NY 14228-2298

This invoice falls under TestAmerica Laboratories Inc. Standard T&C's of Net 30 Days unless superseded by another valid contract vehicle at the time these services were rendered.

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-114759-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

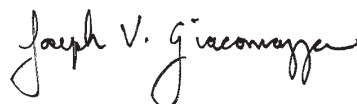
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

3/30/2017 9:25:48 AM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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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
3/30/2017 9:25:48 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-114759-1

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
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: 480-114759-1

Job ID: 480-114759-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-114759-1

Receipt

The samples were received on 3/17/2017 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described 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 sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-114759-2) and OUTSIDE SUMP (480-114759-5). 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 (480-114759-1).

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: 480-114759-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-114759-1

Date Collected: 03/17/17 09:30

Matrix: Wastewater

Date Received: 03/17/17 10:50

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			03/20/17 11:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/20/17 11:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/20/17 11:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/20/17 11:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/20/17 11:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/20/17 11:47	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			03/20/17 11:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/20/17 11:47	1
2-Hexanone	ND		5.0	1.2	ug/L			03/20/17 11:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/20/17 11:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/20/17 11:47	1
Acetone	ND		10	3.0	ug/L			03/20/17 11:47	1
Benzene	ND		1.0	0.41	ug/L			03/20/17 11:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/20/17 11:47	1
Bromoform	ND		1.0	0.26	ug/L			03/20/17 11:47	1
Bromomethane	ND		1.0	0.69	ug/L			03/20/17 11:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/20/17 11:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/20/17 11:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/20/17 11:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/20/17 11:47	1
Chloroethane	ND		1.0	0.32	ug/L			03/20/17 11:47	1
Chloroform	ND		1.0	0.34	ug/L			03/20/17 11:47	1
Chloromethane	ND		1.0	0.35	ug/L			03/20/17 11:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/20/17 11:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/20/17 11:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/20/17 11:47	1
Styrene	ND		1.0	0.73	ug/L			03/20/17 11:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/20/17 11:47	1
Toluene	ND		1.0	0.51	ug/L			03/20/17 11:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/20/17 11:47	1
Trichloroethene	ND		1.0	0.46	ug/L			03/20/17 11:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/20/17 11:47	1
Vinyl acetate	ND		5.0	0.85	ug/L			03/20/17 11:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/20/17 11:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120		03/20/17 11:47	1
Toluene-d8 (Surr)	104		80 - 120		03/20/17 11:47	1
4-Bromofluorobenzene (Surr)	108		73 - 120		03/20/17 11:47	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			03/22/17 13:26	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/22/17 13:26	1
Benzene	ND		0.20	0.023	ug/L			03/22/17 13:26	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/22/17 13:26	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/22/17 13:26	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/22/17 13:26	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/22/17 13:26	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/22/17 13:26	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-114759-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-114759-1

Date Collected: 03/17/17 09:30

Matrix: Wastewater

Date Received: 03/17/17 10:50

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			03/22/17 13:26	1
o-Xylene	ND		0.20	0.027	ug/L			03/22/17 13:26	1
p-Cymene	ND		0.20	0.030	ug/L			03/22/17 13:26	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/22/17 13:26	1
Toluene	ND		0.20	0.036	ug/L			03/22/17 13:26	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/22/17 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 129		03/22/17 13:26	1
4-Bromofluorobenzene	91		64 - 128		03/22/17 13:26	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	25.8	J	50.0	19.3	ug/L		03/20/17 09:29	03/21/17 03:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.031		0.010	0.0050	mg/L		03/21/17 13:20	03/22/17 10:28	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7	HF	0.1	0.1	SU			03/21/17 20:26	1
Temperature	21.0	HF	0.001	0.001	Degrees C			03/21/17 20:26	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-114759-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-114759-2

Date Collected: 03/17/17 10:00

Matrix: Wastewater

Date Received: 03/17/17 10:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	6.7	J	10	1.7	ug/L			03/22/17 15:35	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			03/22/17 15:35	50
Benzene	2600		10	1.2	ug/L			03/22/17 15:35	50
Ethylbenzene	260		10	1.4	ug/L			03/22/17 15:35	50
Isopropylbenzene	ND		10	1.4	ug/L			03/22/17 15:35	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			03/22/17 15:35	50
m,p-Xylene	93		20	2.7	ug/L			03/22/17 15:35	50
n-Butylbenzene	ND		10	1.5	ug/L			03/22/17 15:35	50
n-Propylbenzene	ND		10	6.5	ug/L			03/22/17 15:35	50
o-Xylene	63		10	1.4	ug/L			03/22/17 15:35	50
p-Cymene	ND		10	1.5	ug/L			03/22/17 15:35	50
sec-Butylbenzene	ND		10	1.0	ug/L			03/22/17 15:35	50
Toluene	590		10	1.8	ug/L			03/22/17 15:35	50
Xylenes, Total	160		30	2.7	ug/L			03/22/17 15:35	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129		03/22/17 15:35	50
4-Bromofluorobenzene	102		64 - 128		03/22/17 15:35	50

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		03/20/17 09:29	03/21/17 03:42	1
Iron	2390		50.0	19.3	ug/L		03/20/17 09:29	03/21/17 03:42	1
Magnesium	51400		200	43.4	ug/L		03/20/17 09:29	03/21/17 03:42	1
Potassium	3800		500	100	ug/L		03/20/17 09:29	03/21/17 03:42	1
Sodium	66500		1000	324	ug/L		03/20/17 09:29	03/21/17 03:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		10.0	5.6	mg/L			03/29/17 00:41	20
Sulfate	194		40.0	7.0	mg/L			03/29/17 00:41	20
Alkalinity, Total	364		40.0	16.0	mg/L			03/23/17 13:33	4

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-114759-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-114759-3

Date Collected: 03/17/17 09:40

Matrix: Water

Date Received: 03/17/17 10:50

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			03/22/17 13:58	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/22/17 13:58	1
Benzene	ND		0.20	0.023	ug/L			03/22/17 13:58	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/22/17 13:58	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/22/17 13:58	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/22/17 13:58	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/22/17 13:58	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/22/17 13:58	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/22/17 13:58	1
o-Xylene	ND		0.20	0.027	ug/L			03/22/17 13:58	1
p-Cymene	ND		0.20	0.030	ug/L			03/22/17 13:58	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/22/17 13:58	1
Toluene	ND		0.20	0.036	ug/L			03/22/17 13:58	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/22/17 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	109		63 - 129		03/22/17 13:58	1
4-Bromofluorobenzene	98		64 - 128		03/22/17 13:58	1

Client Sample Results

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

TestAmerica Job ID: 480-114759-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-114759-4

Date Collected: 03/17/17 09:50

Matrix: Water

Date Received: 03/17/17 10:50

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			03/22/17 14:30	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/22/17 14:30	1
Benzene	0.13	J	0.20	0.023	ug/L			03/22/17 14:30	1
Ethylbenzene	0.054	J	0.20	0.029	ug/L			03/22/17 14:30	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/22/17 14:30	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/22/17 14:30	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/22/17 14:30	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/22/17 14:30	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/22/17 14:30	1
o-Xylene	ND		0.20	0.027	ug/L			03/22/17 14:30	1
p-Cymene	ND		0.20	0.030	ug/L			03/22/17 14:30	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/22/17 14:30	1
Toluene	0.051	J	0.20	0.036	ug/L			03/22/17 14:30	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/22/17 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		63 - 129		03/22/17 14:30	1
4-Bromofluorobenzene	93		64 - 128		03/22/17 14:30	1

Client Sample Results

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

TestAmerica Job ID: 480-114759-1

Client Sample ID: OUTSIDE SUMP

Lab Sample ID: 480-114759-5

Date Collected: 03/17/17 10:15

Matrix: Water

Date Received: 03/17/17 10:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	35	J	100	17	ug/L			03/22/17 15:02	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			03/22/17 15:02	500
Benzene	4600		100	12	ug/L			03/22/17 15:02	500
Ethylbenzene	380		100	14	ug/L			03/22/17 15:02	500
Isopropylbenzene	ND		100	14	ug/L			03/22/17 15:02	500
Methyl tert-butyl ether	ND		200	22	ug/L			03/22/17 15:02	500
m,p-Xylene	150	J	200	27	ug/L			03/22/17 15:02	500
n-Butylbenzene	ND		100	15	ug/L			03/22/17 15:02	500
n-Propylbenzene	ND		100	65	ug/L			03/22/17 15:02	500
o-Xylene	77	J	100	14	ug/L			03/22/17 15:02	500
p-Cymene	ND		100	15	ug/L			03/22/17 15:02	500
sec-Butylbenzene	ND		100	10	ug/L			03/22/17 15:02	500
Toluene	840		100	18	ug/L			03/22/17 15:02	500
Xylenes, Total	230	J	300	27	ug/L			03/22/17 15:02	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	114		63 - 129		03/22/17 15:02	500
4-Bromofluorobenzene	105		64 - 128		03/22/17 15:02	500

Lab Chronicle

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

TestAmerica Job ID: 480-114759-1

Client Sample ID: Post-Carbon 3

Date Collected: 03/17/17 09:30

Date Received: 03/17/17 10:50

Lab Sample ID: 480-114759-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	348050	03/20/17 11:47	ARS	TAL BUF
Total/NA	Analysis	8021B		1	348418	03/22/17 13:26	JLS	TAL BUF
Total/NA	Prep	200.7			348007	03/20/17 09:29	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	348176	03/21/17 03:38	LMH	TAL BUF
Total/NA	Prep	Distill/CN			348293	03/21/17 13:20	JCL	TAL BUF
Total/NA	Analysis	335.4		1	348492	03/22/17 10:28	KRT	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	348497	03/21/17 20:26	DSC	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 03/17/17 10:00

Date Received: 03/17/17 10:50

Lab Sample ID: 480-114759-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	348418	03/22/17 15:35	JLS	TAL BUF
Total/NA	Prep	200.7			348007	03/20/17 09:29	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	348176	03/21/17 03:42	LMH	TAL BUF
Total/NA	Analysis	300.0		20	349007	03/29/17 00:41	DMR	TAL BUF
Total/NA	Analysis	310.2		4	348650	03/23/17 13:33	KRT	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 03/17/17 09:40

Date Received: 03/17/17 10:50

Lab Sample ID: 480-114759-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	348418	03/22/17 13:58	JLS	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 03/17/17 09:50

Date Received: 03/17/17 10:50

Lab Sample ID: 480-114759-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	348418	03/22/17 14:30	JLS	TAL BUF

Client Sample ID: OUTSIDE SUMP

Date Collected: 03/17/17 10:15

Date Received: 03/17/17 10:50

Lab Sample ID: 480-114759-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	348418	03/22/17 15:02	JLS	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: 480-114759-1

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	03-31-17 *

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
SM 4500 H+ B		Wastewater	Temperature

* Certification renewal pending - certification considered valid.

TestAmerica Buffalo

Method Summary

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

TestAmerica Job ID: 480-114759-1

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: 480-114759-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-114759-1	Post-Carbon 3	Wastewater	03/17/17 09:30	03/17/17 10:50
480-114759-2	Pre-Carbon	Wastewater	03/17/17 10:00	03/17/17 10:50
480-114759-3	Post-Carbon 2	Water	03/17/17 09:40	03/17/17 10:50
480-114759-4	Post-Carbon 1	Water	03/17/17 09:50	03/17/17 10:50
480-114759-5	OUTSIDE SUMP	Water	03/17/17 10:15	03/17/17 10:50

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.

[illegible]

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-114759-1

Login Number: 114759

List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	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: 480-116722-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

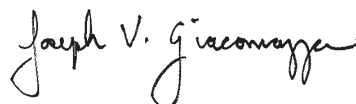
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

5/5/2017 10:32:52 AM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

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.



Joe Giacomazza
Project Management Assistant II
5/5/2017 10:32:52 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-116722-1

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.
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: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

Job ID: 480-116722-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-116722-1

Receipt

The samples were received on 4/21/2017 12:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

Receipt Exceptions

8021 volumes received empty. Method has been canceled. Pre-Carbon (480-116722-4)

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-355138 recovered above the upper control limit for Chlorodibromomethane and Bromoform. 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 (480-116722-1).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-355138 recovered outside control limits for the following analytes: Chlorodibromomethane and Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-116722-4). 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 sample was diluted to bring the concentration of target analytes within the calibration range: Outside Sump (480-116722-5). 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 (480-116722-1).

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: 480-116722-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-116722-1

Date Collected: 04/21/17 11:00

Matrix: Wastewater

Date Received: 04/21/17 12:25

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			05/02/17 18:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/17 18:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/02/17 18:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/02/17 18:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/02/17 18:54	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/02/17 18:54	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			05/02/17 18:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/02/17 18:54	1
2-Hexanone	ND		5.0	1.2	ug/L			05/02/17 18:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/02/17 18:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/02/17 18:54	1
Acetone	ND		10	3.0	ug/L			05/02/17 18:54	1
Benzene	ND		1.0	0.41	ug/L			05/02/17 18:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/17 18:54	1
Bromoform	ND	*	1.0	0.26	ug/L			05/02/17 18:54	1
Bromomethane	ND		1.0	0.69	ug/L			05/02/17 18:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/02/17 18:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/02/17 18:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/02/17 18:54	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			05/02/17 18:54	1
Chloroethane	ND		1.0	0.32	ug/L			05/02/17 18:54	1
Chloroform	ND		1.0	0.34	ug/L			05/02/17 18:54	1
Chloromethane	ND		1.0	0.35	ug/L			05/02/17 18:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/02/17 18:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/02/17 18:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/02/17 18:54	1
Styrene	ND		1.0	0.73	ug/L			05/02/17 18:54	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/02/17 18:54	1
Toluene	ND		1.0	0.51	ug/L			05/02/17 18:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/02/17 18:54	1
Trichloroethene	ND		1.0	0.46	ug/L			05/02/17 18:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/02/17 18:54	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/02/17 18:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/02/17 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		77 - 120		05/02/17 18:54	1
Toluene-d8 (Surr)	84		80 - 120		05/02/17 18:54	1
4-Bromofluorobenzene (Surr)	90		73 - 120		05/02/17 18:54	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			04/25/17 14:16	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/25/17 14:16	1
Benzene	ND		0.20	0.023	ug/L			04/25/17 14:16	1
Ethylbenzene	ND		0.20	0.029	ug/L			04/25/17 14:16	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/25/17 14:16	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/25/17 14:16	1
m,p-Xylene	ND		0.40	0.054	ug/L			04/25/17 14:16	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/25/17 14:16	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-116722-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-116722-1

Date Collected: 04/21/17 11:00

Matrix: Wastewater

Date Received: 04/21/17 12:25

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			04/25/17 14:16	1
o-Xylene	ND		0.20	0.027	ug/L			04/25/17 14:16	1
p-Cymene	ND		0.20	0.030	ug/L			04/25/17 14:16	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/25/17 14:16	1
Toluene	ND		0.20	0.036	ug/L			04/25/17 14:16	1
Xylenes, Total	ND		0.60	0.054	ug/L			04/25/17 14:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129		04/25/17 14:16	1
4-Bromofluorobenzene	92		64 - 128		04/25/17 14:16	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	58.2		50.0	19.3	ug/L		04/23/17 08:45	04/29/17 00:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.043		0.010	0.0050	mg/L		05/03/17 16:50	05/04/17 11:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.5	HF	0.1	0.1	SU			04/27/17 21:44	1
Temperature	20.0	HF	0.001	0.001	Degrees C			04/27/17 21:44	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-116722-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-116722-2

Date Collected: 04/21/17 11:05

Matrix: Water

Date Received: 04/21/17 12:25

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			04/25/17 14:48	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/25/17 14:48	1
Benzene	0.34		0.20	0.023	ug/L			04/25/17 14:48	1
Ethylbenzene	ND		0.20	0.029	ug/L			04/25/17 14:48	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/25/17 14:48	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/25/17 14:48	1
m,p-Xylene	ND		0.40	0.054	ug/L			04/25/17 14:48	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/25/17 14:48	1
n-Propylbenzene	ND		0.20	0.13	ug/L			04/25/17 14:48	1
o-Xylene	ND		0.20	0.027	ug/L			04/25/17 14:48	1
p-Cymene	ND		0.20	0.030	ug/L			04/25/17 14:48	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/25/17 14:48	1
Toluene	0.066	J	0.20	0.036	ug/L			04/25/17 14:48	1
Xylenes, Total	ND		0.60	0.054	ug/L			04/25/17 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 129		04/25/17 14:48	1
4-Bromofluorobenzene	88		64 - 128		04/25/17 14:48	1

Client Sample Results

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

TestAmerica Job ID: 480-116722-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-116722-3

Date Collected: 04/21/17 11:10

Matrix: Water

Date Received: 04/21/17 12:25

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			04/25/17 15:21	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/25/17 15:21	1
Benzene	54		0.20	0.023	ug/L			04/25/17 15:21	1
Ethylbenzene	2.3		0.20	0.029	ug/L			04/25/17 15:21	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/25/17 15:21	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/25/17 15:21	1
m,p-Xylene	0.38	J	0.40	0.054	ug/L			04/25/17 15:21	1
n-Butylbenzene	0.23		0.20	0.031	ug/L			04/25/17 15:21	1
n-Propylbenzene	ND		0.20	0.13	ug/L			04/25/17 15:21	1
o-Xylene	0.57		0.20	0.027	ug/L			04/25/17 15:21	1
p-Cymene	ND		0.20	0.030	ug/L			04/25/17 15:21	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/25/17 15:21	1
Toluene	6.1		0.20	0.036	ug/L			04/25/17 15:21	1
Xylenes, Total	0.95		0.60	0.054	ug/L			04/25/17 15:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129		04/25/17 15:21	1
4-Bromofluorobenzene	91		64 - 128		04/25/17 15:21	1

Client Sample Results

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

TestAmerica Job ID: 480-116722-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-116722-4

Date Collected: 04/21/17 11:15

Matrix: Water

Date Received: 04/21/17 12:25

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		500	100	ug/L		04/23/17 08:45	04/29/17 00:31	1
Iron	6030		50.0	19.3	ug/L		04/23/17 08:45	04/29/17 00:31	1
Magnesium	44200		200	43.4	ug/L		04/23/17 08:45	04/29/17 00:31	1
Potassium	3980		500	100	ug/L		04/23/17 08:45	04/29/17 00:31	1
Sodium	56000		1000	324	ug/L		04/23/17 08:45	04/29/17 00:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	121		10.0	5.6	mg/L			05/04/17 10:02	20
Sulfate	129		40.0	7.0	mg/L			05/04/17 10:02	20
Alkalinity, Total	342	B	40.0	16.0	mg/L			05/01/17 12:00	4

Client Sample Results

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

TestAmerica Job ID: 480-116722-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-116722-5

Date Collected: 04/21/17 11:30

Matrix: Water

Date Received: 04/21/17 12:25

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			04/25/17 15:53	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			04/25/17 15:53	500
Benzene	1800		100	12	ug/L			04/25/17 15:53	500
Ethylbenzene	150		100	14	ug/L			04/25/17 15:53	500
Isopropylbenzene	ND		100	14	ug/L			04/25/17 15:53	500
Methyl tert-butyl ether	ND		200	22	ug/L			04/25/17 15:53	500
m,p-Xylene	55 J		200	27	ug/L			04/25/17 15:53	500
n-Butylbenzene	ND		100	15	ug/L			04/25/17 15:53	500
n-Propylbenzene	ND		100	65	ug/L			04/25/17 15:53	500
o-Xylene	ND		100	14	ug/L			04/25/17 15:53	500
p-Cymene	ND		100	15	ug/L			04/25/17 15:53	500
sec-Butylbenzene	ND		100	10	ug/L			04/25/17 15:53	500
Toluene	350		100	18	ug/L			04/25/17 15:53	500
Xylenes, Total	55 J		300	27	ug/L			04/25/17 15:53	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 129		04/25/17 15:53	500
4-Bromofluorobenzene	91		64 - 128		04/25/17 15:53	500

Lab Chronicle

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

TestAmerica Job ID: 480-116722-1

Client Sample ID: Post-Carbon 3

Date Collected: 04/21/17 11:00

Date Received: 04/21/17 12:25

Lab Sample ID: 480-116722-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	355138	05/02/17 18:54	RRS	TAL BUF
Total/NA	Analysis	8021B		1	353856	04/25/17 14:16	JLS	TAL BUF
Total/NA	Prep	200.7			353514	04/23/17 08:45	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	354758	04/29/17 00:27	SLB	TAL BUF
Total/NA	Prep	Distill/CN			355473	05/03/17 16:50	CLT	TAL BUF
Total/NA	Analysis	335.4		1	355724	05/04/17 11:15	KRT	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	354492	04/27/17 21:44	ALZ	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 04/21/17 11:05

Date Received: 04/21/17 12:25

Lab Sample ID: 480-116722-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	353856	04/25/17 14:48	JLS	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 04/21/17 11:10

Date Received: 04/21/17 12:25

Lab Sample ID: 480-116722-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	353856	04/25/17 15:21	JLS	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 04/21/17 11:15

Date Received: 04/21/17 12:25

Lab Sample ID: 480-116722-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			353514	04/23/17 08:45	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	354758	04/29/17 00:31	SLB	TAL BUF
Total/NA	Analysis	300.0		20	355430	05/04/17 10:02	DMR	TAL BUF
Total/NA	Analysis	310.2		4	355015	05/01/17 12:00	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 04/21/17 11:30

Date Received: 04/21/17 12:25

Lab Sample ID: 480-116722-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	353856	04/25/17 15:53	JLS	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-116722-1

Laboratory: TestAmerica Buffalo

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
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
SM 4500 H+ B		Wastewater	Temperature

Method Summary

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

TestAmerica Job ID: 480-116722-1

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: 480-116722-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-116722-1	Post-Carbon 3	Wastewater	04/21/17 11:00	04/21/17 12:25
480-116722-2	Post-Carbon 2	Water	04/21/17 11:05	04/21/17 12:25
480-116722-3	Post-Carbon 1	Water	04/21/17 11:10	04/21/17 12:25
480-116722-4	Pre-Carbon	Water	04/21/17 11:15	04/21/17 12:25
480-116722-5	Outside Sump	Water	04/21/17 11:30	04/21/17 12:25

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: 4/21/17						COC No:											
Groundwater & Environmental Services, Inc						Tel/Fax: (716) 851-7220						Lab Contact: O. Johnson						Carrier:						1 of 1 COCs											
495 Aero Drive Suite 3						Analysis Turnaround Time						<div style="display: flex; justify-content: space-between;"><div>Filtered Sample</div><div>300.0 - 28D (MOD) Local Method</div><div>200.7 - (MOD) Local Method</div><div>310.2 - Alkalinity</div><div>200.7 - Iron</div><div>8260B - (MOD) TCL list OLM04.2</div><div>8021B - (MOD) STARS list - VOA - 8021</div><div>335.4 - Cyanide, Total</div><div>SM4500_H+-pH</div></div>						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.																									
Post-Carbon 3						4/21	1100	Grab	W	9	N				X	X	X	X	X							S									
Post-Carbon 2							1105	Grab	W	3	N						X								480-116722 COC										
Post-Carbon 1							1110	Grab	W	3	N						X																		
Pre-Carbon							1115	Grab	W	6	N	X	X	X			X																		
Inside Outside Sump							1130	Grab	W	3	N						X																		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other																																			
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																													
<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"/>						<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: [Signature]						Company: CBS						Date/Time: 4/21/225						Received by: [Signature]						Company: [Signature]						Date/Time: 4/21/17 1225					
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: 480-116722-1

Login Number: 116722

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 (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	
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: 480-117157-1

Client Project/Site: Gastown WWTP #915171

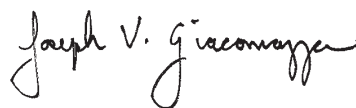
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

5/8/2017 1:52:35 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

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.



Joe Giacomazza
Project Management Assistant II
5/8/2017 1:52:35 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-117157-1

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.

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: 480-117157-1

Job ID: 480-117157-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-117157-1

Receipt

The sample was received on 4/28/2017 11:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.7° C.

GC/MS VOA

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

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-117157-1). 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.

Client Sample Results

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

TestAmerica Job ID: 480-117157-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-117157-1

Date Collected: 04/28/17 11:00

Matrix: Water

Date Received: 04/28/17 11:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.1	J	10	1.7	ug/L			05/03/17 22:54	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			05/03/17 22:54	50
Benzene	2000		10	1.2	ug/L			05/03/17 22:54	50
Ethylbenzene	180		10	1.4	ug/L			05/03/17 22:54	50
Isopropylbenzene	ND		10	1.4	ug/L			05/03/17 22:54	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			05/03/17 22:54	50
m,p-Xylene	67		20	2.7	ug/L			05/03/17 22:54	50
n-Butylbenzene	ND		10	1.5	ug/L			05/03/17 22:54	50
n-Propylbenzene	ND		10	6.5	ug/L			05/03/17 22:54	50
o-Xylene	45		10	1.4	ug/L			05/03/17 22:54	50
p-Cymene	ND		10	1.5	ug/L			05/03/17 22:54	50
sec-Butylbenzene	ND		10	1.0	ug/L			05/03/17 22:54	50
Toluene	380		10	1.8	ug/L			05/03/17 22:54	50
Xylenes, Total	110		30	2.7	ug/L			05/03/17 22:54	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129		05/03/17 22:54	50
4-Bromofluorobenzene	91		64 - 128		05/03/17 22:54	50

Lab Chronicle

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

TestAmerica Job ID: 480-117157-1

Client Sample ID: Pre-Carbon
Date Collected: 04/28/17 11:00
Date Received: 04/28/17 11:10

Lab Sample ID: 480-117157-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	355491	05/03/17 22:54	MRB	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-117157-1

Laboratory: TestAmerica Buffalo

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8021B		Water	m,p-Xylene
8021B		Water	o-Xylene

Method Summary

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

TestAmerica Job ID: 480-117157-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF

Protocol References:

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: 480-117157-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-117157-1	Pre-Carbon	Water	04/28/17 11:00	04/28/17 11:10

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: 480-117157-1

Login Number: 117157

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 (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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: 480-118651-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

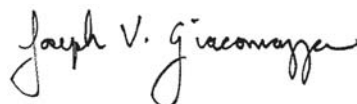
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

6/12/2017 2:42:32 PM

Joe Giacomazza, Project Management Assistant II

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Designee for

Orlette Johnson, Senior Project Manager

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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.

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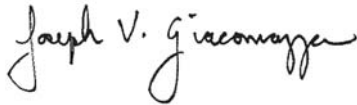
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I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample 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.



Joe Giacomazza
Project Management Assistant II
6/12/2017 2:42:32 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-118651-1

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
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-118651-1

Job ID: 480-118651-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-118651-1

Comments

No additional comments.

Receipt

The samples were received on 5/26/2017 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-360332 recovered outside acceptance criteria, low biased, for 2-Hexanone. 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.

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 (480-118651-4). 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 (480-118651-3), Pre-Carbon (480-118651-4) and Outside Pump (480-118651-5). 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 (480-118651-1).

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: 480-118651-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-118651-1

Date Collected: 05/26/17 10:00

Matrix: Wastewater

Date Received: 05/26/17 10:50

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			06/03/17 12:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/03/17 12:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/03/17 12:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/03/17 12:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/03/17 12:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/03/17 12:23	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			06/03/17 12:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/03/17 12:23	1
2-Hexanone	ND		5.0	1.2	ug/L			06/03/17 12:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/03/17 12:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/03/17 12:23	1
Acetone	ND		10	3.0	ug/L			06/03/17 12:23	1
Benzene	ND		1.0	0.41	ug/L			06/03/17 12:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/03/17 12:23	1
Bromoform	ND		1.0	0.26	ug/L			06/03/17 12:23	1
Bromomethane	ND		1.0	0.69	ug/L			06/03/17 12:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/03/17 12:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/03/17 12:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/03/17 12:23	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/03/17 12:23	1
Chloroethane	ND		1.0	0.32	ug/L			06/03/17 12:23	1
Chloroform	ND		1.0	0.34	ug/L			06/03/17 12:23	1
Chloromethane	0.80	J	1.0	0.35	ug/L			06/03/17 12:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/03/17 12:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/03/17 12:23	1
Methylene Chloride	0.50	J	1.0	0.44	ug/L			06/03/17 12:23	1
Styrene	ND		1.0	0.73	ug/L			06/03/17 12:23	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/03/17 12:23	1
Toluene	ND		1.0	0.51	ug/L			06/03/17 12:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/03/17 12:23	1
Trichloroethene	ND		1.0	0.46	ug/L			06/03/17 12:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/03/17 12:23	1
Vinyl acetate	ND		5.0	0.85	ug/L			06/03/17 12:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/03/17 12:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		77 - 120		06/03/17 12:23	1
Toluene-d8 (Surr)	98		80 - 120		06/03/17 12:23	1
4-Bromofluorobenzene (Surr)	101		73 - 120		06/03/17 12:23	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			05/31/17 19:23	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/31/17 19:23	1
Benzene	ND		0.20	0.023	ug/L			05/31/17 19:23	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/31/17 19:23	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/31/17 19:23	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			05/31/17 19:23	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/31/17 19:23	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/31/17 19:23	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-118651-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-118651-1

Date Collected: 05/26/17 10:00

Matrix: Wastewater

Date Received: 05/26/17 10:50

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			05/31/17 19:23	1
o-Xylene	ND		0.20	0.027	ug/L			05/31/17 19:23	1
p-Cymene	ND		0.20	0.030	ug/L			05/31/17 19:23	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/31/17 19:23	1
Toluene	ND		0.20	0.036	ug/L			05/31/17 19:23	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/31/17 19:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129		05/31/17 19:23	1
4-Bromofluorobenzene	92		64 - 128		05/31/17 19:23	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	55.2	B	50.0	19.3	ug/L		05/30/17 09:35	06/09/17 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.11		0.010	0.0050	mg/L		06/06/17 03:15	06/06/17 12:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6	HF	0.1	0.1	SU			05/26/17 21:57	1
Temperature	20.0	HF	0.001	0.001	Degrees C			05/26/17 21:57	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-118651-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-118651-2

Date Collected: 05/26/17 10:05

Matrix: Wastewater

Date Received: 05/26/17 10:50

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			05/31/17 19:55	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/31/17 19:55	1
Benzene	0.037	J	0.20	0.023	ug/L			05/31/17 19:55	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/31/17 19:55	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/31/17 19:55	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			05/31/17 19:55	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/31/17 19:55	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/31/17 19:55	1
n-Propylbenzene	ND		0.20	0.13	ug/L			05/31/17 19:55	1
o-Xylene	ND		0.20	0.027	ug/L			05/31/17 19:55	1
p-Cymene	ND		0.20	0.030	ug/L			05/31/17 19:55	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/31/17 19:55	1
Toluene	ND		0.20	0.036	ug/L			05/31/17 19:55	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/31/17 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 129		05/31/17 19:55	1
4-Bromofluorobenzene	95		64 - 128		05/31/17 19:55	1

Client Sample Results

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

TestAmerica Job ID: 480-118651-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-118651-3

Date Collected: 05/26/17 10:10

Matrix: Water

Date Received: 05/26/17 10:50

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			06/01/17 00:34	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			06/01/17 00:34	50
Benzene	560		10	1.2	ug/L			06/01/17 00:34	50
Ethylbenzene	32		10	1.4	ug/L			06/01/17 00:34	50
Isopropylbenzene	ND		10	1.4	ug/L			06/01/17 00:34	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			06/01/17 00:34	50
m,p-Xylene	14 J		20	2.7	ug/L			06/01/17 00:34	50
n-Butylbenzene	ND		10	1.5	ug/L			06/01/17 00:34	50
n-Propylbenzene	ND		10	6.5	ug/L			06/01/17 00:34	50
o-Xylene	9.0 J		10	1.4	ug/L			06/01/17 00:34	50
p-Cymene	ND		10	1.5	ug/L			06/01/17 00:34	50
sec-Butylbenzene	ND		10	1.0	ug/L			06/01/17 00:34	50
Toluene	77		10	1.8	ug/L			06/01/17 00:34	50
Xylenes, Total	23 J		30	2.7	ug/L			06/01/17 00:34	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		63 - 129		06/01/17 00:34	50
4-Bromofluorobenzene	92		64 - 128		06/01/17 00:34	50

Client Sample Results

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

TestAmerica Job ID: 480-118651-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-118651-4

Date Collected: 05/26/17 10:15

Matrix: Wastewater

Date Received: 05/26/17 10:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.6	J	10	1.7	ug/L			06/01/17 01:06	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			06/01/17 01:06	50
Benzene	1600		10	1.2	ug/L			06/01/17 01:06	50
Ethylbenzene	120		10	1.4	ug/L			06/01/17 01:06	50
Isopropylbenzene	ND		10	1.4	ug/L			06/01/17 01:06	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			06/01/17 01:06	50
m,p-Xylene	40		20	2.7	ug/L			06/01/17 01:06	50
n-Butylbenzene	ND		10	1.5	ug/L			06/01/17 01:06	50
n-Propylbenzene	ND		10	6.5	ug/L			06/01/17 01:06	50
o-Xylene	29		10	1.4	ug/L			06/01/17 01:06	50
p-Cymene	ND		10	1.5	ug/L			06/01/17 01:06	50
sec-Butylbenzene	ND		10	1.0	ug/L			06/01/17 01:06	50
Toluene	250		10	1.8	ug/L			06/01/17 01:06	50
Xylenes, Total	69		30	2.7	ug/L			06/01/17 01:06	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		63 - 129		06/01/17 01:06	50
4-Bromofluorobenzene	94		64 - 128		06/01/17 01:06	50

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		500	100	ug/L		05/30/17 09:35	06/09/17 16:47	1
Iron	1240	B	50.0	19.3	ug/L		05/30/17 09:35	06/09/17 16:47	1
Magnesium	39600		200	43.4	ug/L		05/30/17 09:35	06/09/17 16:47	1
Potassium	3890	B	500	100	ug/L		05/30/17 09:35	06/09/17 16:47	1
Sodium	49100	B	1000	324	ug/L		05/30/17 09:35	06/09/17 16:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.5		10.0	5.6	mg/L			06/07/17 10:03	20
Sulfate	120		40.0	7.0	mg/L			06/07/17 10:03	20
Alkalinity, Total	316	B	40.0	16.0	mg/L			06/06/17 18:53	4

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-118651-1

Client Sample ID: Outside Pump

Lab Sample ID: 480-118651-5

Date Collected: 05/26/17 10:30

Matrix: Water

Date Received: 05/26/17 10:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	8.4	J	10	1.7	ug/L			06/01/17 01:38	50
1,3,5-Trimethylbenzene	48		10	7.5	ug/L			06/01/17 01:38	50
Benzene	2600		10	1.2	ug/L			06/01/17 01:38	50
Ethylbenzene	180		10	1.4	ug/L			06/01/17 01:38	50
Isopropylbenzene	ND		10	1.4	ug/L			06/01/17 01:38	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			06/01/17 01:38	50
m,p-Xylene	68		20	2.7	ug/L			06/01/17 01:38	50
n-Butylbenzene	ND		10	1.5	ug/L			06/01/17 01:38	50
n-Propylbenzene	ND		10	6.5	ug/L			06/01/17 01:38	50
o-Xylene	110		10	1.4	ug/L			06/01/17 01:38	50
p-Cymene	ND		10	1.5	ug/L			06/01/17 01:38	50
sec-Butylbenzene	ND		10	1.0	ug/L			06/01/17 01:38	50
Toluene	370		10	1.8	ug/L			06/01/17 01:38	50
Xylenes, Total	180		30	2.7	ug/L			06/01/17 01:38	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	106		63 - 129		06/01/17 01:38	50
4-Bromofluorobenzene	95		64 - 128		06/01/17 01:38	50

Lab Chronicle

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

TestAmerica Job ID: 480-118651-1

Client Sample ID: Post-Carbon 3

Date Collected: 05/26/17 10:00

Date Received: 05/26/17 10:50

Lab Sample ID: 480-118651-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	360332	06/03/17 12:23	NEA	TAL BUF
Total/NA	Analysis	8021B		1	359825	05/31/17 19:23	JLS	TAL BUF
Total/NA	Prep	200.7			359663	05/30/17 09:35	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	361605	06/09/17 16:43	LMH	TAL BUF
Total/NA	Prep	Distill/CN			360589	06/06/17 03:15	LAW	TAL BUF
Total/NA	Analysis	335.4		1	360694	06/06/17 12:29	MDL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	359417	05/26/17 21:57	ALZ	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 05/26/17 10:05

Date Received: 05/26/17 10:50

Lab Sample ID: 480-118651-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	359825	05/31/17 19:55	JLS	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 05/26/17 10:10

Date Received: 05/26/17 10:50

Lab Sample ID: 480-118651-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	359825	06/01/17 00:34	JLS	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 05/26/17 10:15

Date Received: 05/26/17 10:50

Lab Sample ID: 480-118651-4

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	359825	06/01/17 01:06	JLS	TAL BUF
Total/NA	Prep	200.7			359663	05/30/17 09:35	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	361605	06/09/17 16:47	LMH	TAL BUF
Total/NA	Analysis	300.0		20	360737	06/07/17 10:03	DMR	TAL BUF
Total/NA	Analysis	310.2		4	360782	06/06/17 18:53	KRT	TAL BUF

Client Sample ID: Outside Pump

Date Collected: 05/26/17 10:30

Date Received: 05/26/17 10:50

Lab Sample ID: 480-118651-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	359825	06/01/17 01:38	JLS	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-118651-1

Laboratory: TestAmerica Buffalo

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

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

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
335.4	Distill/CN	Wastewater	Cyanide, Total

The following analytes are included in this report, but accreditation/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
SM 4500 H+ B		Wastewater	Temperature

Method Summary

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

TestAmerica Job ID: 480-118651-1

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: 480-118651-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-118651-1	Post-Carbon 3	Wastewater	05/26/17 10:00	05/26/17 10:50
480-118651-2	Post-Carbon 2	Wastewater	05/26/17 10:05	05/26/17 10:50
480-118651-3	Post-Carbon 1	Water	05/26/17 10:10	05/26/17 10:50
480-118651-4	Pre-Carbon	Wastewater	05/26/17 10:15	05/26/17 10:50
480-118651-5	Outside Pump	Water	05/26/17 10:30	05/26/17 10:50

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.

[illegible]

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-118651-1

Login Number: 118651

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 (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ges
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	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: 480-119708-1

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:

6/30/2017 9:43:44 AM

Sally Hoffman, Project Management Assistant I

(716)504-9839

sally.hoffman@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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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.



Sally Hoffman
Project Management Assistant I
6/30/2017 9:43:44 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-119708-1

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.
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-119708-1

Job ID: 480-119708-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-119708-1

Comments

No additional comments.

Receipt

The samples were received on 6/16/2017 12:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-363601 recovered above the upper control limit for Carbon tetrachloride. The sample associated with this CCV was non-detect for the affected analyte; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-119708-1).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-363601 recovered outside control limits for the following analytes: Carbon tetrachloride. This 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 (480-119708-1)

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 (480-119708-4). 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 (480-119708-3), Pre-Carbon (480-119708-4) and Outside Sump (480-119708-5). 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 (480-119708-1).

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: 480-119708-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-119708-1

Date Collected: 06/16/17 11:00

Matrix: Water

Date Received: 06/16/17 12:10

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			06/23/17 13:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/23/17 13:38	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/23/17 13:38	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/23/17 13:38	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/23/17 13:38	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/23/17 13:38	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			06/23/17 13:38	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/23/17 13:38	1
2-Hexanone	ND		5.0	1.2	ug/L			06/23/17 13:38	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/23/17 13:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/23/17 13:38	1
Acetone	ND		10	3.0	ug/L			06/23/17 13:38	1
Benzene	ND		1.0	0.41	ug/L			06/23/17 13:38	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/23/17 13:38	1
Bromoform	ND		1.0	0.26	ug/L			06/23/17 13:38	1
Bromomethane	ND		1.0	0.69	ug/L			06/23/17 13:38	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/23/17 13:38	1
Carbon tetrachloride	ND *		1.0	0.27	ug/L			06/23/17 13:38	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/23/17 13:38	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/23/17 13:38	1
Chloroethane	ND		1.0	0.32	ug/L			06/23/17 13:38	1
Chloroform	ND		1.0	0.34	ug/L			06/23/17 13:38	1
Chloromethane	ND		1.0	0.35	ug/L			06/23/17 13:38	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/23/17 13:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/23/17 13:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			06/23/17 13:38	1
Styrene	ND		1.0	0.73	ug/L			06/23/17 13:38	1
Tetrachloroethene	ND		1.0	0.36	ug/L			06/23/17 13:38	1
Toluene	ND		1.0	0.51	ug/L			06/23/17 13:38	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			06/23/17 13:38	1
Trichloroethene	ND		1.0	0.46	ug/L			06/23/17 13:38	1
Vinyl chloride	ND		1.0	0.90	ug/L			06/23/17 13:38	1
Vinyl acetate	ND		5.0	0.85	ug/L			06/23/17 13:38	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/23/17 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		06/23/17 13:38	1
Toluene-d8 (Surr)	93		80 - 120		06/23/17 13:38	1
4-Bromofluorobenzene (Surr)	113		73 - 120		06/23/17 13:38	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			06/21/17 19:17	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			06/21/17 19:17	1
Benzene	ND		0.20	0.023	ug/L			06/21/17 19:17	1
Ethylbenzene	ND		0.20	0.029	ug/L			06/21/17 19:17	1
Isopropylbenzene	ND		0.20	0.027	ug/L			06/21/17 19:17	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			06/21/17 19:17	1
m,p-Xylene	ND		0.40	0.054	ug/L			06/21/17 19:17	1
n-Butylbenzene	ND		0.20	0.031	ug/L			06/21/17 19:17	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-119708-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-119708-1

Date Collected: 06/16/17 11:00

Matrix: Water

Date Received: 06/16/17 12:10

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			06/21/17 19:17	1
o-Xylene	ND		0.20	0.027	ug/L			06/21/17 19:17	1
p-Cymene	ND		0.20	0.030	ug/L			06/21/17 19:17	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			06/21/17 19:17	1
Toluene	ND		0.20	0.036	ug/L			06/21/17 19:17	1
Xylenes, Total	ND		0.60	0.054	ug/L			06/21/17 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 129		06/21/17 19:17	1
4-Bromofluorobenzene	82		64 - 128		06/21/17 19:17	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	97.0		50.0	19.3	ug/L		06/19/17 08:50	06/23/17 22:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.17		0.010	0.0050	mg/L		06/28/17 04:15	06/28/17 12:46	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.7	HF	0.1	0.1	SU			06/19/17 18:11	1
Temperature	20.5	HF	0.001	0.001	Degrees C			06/19/17 18:11	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-119708-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-119708-2

Date Collected: 06/16/17 11:05

Matrix: Water

Date Received: 06/16/17 12:10

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			06/21/17 19:49	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			06/21/17 19:49	1
Benzene	0.074	J	0.20	0.023	ug/L			06/21/17 19:49	1
Ethylbenzene	ND		0.20	0.029	ug/L			06/21/17 19:49	1
Isopropylbenzene	ND		0.20	0.027	ug/L			06/21/17 19:49	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			06/21/17 19:49	1
m,p-Xylene	ND		0.40	0.054	ug/L			06/21/17 19:49	1
n-Butylbenzene	ND		0.20	0.031	ug/L			06/21/17 19:49	1
n-Propylbenzene	ND		0.20	0.13	ug/L			06/21/17 19:49	1
o-Xylene	ND		0.20	0.027	ug/L			06/21/17 19:49	1
p-Cymene	ND		0.20	0.030	ug/L			06/21/17 19:49	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			06/21/17 19:49	1
Toluene	0.036	J	0.20	0.036	ug/L			06/21/17 19:49	1
Xylenes, Total	ND		0.60	0.054	ug/L			06/21/17 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 129		06/21/17 19:49	1
4-Bromofluorobenzene	84		64 - 128		06/21/17 19:49	1

Client Sample Results

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

TestAmerica Job ID: 480-119708-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-119708-3

Date Collected: 06/16/17 11:10

Matrix: Water

Date Received: 06/16/17 12:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	4.4	J	10	1.7	ug/L			06/21/17 21:26	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			06/21/17 21:26	50
Benzene	940		10	1.2	ug/L			06/21/17 21:26	50
Ethylbenzene	51		10	1.4	ug/L			06/21/17 21:26	50
Isopropylbenzene	ND		10	1.4	ug/L			06/21/17 21:26	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			06/21/17 21:26	50
m,p-Xylene	23		20	2.7	ug/L			06/21/17 21:26	50
n-Butylbenzene	ND		10	1.5	ug/L			06/21/17 21:26	50
n-Propylbenzene	ND		10	6.5	ug/L			06/21/17 21:26	50
o-Xylene	14		10	1.4	ug/L			06/21/17 21:26	50
p-Cymene	ND		10	1.5	ug/L			06/21/17 21:26	50
sec-Butylbenzene	ND		10	1.0	ug/L			06/21/17 21:26	50
Toluene	160		10	1.8	ug/L			06/21/17 21:26	50
Xylenes, Total	37		30	2.7	ug/L			06/21/17 21:26	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	99		63 - 129		06/21/17 21:26	50
<i>4-Bromofluorobenzene</i>	86		64 - 128		06/21/17 21:26	50

Client Sample Results

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

TestAmerica Job ID: 480-119708-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-119708-4

Date Collected: 06/16/17 11:15

Matrix: Water

Date Received: 06/16/17 12:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	13	J	20	3.5	ug/L			06/22/17 13:19	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			06/22/17 13:19	100
Benzene	3400		20	2.3	ug/L			06/22/17 13:19	100
Ethylbenzene	250		20	2.9	ug/L			06/22/17 13:19	100
Isopropylbenzene	ND		20	2.7	ug/L			06/22/17 13:19	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			06/22/17 13:19	100
m,p-Xylene	120		40	5.4	ug/L			06/22/17 13:19	100
n-Butylbenzene	ND		20	3.1	ug/L			06/22/17 13:19	100
n-Propylbenzene	ND		20	13	ug/L			06/22/17 13:19	100
o-Xylene	70		20	2.7	ug/L			06/22/17 13:19	100
p-Cymene	ND		20	3.0	ug/L			06/22/17 13:19	100
sec-Butylbenzene	ND		20	2.0	ug/L			06/22/17 13:19	100
Toluene	710		20	3.6	ug/L			06/22/17 13:19	100
Xylenes, Total	190		60	5.4	ug/L			06/22/17 13:19	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	98		63 - 129		06/22/17 13:19	100
<i>4-Bromofluorobenzene</i>	87		64 - 128		06/22/17 13:19	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	103000		500	100	ug/L		06/19/17 08:50	06/23/17 22:30	1
Iron	738		50.0	19.3	ug/L		06/19/17 08:50	06/23/17 22:30	1
Magnesium	43800		200	43.4	ug/L		06/19/17 08:50	06/23/17 22:30	1
Potassium	3380		500	100	ug/L		06/19/17 08:50	06/23/17 22:30	1
Sodium	45600		1000	324	ug/L		06/19/17 08:50	06/23/17 22:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.7		10.0	5.6	mg/L			06/27/17 23:30	20
Sulfate	121		40.0	7.0	mg/L			06/27/17 23:30	20
Alkalinity, Total	348	B	40.0	16.0	mg/L			06/20/17 19:27	4

Client Sample Results

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

TestAmerica Job ID: 480-119708-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-119708-5

Date Collected: 06/16/17 11:30

Matrix: Water

Date Received: 06/16/17 12:10

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	37	J	100	17	ug/L			06/22/17 13:51	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			06/22/17 13:51	500
Benzene	4900		100	12	ug/L			06/22/17 13:51	500
Ethylbenzene	370		100	14	ug/L			06/22/17 13:51	500
Isopropylbenzene	ND		100	14	ug/L			06/22/17 13:51	500
Methyl tert-butyl ether	ND		200	22	ug/L			06/22/17 13:51	500
m,p-Xylene	160	J	200	27	ug/L			06/22/17 13:51	500
n-Butylbenzene	ND		100	15	ug/L			06/22/17 13:51	500
n-Propylbenzene	ND		100	65	ug/L			06/22/17 13:51	500
o-Xylene	ND		100	14	ug/L			06/22/17 13:51	500
p-Cymene	ND		100	15	ug/L			06/22/17 13:51	500
sec-Butylbenzene	ND		100	10	ug/L			06/22/17 13:51	500
Toluene	910		100	18	ug/L			06/22/17 13:51	500
Xylenes, Total	160	J	300	27	ug/L			06/22/17 13:51	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 129		06/22/17 13:51	500
4-Bromofluorobenzene	86		64 - 128		06/22/17 13:51	500

Lab Chronicle

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

TestAmerica Job ID: 480-119708-1

Client Sample ID: Post-Carbon 3

Date Collected: 06/16/17 11:00

Date Received: 06/16/17 12:10

Lab Sample ID: 480-119708-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	363601	06/23/17 13:38	ARS	TAL BUF
Total/NA	Analysis	8021B		1	363236	06/21/17 19:17	JLS	TAL BUF
Total/NA	Prep	200.7			362814	06/19/17 08:50	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	364025	06/23/17 22:26	LMH	TAL BUF
Total/NA	Prep	Distill/CN			364373	06/28/17 04:15	LAW	TAL BUF
Total/NA	Analysis	335.4		1	364509	06/28/17 12:46	MDL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	362835	06/19/17 18:11	ALZ	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 06/16/17 11:05

Date Received: 06/16/17 12:10

Lab Sample ID: 480-119708-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	363236	06/21/17 19:49	JLS	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 06/16/17 11:10

Date Received: 06/16/17 12:10

Lab Sample ID: 480-119708-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	363236	06/21/17 21:26	JLS	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 06/16/17 11:15

Date Received: 06/16/17 12:10

Lab Sample ID: 480-119708-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	363376	06/22/17 13:19	JLS	TAL BUF
Total/NA	Prep	200.7			362814	06/19/17 08:50	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	364025	06/23/17 22:30	LMH	TAL BUF
Total/NA	Analysis	300.0		20	364263	06/27/17 23:30	RJS	TAL BUF
Total/NA	Analysis	310.2		4	363067	06/20/17 19:27	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 06/16/17 11:30

Date Received: 06/16/17 12:10

Lab Sample ID: 480-119708-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	363376	06/22/17 13:51	JLS	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-119708-1

Laboratory: TestAmerica Buffalo

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

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

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
335.4	Distill/CN	Water	Cyanide, Total

The following analytes are included in this report, but accreditation/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
SM 4500 H+ B		Water	Temperature

Method Summary

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

TestAmerica Job ID: 480-119708-1

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: 480-119708-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-119708-1	Post-Carbon 3	Water	06/16/17 11:00	06/16/17 12:10
480-119708-2	Post-Carbon 2	Water	06/16/17 11:05	06/16/17 12:10
480-119708-3	Post-Carbon 1	Water	06/16/17 11:10	06/16/17 12:10
480-119708-4	Pre-Carbon	Water	06/16/17 11:15	06/16/17 12:10
480-119708-5	Outside Sump	Water	06/16/17 11:30	06/16/17 12:10

10 Hazelwood Drive

phone 716.504.9852 fax 716.691.7991

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

[illegible]

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

Page 16 of 17

6/30/2017

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-119708-1

Login Number: 119708

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 (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-121124-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C.

625 Broadway

11th Floor

Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by:

7/31/2017 1:00:48 PM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

LINKS

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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.



Orlette Johnson
Senior Project Manager
7/31/2017 1:00:48 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-121124-1

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.

GC Semi 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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-121124-1

Job ID: 480-121124-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-121124-1

Receipt

The samples were received on 7/14/2017 2:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-368725 recovered outside acceptance criteria, low biased, for Carbon Tetrachloride and 1,1-Dichloroethene. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported. The following sample is impacted: Pre-Carbon (480-121124-4).

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 (480-121124-4). 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-2 (480-121124-2), Post-Carbon-1 (480-121124-3), Pre-Carbon (480-121124-4) and Outside Sump (480-121124-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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

Metals

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

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 (480-121124-1).

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/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-367627.

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: 480-121124-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-121124-1

Date Collected: 07/14/17 14:00

Matrix: Water

Date Received: 07/14/17 14:55

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			07/25/17 16:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/25/17 16:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/25/17 16:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/25/17 16:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/25/17 16:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/25/17 16:56	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			07/25/17 16:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/25/17 16:56	1
2-Hexanone	ND		5.0	1.2	ug/L			07/25/17 16:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/25/17 16:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/25/17 16:56	1
Acetone	ND		10	3.0	ug/L			07/25/17 16:56	1
Benzene	ND		1.0	0.41	ug/L			07/25/17 16:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/25/17 16:56	1
Bromoform	ND		1.0	0.26	ug/L			07/25/17 16:56	1
Bromomethane	ND		1.0	0.69	ug/L			07/25/17 16:56	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/25/17 16:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/25/17 16:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/25/17 16:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/25/17 16:56	1
Chloroethane	ND		1.0	0.32	ug/L			07/25/17 16:56	1
Chloroform	ND		1.0	0.34	ug/L			07/25/17 16:56	1
Chloromethane	ND		1.0	0.35	ug/L			07/25/17 16:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/25/17 16:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/25/17 16:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/25/17 16:56	1
Styrene	ND		1.0	0.73	ug/L			07/25/17 16:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/25/17 16:56	1
Toluene	ND		1.0	0.51	ug/L			07/25/17 16:56	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/25/17 16:56	1
Trichloroethene	ND		1.0	0.46	ug/L			07/25/17 16:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/25/17 16:56	1
Vinyl acetate	ND		5.0	0.85	ug/L			07/25/17 16:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/25/17 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		77 - 120		07/25/17 16:56	1
Toluene-d8 (Surr)	108		80 - 120		07/25/17 16:56	1
4-Bromofluorobenzene (Surr)	87		73 - 120		07/25/17 16:56	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		07/18/17 07:19	07/20/17 01:03	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/18/17 07:19	07/20/17 01:03	1
Acenaphthene	ND		5.0	0.41	ug/L		07/18/17 07:19	07/20/17 01:03	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/18/17 07:19	07/20/17 01:03	1
Anthracene	ND		5.0	0.28	ug/L		07/18/17 07:19	07/20/17 01:03	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		07/18/17 07:19	07/20/17 01:03	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		07/18/17 07:19	07/20/17 01:03	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		07/18/17 07:19	07/20/17 01:03	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-121124-1

Date Collected: 07/14/17 14:00

Matrix: Water

Date Received: 07/14/17 14:55

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		07/18/17 07:19	07/20/17 01:03	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		07/18/17 07:19	07/20/17 01:03	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/18/17 07:19	07/20/17 01:03	1
Carbazole	ND		5.0	0.30	ug/L		07/18/17 07:19	07/20/17 01:03	1
Chrysene	ND		5.0	0.33	ug/L		07/18/17 07:19	07/20/17 01:03	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/18/17 07:19	07/20/17 01:03	1
Dibenzofuran	ND		10	0.51	ug/L		07/18/17 07:19	07/20/17 01:03	1
Fluoranthene	ND		5.0	0.40	ug/L		07/18/17 07:19	07/20/17 01:03	1
Fluorene	ND		5.0	0.36	ug/L		07/18/17 07:19	07/20/17 01:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		07/18/17 07:19	07/20/17 01:03	1
Naphthalene	ND		5.0	0.76	ug/L		07/18/17 07:19	07/20/17 01:03	1
Pentachlorophenol	ND		10	2.2	ug/L		07/18/17 07:19	07/20/17 01:03	1
Phenanthrene	ND		5.0	0.44	ug/L		07/18/17 07:19	07/20/17 01:03	1
Phenol	ND		5.0	0.39	ug/L		07/18/17 07:19	07/20/17 01:03	1
Pyrene	ND		5.0	0.34	ug/L		07/18/17 07:19	07/20/17 01:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	100		46 - 120	07/18/17 07:19	07/20/17 01:03	1
2-Fluorobiphenyl	92		48 - 120	07/18/17 07:19	07/20/17 01:03	1
p-Terphenyl-d14	101		59 - 136	07/18/17 07:19	07/20/17 01:03	1
Phenol-d5	56		22 - 120	07/18/17 07:19	07/20/17 01:03	1
2-Fluorophenol	76		35 - 120	07/18/17 07:19	07/20/17 01:03	1
2,4,6-Tribromophenol	78		41 - 120	07/18/17 07:19	07/20/17 01:03	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			07/18/17 12:24	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/18/17 12:24	1
Benzene	ND		0.20	0.023	ug/L			07/18/17 12:24	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/18/17 12:24	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/18/17 12:24	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/18/17 12:24	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/18/17 12:24	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/18/17 12:24	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/18/17 12:24	1
o-Xylene	ND		0.20	0.027	ug/L			07/18/17 12:24	1
p-Cymene	ND		0.20	0.030	ug/L			07/18/17 12:24	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/18/17 12:24	1
Toluene	ND		0.20	0.036	ug/L			07/18/17 12:24	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/18/17 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 129		07/18/17 12:24	1
4-Bromofluorobenzene	91		64 - 128		07/18/17 12:24	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.050	0.0081	ug/L		07/19/17 07:19	07/20/17 10:54	1
alpha-BHC	0.011	J	0.050	0.0077	ug/L		07/19/17 07:19	07/20/17 10:54	1
beta-BHC	ND		0.050	0.025	ug/L		07/19/17 07:19	07/20/17 10:54	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Post-Carbon-3

Lab Sample ID: 480-121124-1

Date Collected: 07/14/17 14:00

Matrix: Water

Date Received: 07/14/17 14:55

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		07/19/17 07:19	07/20/17 10:54	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		07/19/17 07:19	07/20/17 10:54	1
Chlordane (technical)	ND		0.50	0.29	ug/L		07/19/17 07:19	07/20/17 10:54	1
4,4'-DDD	ND		0.050	0.0092	ug/L		07/19/17 07:19	07/20/17 10:54	1
4,4'-DDE	ND		0.050	0.012	ug/L		07/19/17 07:19	07/20/17 10:54	1
4,4'-DDT	ND		0.050	0.011	ug/L		07/19/17 07:19	07/20/17 10:54	1
Dieldrin	ND		0.050	0.0098	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endosulfan I	ND		0.050	0.011	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endosulfan II	ND		0.050	0.012	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endrin	ND		0.050	0.014	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endrin aldehyde	ND		0.050	0.016	ug/L		07/19/17 07:19	07/20/17 10:54	1
Heptachlor	ND		0.050	0.0085	ug/L		07/19/17 07:19	07/20/17 10:54	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		07/19/17 07:19	07/20/17 10:54	1
Toxaphene	ND		0.50	0.12	ug/L		07/19/17 07:19	07/20/17 10:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	78		23 - 120	07/19/17 07:19	07/20/17 10:54	1
Tetrachloro-m-xylene	80		44 - 120	07/19/17 07:19	07/20/17 10:54	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	163		50.0	19.3	ug/L		07/19/17 09:05	07/20/17 12:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.2	1.5	mg/L		07/19/17 11:38	07/19/17 11:38	1
Cyanide, Total	0.37		0.010	0.0050	mg/L		07/28/17 13:30	07/28/17 17:13	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		07/17/17 20:00	07/18/17 02:16	1
Total Dissolved Solids	585		10.0	4.0	mg/L			07/19/17 10:59	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			07/15/17 15:01	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			07/19/17 10:46	1
pH	7.4	HF	0.1	0.1	SU			07/17/17 17:21	1
Temperature	21.1	HF	0.001	0.001	Degrees C			07/17/17 17:21	1

Client Sample Results

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Post-Carbon-2

Lab Sample ID: 480-121124-2

Date Collected: 07/14/17 14:05

Matrix: Water

Date Received: 07/14/17 14:55

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			07/18/17 15:04	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/18/17 15:04	1
Benzene	0.090	J	0.20	0.023	ug/L			07/18/17 15:04	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/18/17 15:04	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/18/17 15:04	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/18/17 15:04	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/18/17 15:04	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/18/17 15:04	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/18/17 15:04	1
o-Xylene	ND		0.20	0.027	ug/L			07/18/17 15:04	1
p-Cymene	ND		0.20	0.030	ug/L			07/18/17 15:04	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/18/17 15:04	1
Toluene	ND		0.20	0.036	ug/L			07/18/17 15:04	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/18/17 15:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129		07/18/17 15:04	1
4-Bromofluorobenzene	89		64 - 128		07/18/17 15:04	1

Client Sample Results

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Post-Carbon-1

Lab Sample ID: 480-121124-3

Date Collected: 07/14/17 14:10

Matrix: Water

Date Received: 07/14/17 14:55

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			07/18/17 13:29	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			07/18/17 13:29	50
Benzene	290		10	1.2	ug/L			07/18/17 13:29	50
Ethylbenzene	4.1	J	10	1.4	ug/L			07/18/17 13:29	50
Isopropylbenzene	ND		10	1.4	ug/L			07/18/17 13:29	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			07/18/17 13:29	50
m,p-Xylene	5.7	J	20	2.7	ug/L			07/18/17 13:29	50
n-Butylbenzene	ND		10	1.5	ug/L			07/18/17 13:29	50
n-Propylbenzene	ND		10	6.5	ug/L			07/18/17 13:29	50
o-Xylene	4.8	J	10	1.4	ug/L			07/18/17 13:29	50
p-Cymene	ND		10	1.5	ug/L			07/18/17 13:29	50
sec-Butylbenzene	ND		10	1.0	ug/L			07/18/17 13:29	50
Toluene	32		10	1.8	ug/L			07/18/17 13:29	50
Xylenes, Total	11	J	30	2.7	ug/L			07/18/17 13:29	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129		07/18/17 13:29	50
4-Bromofluorobenzene	91		64 - 128		07/18/17 13:29	50

Client Sample Results

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-121124-4

Date Collected: 07/14/17 14:15

Matrix: Water

Date Received: 07/14/17 14:55

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			07/26/17 15:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/26/17 15:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/26/17 15:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/26/17 15:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/26/17 15:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/26/17 15:43	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			07/26/17 15:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/26/17 15:43	1
2-Hexanone	ND		5.0	1.2	ug/L			07/26/17 15:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/26/17 15:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/26/17 15:43	1
Acetone	ND		10	3.0	ug/L			07/26/17 15:43	1
Benzene	53		1.0	0.41	ug/L			07/26/17 15:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/26/17 15:43	1
Bromoform	ND		1.0	0.26	ug/L			07/26/17 15:43	1
Bromomethane	ND		1.0	0.69	ug/L			07/26/17 15:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/26/17 15:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/26/17 15:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/26/17 15:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/26/17 15:43	1
Chloroethane	ND		1.0	0.32	ug/L			07/26/17 15:43	1
Chloroform	0.47	J	1.0	0.34	ug/L			07/26/17 15:43	1
Chloromethane	ND		1.0	0.35	ug/L			07/26/17 15:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/26/17 15:43	1
Ethylbenzene	0.93	J	1.0	0.74	ug/L			07/26/17 15:43	1
Methylene Chloride	0.64	J	1.0	0.44	ug/L			07/26/17 15:43	1
Styrene	ND		1.0	0.73	ug/L			07/26/17 15:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/26/17 15:43	1
Toluene	6.0		1.0	0.51	ug/L			07/26/17 15:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/26/17 15:43	1
Trichloroethene	ND		1.0	0.46	ug/L			07/26/17 15:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/26/17 15:43	1
Vinyl acetate	ND		5.0	0.85	ug/L			07/26/17 15:43	1
Xylenes, Total	6.7		2.0	0.66	ug/L			07/26/17 15:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		77 - 120		07/26/17 15:43	1
Toluene-d8 (Surr)	106		80 - 120		07/26/17 15:43	1
4-Bromofluorobenzene (Surr)	85		73 - 120		07/26/17 15:43	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	10	J	20	3.5	ug/L			07/18/17 14:01	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			07/18/17 14:01	100
Benzene	420		20	2.3	ug/L			07/18/17 14:01	100
Ethylbenzene	8.6	J	20	2.9	ug/L			07/18/17 14:01	100
Isopropylbenzene	ND		20	2.7	ug/L			07/18/17 14:01	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			07/18/17 14:01	100
m,p-Xylene	35	J	40	5.4	ug/L			07/18/17 14:01	100
n-Butylbenzene	ND		20	3.1	ug/L			07/18/17 14:01	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-121124-4

Date Collected: 07/14/17 14:15

Matrix: Water

Date Received: 07/14/17 14:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		20	13	ug/L			07/18/17 14:01	100
o-Xylene	22		20	2.7	ug/L			07/18/17 14:01	100
p-Cymene	ND		20	3.0	ug/L			07/18/17 14:01	100
sec-Butylbenzene	ND		20	2.0	ug/L			07/18/17 14:01	100
Toluene	51		20	3.6	ug/L			07/18/17 14:01	100
Xylenes, Total	57 J		60	5.4	ug/L			07/18/17 14:01	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129					07/18/17 14:01	100
4-Bromofluorobenzene	92		64 - 128					07/18/17 14:01	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	106000		500	100	ug/L		07/19/17 09:05	07/19/17 21:23	1
Iron	1030		50.0	19.3	ug/L		07/19/17 09:05	07/20/17 12:51	1
Magnesium	40000		200	43.4	ug/L		07/19/17 09:05	07/19/17 21:23	1
Potassium	3800 B		500	100	ug/L		07/19/17 09:05	07/19/17 21:23	1
Sodium	49700 B		1000	324	ug/L		07/19/17 09:05	07/19/17 21:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.4		10.0	5.6	mg/L			07/25/17 12:51	20
Sulfate	116		40.0	7.0	mg/L			07/25/17 12:51	20
Alkalinity, Total	335 B		40.0	16.0	mg/L			07/17/17 15:10	4

Client Sample Results

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-121124-5

Date Collected: 07/14/17 14:30

Matrix: Water

Date Received: 07/14/17 14:55

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			07/18/17 14:33	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			07/18/17 14:33	500
Benzene	2500		100	12	ug/L			07/18/17 14:33	500
Ethylbenzene	180		100	14	ug/L			07/18/17 14:33	500
Isopropylbenzene	ND		100	14	ug/L			07/18/17 14:33	500
Methyl tert-butyl ether	ND		200	22	ug/L			07/18/17 14:33	500
m,p-Xylene	65 J		200	27	ug/L			07/18/17 14:33	500
n-Butylbenzene	ND		100	15	ug/L			07/18/17 14:33	500
n-Propylbenzene	ND		100	65	ug/L			07/18/17 14:33	500
o-Xylene	ND		100	14	ug/L			07/18/17 14:33	500
p-Cymene	ND		100	15	ug/L			07/18/17 14:33	500
sec-Butylbenzene	ND		100	10	ug/L			07/18/17 14:33	500
Toluene	380		100	18	ug/L			07/18/17 14:33	500
Xylenes, Total	65 J		300	27	ug/L			07/18/17 14:33	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129		07/18/17 14:33	500
4-Bromofluorobenzene	91		64 - 128		07/18/17 14:33	500

Lab Chronicle

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Post-Carbon-3

Date Collected: 07/14/17 14:00

Date Received: 07/14/17 14:55

Lab Sample ID: 480-121124-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	368515	07/25/17 16:56	ARS	TAL BUF
Total/NA	Prep	3510C			367397	07/18/17 07:19	JMP	TAL BUF
Total/NA	Analysis	8270D		1	367766	07/20/17 01:03	PJQ	TAL BUF
Total/NA	Analysis	8021B		1	367438	07/18/17 12:24	JLS	TAL BUF
Total/NA	Prep	3510C			367627	07/19/17 07:19	JMP	TAL BUF
Total/NA	Analysis	608		1	367820	07/20/17 10:54	MAN	TAL BUF
Total/NA	Prep	200.7			367614	07/19/17 09:05	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	368061	07/20/17 12:48	AMH	TAL BUF
Total/NA	Prep	1664A			367710	07/19/17 11:38	DSC	TAL BUF
Total/NA	Analysis	1664A		1	367758	07/19/17 11:38	DSC	TAL BUF
Total/NA	Prep	Distill/CN			369361	07/28/17 13:30	CLT	TAL BUF
Total/NA	Analysis	335.4		1	369373	07/28/17 17:13	KRT	TAL BUF
Total/NA	Prep	Distill/Phenol			367373	07/17/17 20:00	DCB	TAL BUF
Total/NA	Analysis	420.1		1	367387	07/18/17 02:16	KMB	TAL BUF
Total/NA	Analysis	SM 2540C		1	367701	07/19/17 10:59	EKB	TAL BUF
Total/NA	Analysis	SM 2540D		1	367694	07/19/17 10:46	EKB	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	367378	07/17/17 17:21	ALZ	TAL BUF
Total/NA	Analysis	SM 5210B		1	367155	07/15/17 15:01	LAW	TAL BUF

Client Sample ID: Post-Carbon-2

Date Collected: 07/14/17 14:05

Date Received: 07/14/17 14:55

Lab Sample ID: 480-121124-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	367438	07/18/17 15:04	JLS	TAL BUF

Client Sample ID: Post-Carbon-1

Date Collected: 07/14/17 14:10

Date Received: 07/14/17 14:55

Lab Sample ID: 480-121124-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	367438	07/18/17 13:29	JLS	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 07/14/17 14:15

Date Received: 07/14/17 14:55

Lab Sample ID: 480-121124-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	368725	07/26/17 15:43	ARS	TAL BUF
Total/NA	Analysis	8021B		100	367438	07/18/17 14:01	JLS	TAL BUF
Total/NA	Prep	200.7			367614	07/19/17 09:05	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	368071	07/19/17 21:23	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-121124-1

Client Sample ID: Pre-Carbon

Date Collected: 07/14/17 14:15

Date Received: 07/14/17 14:55

Lab Sample ID: 480-121124-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			367614	07/19/17 09:05	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	368061	07/20/17 12:51	AMH	TAL BUF
Total/NA	Analysis	300.0		20	368552	07/25/17 12:51	RJS	TAL BUF
Total/NA	Analysis	310.2		4	367343	07/17/17 15:10	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 07/14/17 14:30

Date Received: 07/14/17 14:55

Lab Sample ID: 480-121124-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	367438	07/18/17 14:33	JLS	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-121124-1

Laboratory: TestAmerica Buffalo

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

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

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
1664A	1664A	Water	Oil & Grease
335.4	Distill/CN	Water	Cyanide, Total

The following analytes are included in this report, but accreditation/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
SM 4500 H+ B		Water	Temperature

Method Summary

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

TestAmerica Job ID: 480-121124-1

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: 480-121124-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-121124-1	Post-Carbon-3	Water	07/14/17 14:00	07/14/17 14:55
480-121124-2	Post-Carbon-2	Water	07/14/17 14:05	07/14/17 14:55
480-121124-3	Post-Carbon-1	Water	07/14/17 14:10	07/14/17 14:55
480-121124-4	Pre-Carbon	Water	07/14/17 14:15	07/14/17 14:55
480-121124-5	Outside Sump	Water	07/14/17 14:30	07/14/17 14:55

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-121124-1

Login Number: 121124

List Number: 1

Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-122949-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C.

625 Broadway

11th Floor

Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by:

8/29/2017 8:11:37 AM

Orlette Johnson, Senior Project Manager

(484)685-0864

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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
8/29/2017 8:11:37 AM

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Definitions/Glossary

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

TestAmerica Job ID: 480-122949-1

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.
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.
F1	MS and/or MSD Recovery is outside acceptance limits.
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-122949-1

Job ID: 480-122949-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-122949-1

Receipt

The samples were received on 8/18/2017 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° 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 (480-122949-4). 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 (480-122949-3), Pre-Carbon (480-122949-4) and Outside Sump (480-122949-5). 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 (480-122949-1).

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: 480-122949-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-122949-1

Date Collected: 08/18/17 13:00

Matrix: Water

Date Received: 08/18/17 14:40

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			08/28/17 17:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/28/17 17:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/28/17 17:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/28/17 17:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/28/17 17:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/28/17 17:03	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			08/28/17 17:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/28/17 17:03	1
2-Hexanone	ND		5.0	1.2	ug/L			08/28/17 17:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/28/17 17:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/28/17 17:03	1
Acetone	4.2	J	10	3.0	ug/L			08/28/17 17:03	1
Benzene	ND		1.0	0.41	ug/L			08/28/17 17:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/28/17 17:03	1
Bromoform	ND		1.0	0.26	ug/L			08/28/17 17:03	1
Bromomethane	ND		1.0	0.69	ug/L			08/28/17 17:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/28/17 17:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/28/17 17:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/28/17 17:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/28/17 17:03	1
Chloroethane	ND		1.0	0.32	ug/L			08/28/17 17:03	1
Chloroform	ND		1.0	0.34	ug/L			08/28/17 17:03	1
Chloromethane	ND		1.0	0.35	ug/L			08/28/17 17:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/28/17 17:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/28/17 17:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/28/17 17:03	1
Styrene	ND		1.0	0.73	ug/L			08/28/17 17:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/28/17 17:03	1
Toluene	ND		1.0	0.51	ug/L			08/28/17 17:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/28/17 17:03	1
Trichloroethene	ND		1.0	0.46	ug/L			08/28/17 17:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/28/17 17:03	1
Vinyl acetate	ND		5.0	0.85	ug/L			08/28/17 17:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/28/17 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		08/28/17 17:03	1
Toluene-d8 (Surr)	98		80 - 120		08/28/17 17:03	1
4-Bromofluorobenzene (Surr)	96		73 - 120		08/28/17 17:03	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			08/22/17 14:33	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/22/17 14:33	1
Benzene	ND		0.20	0.023	ug/L			08/22/17 14:33	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/22/17 14:33	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/22/17 14:33	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/22/17 14:33	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/22/17 14:33	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/22/17 14:33	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-122949-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-122949-1

Date Collected: 08/18/17 13:00

Matrix: Water

Date Received: 08/18/17 14:40

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			08/22/17 14:33	1
o-Xylene	ND		0.20	0.027	ug/L			08/22/17 14:33	1
p-Cymene	ND		0.20	0.030	ug/L			08/22/17 14:33	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/22/17 14:33	1
Toluene	ND		0.20	0.036	ug/L			08/22/17 14:33	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/22/17 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		63 - 129		08/22/17 14:33	1
4-Bromofluorobenzene	81		64 - 128		08/22/17 14:33	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	45.9	J	50.0	19.3	ug/L		08/21/17 10:00	08/21/17 21:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.091	F1	0.010	0.0050	mg/L		08/23/17 03:25	08/23/17 12:41	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.8	HF	0.1	0.1	SU			08/21/17 19:52	1
Temperature	24.1	HF	0.001	0.001	Degrees C			08/21/17 19:52	1

Client Sample Results

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

TestAmerica Job ID: 480-122949-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-122949-2

Date Collected: 08/18/17 13:05

Matrix: Water

Date Received: 08/18/17 14:40

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			08/22/17 15:06	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/22/17 15:06	1
Benzene	0.045	J	0.20	0.023	ug/L			08/22/17 15:06	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/22/17 15:06	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/22/17 15:06	1
Methyl tert-butyl ether	0.23	J	0.40	0.044	ug/L			08/22/17 15:06	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/22/17 15:06	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/22/17 15:06	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/22/17 15:06	1
o-Xylene	ND		0.20	0.027	ug/L			08/22/17 15:06	1
p-Cymene	ND		0.20	0.030	ug/L			08/22/17 15:06	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/22/17 15:06	1
Toluene	ND		0.20	0.036	ug/L			08/22/17 15:06	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/22/17 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 129		08/22/17 15:06	1
4-Bromofluorobenzene	81		64 - 128		08/22/17 15:06	1

Client Sample Results

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

TestAmerica Job ID: 480-122949-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-122949-3

Date Collected: 08/18/17 13:10

Matrix: Water

Date Received: 08/18/17 14:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.2		5.0	0.87	ug/L			08/22/17 19:27	25
1,3,5-Trimethylbenzene	17		5.0	3.8	ug/L			08/22/17 19:27	25
Benzene	940		5.0	0.58	ug/L			08/22/17 19:27	25
Ethylbenzene	64		5.0	0.72	ug/L			08/22/17 19:27	25
Isopropylbenzene	ND		5.0	0.68	ug/L			08/22/17 19:27	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			08/22/17 19:27	25
m,p-Xylene	44		10	1.4	ug/L			08/22/17 19:27	25
n-Butylbenzene	ND		5.0	0.77	ug/L			08/22/17 19:27	25
n-Propylbenzene	ND		5.0	3.3	ug/L			08/22/17 19:27	25
o-Xylene	27		5.0	0.68	ug/L			08/22/17 19:27	25
p-Cymene	ND		5.0	0.74	ug/L			08/22/17 19:27	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			08/22/17 19:27	25
Toluene	180		5.0	0.89	ug/L			08/22/17 19:27	25
Xylenes, Total	71		15	1.4	ug/L			08/22/17 19:27	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 129		08/22/17 19:27	25
4-Bromofluorobenzene	82		64 - 128		08/22/17 19:27	25

Client Sample Results

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

TestAmerica Job ID: 480-122949-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-122949-4

Date Collected: 08/18/17 13:15

Matrix: Water

Date Received: 08/18/17 14:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.9		5.0	0.87	ug/L			08/22/17 18:55	25
1,3,5-Trimethylbenzene	17		5.0	3.8	ug/L			08/22/17 18:55	25
Benzene	1100		5.0	0.58	ug/L			08/22/17 18:55	25
Ethylbenzene	74		5.0	0.72	ug/L			08/22/17 18:55	25
Isopropylbenzene	ND		5.0	0.68	ug/L			08/22/17 18:55	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			08/22/17 18:55	25
m,p-Xylene	47		10	1.4	ug/L			08/22/17 18:55	25
n-Butylbenzene	ND		5.0	0.77	ug/L			08/22/17 18:55	25
n-Propylbenzene	ND		5.0	3.3	ug/L			08/22/17 18:55	25
o-Xylene	29		5.0	0.68	ug/L			08/22/17 18:55	25
p-Cymene	ND		5.0	0.74	ug/L			08/22/17 18:55	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			08/22/17 18:55	25
Toluene	200		5.0	0.89	ug/L			08/22/17 18:55	25
Xylenes, Total	76		15	1.4	ug/L			08/22/17 18:55	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		63 - 129		08/22/17 18:55	25
4-Bromofluorobenzene	83		64 - 128		08/22/17 18:55	25

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	106000		500	100	ug/L		08/21/17 10:00	08/21/17 21:19	1
Iron	589		50.0	19.3	ug/L		08/21/17 10:00	08/21/17 21:19	1
Magnesium	37000		200	43.4	ug/L		08/21/17 10:00	08/21/17 21:19	1
Potassium	3910	B	500	100	ug/L		08/21/17 10:00	08/21/17 21:19	1
Sodium	49200	B	1000	324	ug/L		08/21/17 10:00	08/21/17 21:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83.9		5.0	2.8	mg/L			08/25/17 03:30	10
Sulfate	126		20.0	3.5	mg/L			08/25/17 03:30	10
Alkalinity, Total	286	B	40.0	16.0	mg/L			08/21/17 16:10	4

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-122949-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-122949-5

Date Collected: 08/18/17 13:30

Matrix: Water

Date Received: 08/18/17 14:40

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			08/22/17 18:23	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			08/22/17 18:23	500
Benzene	3300		100	12	ug/L			08/22/17 18:23	500
Ethylbenzene	240		100	14	ug/L			08/22/17 18:23	500
Isopropylbenzene	ND		100	14	ug/L			08/22/17 18:23	500
Methyl tert-butyl ether	ND		200	22	ug/L			08/22/17 18:23	500
m,p-Xylene	110	J	200	27	ug/L			08/22/17 18:23	500
n-Butylbenzene	ND		100	15	ug/L			08/22/17 18:23	500
n-Propylbenzene	ND		100	65	ug/L			08/22/17 18:23	500
o-Xylene	50	J	100	14	ug/L			08/22/17 18:23	500
p-Cymene	ND		100	15	ug/L			08/22/17 18:23	500
sec-Butylbenzene	ND		100	10	ug/L			08/22/17 18:23	500
Toluene	560		100	18	ug/L			08/22/17 18:23	500
Xylenes, Total	160	J	300	27	ug/L			08/22/17 18:23	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 129		08/22/17 18:23	500
4-Bromofluorobenzene	80		64 - 128		08/22/17 18:23	500

Lab Chronicle

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

TestAmerica Job ID: 480-122949-1

Client Sample ID: Post-Carbon 3

Date Collected: 08/18/17 13:00

Date Received: 08/18/17 14:40

Lab Sample ID: 480-122949-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	374159	08/28/17 17:03	ARS	TAL BUF
Total/NA	Analysis	8021B		1	373259	08/22/17 14:33	JLS	TAL BUF
Total/NA	Prep	200.7			373060	08/21/17 10:00	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	373489	08/21/17 21:16	LMH	TAL BUF
Total/NA	Prep	Distill/CN			373439	08/23/17 03:25	BEV	TAL BUF
Total/NA	Analysis	335.4		1	373564	08/23/17 12:41	MDL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	373205	08/21/17 19:52	ALZ	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 08/18/17 13:05

Date Received: 08/18/17 14:40

Lab Sample ID: 480-122949-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	373259	08/22/17 15:06	JLS	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 08/18/17 13:10

Date Received: 08/18/17 14:40

Lab Sample ID: 480-122949-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		25	373259	08/22/17 19:27	JLS	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 08/18/17 13:15

Date Received: 08/18/17 14:40

Lab Sample ID: 480-122949-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		25	373259	08/22/17 18:55	JLS	TAL BUF
Total/NA	Prep	200.7			373060	08/21/17 10:00	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	373489	08/21/17 21:19	LMH	TAL BUF
Total/NA	Analysis	300.0		10	373813	08/25/17 03:30	RJS	TAL BUF
Total/NA	Analysis	310.2		4	373184	08/21/17 16:10	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 08/18/17 13:30

Date Received: 08/18/17 14:40

Lab Sample ID: 480-122949-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	373259	08/22/17 18:23	JLS	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-122949-1

Laboratory: TestAmerica Buffalo

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

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

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
335.4	Distill/CN	Water	Cyanide, Total

The following analytes are included in this report, but accreditation/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
SM 4500 H+ B		Water	Temperature

Method Summary

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

TestAmerica Job ID: 480-122949-1

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: 480-122949-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-122949-1	Post-Carbon 3	Water	08/18/17 13:00	08/18/17 14:40
480-122949-2	Post-Carbon 2	Water	08/18/17 13:05	08/18/17 14:40
480-122949-3	Post-Carbon 1	Water	08/18/17 13:10	08/18/17 14:40
480-122949-4	Pre-Carbon	Water	08/18/17 13:15	08/18/17 14:40
480-122949-5	Outside Sump	Water	08/18/17 13:30	08/18/17 14:40

10 Hazelwood Drive

phone 716.504.9852 fax 716.691.7991

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

[illegible]

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

Page 16 of 17

8/29/2017

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-122949-1

Login Number: 122949

List Number: 1

Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-124274-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C.

625 Broadway

11th Floor

Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by:

9/26/2017 3:17:50 PM

Denise Giglia, Project Management Assistant II

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Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

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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.



Denise Giglia
Project Management Assistant II
9/26/2017 3:17:50 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-124274-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA

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

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-124274-1

Job ID: 480-124274-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-124274-1

Receipt

The samples were received on 9/15/2017 1:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-124274-4), (480-124274-C-4 MS) and (480-124274-C-4 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-378371 recovered above the upper control limit for 2-Butanone (MEK), Chloromethane, Carbon tetrachloride and Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: Pre-Carbon (480-124274-4).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-124274-4). 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

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-377807 recovered outside acceptance criteria, low biased, for Pentachlorophenol. 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) 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 sample contained an allowable number of surrogate compounds outside limits: Post-Carbon 3 (480-124274-1). These results have been reported and qualified.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-377807 recovered above the upper control limit for Carbazole. 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 (480-124274-1).

Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 480-377389 and analytical batch 480-377807 recovered outside control limits for the following analytes: Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-124274-4). 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 (480-124274-3), Pre-Carbon (480-124274-4) and OUTSIDE SUMP (480-124274-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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

Case Narrative

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

TestAmerica Job ID: 480-124274-1

Job ID: 480-124274-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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 (480-124274-1).

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/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-377801.

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: 480-124274-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-124274-1

Date Collected: 09/15/17 12:15

Matrix: Water

Date Received: 09/15/17 13:05

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			09/23/17 15:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/23/17 15:09	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/23/17 15:09	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/23/17 15:09	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/23/17 15:09	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/23/17 15:09	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			09/23/17 15:09	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/23/17 15:09	1
2-Hexanone	ND		5.0	1.2	ug/L			09/23/17 15:09	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/23/17 15:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/23/17 15:09	1
Acetone	ND		10	3.0	ug/L			09/23/17 15:09	1
Benzene	ND		1.0	0.41	ug/L			09/23/17 15:09	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/23/17 15:09	1
Bromoform	ND		1.0	0.26	ug/L			09/23/17 15:09	1
Bromomethane	ND		1.0	0.69	ug/L			09/23/17 15:09	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/23/17 15:09	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/23/17 15:09	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/23/17 15:09	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/23/17 15:09	1
Chloroethane	ND		1.0	0.32	ug/L			09/23/17 15:09	1
Chloroform	ND		1.0	0.34	ug/L			09/23/17 15:09	1
Chloromethane	ND		1.0	0.35	ug/L			09/23/17 15:09	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/23/17 15:09	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/23/17 15:09	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/23/17 15:09	1
Styrene	ND		1.0	0.73	ug/L			09/23/17 15:09	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/23/17 15:09	1
Toluene	ND		1.0	0.51	ug/L			09/23/17 15:09	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/23/17 15:09	1
Trichloroethene	ND		1.0	0.46	ug/L			09/23/17 15:09	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/23/17 15:09	1
Vinyl acetate	ND		5.0	0.85	ug/L			09/23/17 15:09	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/23/17 15:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		77 - 120		09/23/17 15:09	1
Toluene-d8 (Surr)	98		80 - 120		09/23/17 15:09	1
4-Bromofluorobenzene (Surr)	100		73 - 120		09/23/17 15:09	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		09/18/17 14:24	09/21/17 12:49	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/18/17 14:24	09/21/17 12:49	1
Acenaphthene	ND		5.0	0.41	ug/L		09/18/17 14:24	09/21/17 12:49	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/18/17 14:24	09/21/17 12:49	1
Anthracene	ND		5.0	0.28	ug/L		09/18/17 14:24	09/21/17 12:49	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/18/17 14:24	09/21/17 12:49	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/18/17 14:24	09/21/17 12:49	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/18/17 14:24	09/21/17 12:49	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-124274-1

Date Collected: 09/15/17 12:15

Matrix: Water

Date Received: 09/15/17 13:05

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		09/18/17 14:24	09/21/17 12:49	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/18/17 14:24	09/21/17 12:49	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/18/17 14:24	09/21/17 12:49	1
Carbazole	ND	*	5.0	0.30	ug/L		09/18/17 14:24	09/21/17 12:49	1
Chrysene	ND		5.0	0.33	ug/L		09/18/17 14:24	09/21/17 12:49	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/18/17 14:24	09/21/17 12:49	1
Dibenzofuran	ND		10	0.51	ug/L		09/18/17 14:24	09/21/17 12:49	1
Fluoranthene	ND		5.0	0.40	ug/L		09/18/17 14:24	09/21/17 12:49	1
Fluorene	ND		5.0	0.36	ug/L		09/18/17 14:24	09/21/17 12:49	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/18/17 14:24	09/21/17 12:49	1
Naphthalene	ND		5.0	0.76	ug/L		09/18/17 14:24	09/21/17 12:49	1
Pentachlorophenol	ND		10	2.2	ug/L		09/18/17 14:24	09/21/17 12:49	1
Phenanthrene	ND		5.0	0.44	ug/L		09/18/17 14:24	09/21/17 12:49	1
Phenol	ND		5.0	0.39	ug/L		09/18/17 14:24	09/21/17 12:49	1
Pyrene	ND		5.0	0.34	ug/L		09/18/17 14:24	09/21/17 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	123	X	46 - 120	09/18/17 14:24	09/21/17 12:49	1
2-Fluorobiphenyl	115		48 - 120	09/18/17 14:24	09/21/17 12:49	1
p-Terphenyl-d14	119		59 - 136	09/18/17 14:24	09/21/17 12:49	1
Phenol-d5	53		22 - 120	09/18/17 14:24	09/21/17 12:49	1
2-Fluorophenol	75		35 - 120	09/18/17 14:24	09/21/17 12:49	1
2,4,6-Tribromophenol	99		41 - 120	09/18/17 14:24	09/21/17 12:49	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			09/18/17 18:02	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/18/17 18:02	1
Benzene	ND		0.20	0.023	ug/L			09/18/17 18:02	1
Ethylbenzene	ND		0.20	0.029	ug/L			09/18/17 18:02	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/18/17 18:02	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/18/17 18:02	1
m,p-Xylene	ND		0.40	0.054	ug/L			09/18/17 18:02	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/18/17 18:02	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/18/17 18:02	1
o-Xylene	ND		0.20	0.027	ug/L			09/18/17 18:02	1
p-Cymene	ND		0.20	0.030	ug/L			09/18/17 18:02	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/18/17 18:02	1
Toluene	ND		0.20	0.036	ug/L			09/18/17 18:02	1
Xylenes, Total	ND		0.60	0.054	ug/L			09/18/17 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 129		09/18/17 18:02	1
4-Bromofluorobenzene	85		64 - 128		09/18/17 18:02	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.051	0.0083	ug/L		09/20/17 11:32	09/20/17 21:35	1
alpha-BHC	ND		0.051	0.0079	ug/L		09/20/17 11:32	09/20/17 21:35	1
beta-BHC	ND		0.051	0.025	ug/L		09/20/17 11:32	09/20/17 21:35	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-124274-1

Date Collected: 09/15/17 12:15

Matrix: Water

Date Received: 09/15/17 13:05

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.051	0.010	ug/L		09/20/17 11:32	09/20/17 21:35	1
gamma-BHC (Lindane)	ND		0.051	0.0082	ug/L		09/20/17 11:32	09/20/17 21:35	1
Chlordane (technical)	ND		0.51	0.30	ug/L		09/20/17 11:32	09/20/17 21:35	1
4,4'-DDD	ND		0.051	0.0094	ug/L		09/20/17 11:32	09/20/17 21:35	1
4,4'-DDE	ND		0.051	0.012	ug/L		09/20/17 11:32	09/20/17 21:35	1
4,4'-DDT	ND		0.051	0.011	ug/L		09/20/17 11:32	09/20/17 21:35	1
Dieldrin	ND		0.051	0.010	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endosulfan I	ND		0.051	0.011	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endosulfan II	ND		0.051	0.012	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endosulfan sulfate	ND		0.051	0.016	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endrin	ND		0.051	0.014	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endrin aldehyde	ND		0.051	0.017	ug/L		09/20/17 11:32	09/20/17 21:35	1
Heptachlor	ND		0.051	0.0087	ug/L		09/20/17 11:32	09/20/17 21:35	1
Heptachlor epoxide	ND		0.051	0.0076	ug/L		09/20/17 11:32	09/20/17 21:35	1
Toxaphene	ND		0.51	0.12	ug/L		09/20/17 11:32	09/20/17 21:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	93		23 - 120	09/20/17 11:32	09/20/17 21:35	1
Tetrachloro-m-xylene	100		44 - 120	09/20/17 11:32	09/20/17 21:35	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	75.6		50.0	19.3	ug/L		09/19/17 09:20	09/19/17 21:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.2	1.5	mg/L		09/19/17 12:13	09/19/17 12:13	1
Cyanide, Total	0.20		0.010	0.0050	mg/L		09/22/17 01:20	09/22/17 14:02	1
Phenolics, Total Recoverable	0.0085	J	0.010	0.0050	mg/L		09/18/17 00:49	09/19/17 02:45	1
Total Dissolved Solids	739		10.0	4.0	mg/L			09/19/17 01:29	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			09/16/17 16:15	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			09/18/17 09:32	1
pH	7.4	HF	0.1	0.1	SU			09/18/17 14:04	1
Temperature	24.9	HF	0.001	0.001	Degrees C			09/18/17 14:04	1

Client Sample Results

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-124274-2

Date Collected: 09/15/17 12:20

Matrix: Water

Date Received: 09/15/17 13:05

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			09/18/17 18:35	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/18/17 18:35	1
Benzene	9.6		0.20	0.023	ug/L			09/18/17 18:35	1
Ethylbenzene	0.80		0.20	0.029	ug/L			09/18/17 18:35	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/18/17 18:35	1
Methyl tert-butyl ether	0.25	J	0.40	0.044	ug/L			09/18/17 18:35	1
m,p-Xylene	0.28	J	0.40	0.054	ug/L			09/18/17 18:35	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/18/17 18:35	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/18/17 18:35	1
o-Xylene	0.20		0.20	0.027	ug/L			09/18/17 18:35	1
p-Cymene	ND		0.20	0.030	ug/L			09/18/17 18:35	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/18/17 18:35	1
Toluene	1.5		0.20	0.036	ug/L			09/18/17 18:35	1
Xylenes, Total	0.48	J	0.60	0.054	ug/L			09/18/17 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		63 - 129		09/18/17 18:35	1
4-Bromofluorobenzene	85		64 - 128		09/18/17 18:35	1

Client Sample Results

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-124274-3

Date Collected: 09/15/17 12:25

Matrix: Water

Date Received: 09/15/17 13:05

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	11	J	20	3.5	ug/L			09/19/17 12:35	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			09/19/17 12:35	100
Benzene	4800		20	2.3	ug/L			09/19/17 12:35	100
Ethylbenzene	360		20	2.9	ug/L			09/19/17 12:35	100
Isopropylbenzene	ND		20	2.7	ug/L			09/19/17 12:35	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			09/19/17 12:35	100
m,p-Xylene	130		40	5.4	ug/L			09/19/17 12:35	100
n-Butylbenzene	ND		20	3.1	ug/L			09/19/17 12:35	100
n-Propylbenzene	ND		20	13	ug/L			09/19/17 12:35	100
o-Xylene	90		20	2.7	ug/L			09/19/17 12:35	100
p-Cymene	ND		20	3.0	ug/L			09/19/17 12:35	100
sec-Butylbenzene	ND		20	2.0	ug/L			09/19/17 12:35	100
Toluene	820		20	3.6	ug/L			09/19/17 12:35	100
Xylenes, Total	220		60	5.4	ug/L			09/19/17 12:35	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	89		63 - 129		09/19/17 12:35	100
4-Bromofluorobenzene	82		64 - 128		09/19/17 12:35	100

Client Sample Results

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-124274-4

Date Collected: 09/15/17 12:30

Matrix: Water

Date Received: 09/15/17 13:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		25	21	ug/L			09/23/17 18:53	25
1,1,2,2-Tetrachloroethane	ND		25	5.3	ug/L			09/23/17 18:53	25
1,1,2-Trichloroethane	ND		25	5.8	ug/L			09/23/17 18:53	25
1,1-Dichloroethane	ND	F1	25	9.5	ug/L			09/23/17 18:53	25
1,1-Dichloroethene	ND		25	7.3	ug/L			09/23/17 18:53	25
1,2-Dichloroethane	140		25	5.3	ug/L			09/23/17 18:53	25
1,2-Dichloroethene, Total	ND		50	20	ug/L			09/23/17 18:53	25
1,2-Dichloropropane	ND		25	18	ug/L			09/23/17 18:53	25
2-Hexanone	ND	F1	130	31	ug/L			09/23/17 18:53	25
2-Butanone (MEK)	ND		250	33	ug/L			09/23/17 18:53	25
4-Methyl-2-pentanone (MIBK)	ND	F1	130	53	ug/L			09/23/17 18:53	25
Acetone	ND		250	75	ug/L			09/23/17 18:53	25
Bromodichloromethane	ND	F1	25	9.8	ug/L			09/23/17 18:53	25
Bromoform	ND		25	6.5	ug/L			09/23/17 18:53	25
Bromomethane	ND		25	17	ug/L			09/23/17 18:53	25
Carbon disulfide	ND	F2	25	4.8	ug/L			09/23/17 18:53	25
Carbon tetrachloride	ND		25	6.8	ug/L			09/23/17 18:53	25
Chlorobenzene	ND		25	19	ug/L			09/23/17 18:53	25
Dibromochloromethane	ND		25	8.0	ug/L			09/23/17 18:53	25
Chloroethane	ND		25	8.0	ug/L			09/23/17 18:53	25
Chloroform	60		25	8.5	ug/L			09/23/17 18:53	25
Chloromethane	ND	F1	25	8.8	ug/L			09/23/17 18:53	25
cis-1,3-Dichloropropene	ND		25	9.0	ug/L			09/23/17 18:53	25
Ethylbenzene	400		25	19	ug/L			09/23/17 18:53	25
Methylene Chloride	ND		25	11	ug/L			09/23/17 18:53	25
Styrene	ND		25	18	ug/L			09/23/17 18:53	25
Tetrachloroethene	ND		25	9.0	ug/L			09/23/17 18:53	25
Toluene	960		25	13	ug/L			09/23/17 18:53	25
trans-1,3-Dichloropropene	ND		25	9.3	ug/L			09/23/17 18:53	25
Trichloroethene	ND		25	12	ug/L			09/23/17 18:53	25
Vinyl chloride	ND	F2	25	23	ug/L			09/23/17 18:53	25
Vinyl acetate	ND	F1	130	21	ug/L			09/23/17 18:53	25
Xylenes, Total	180		50	17	ug/L			09/23/17 18:53	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		77 - 120		09/23/17 18:53	25
Toluene-d8 (Surr)	88		80 - 120		09/23/17 18:53	25
4-Bromofluorobenzene (Surr)	98		73 - 120		09/23/17 18:53	25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5700		200	82	ug/L			09/25/17 11:43	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		77 - 120		09/25/17 11:43	200
Toluene-d8 (Surr)	93		80 - 120		09/25/17 11:43	200
4-Bromofluorobenzene (Surr)	98		73 - 120		09/25/17 11:43	200

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-124274-4

Date Collected: 09/15/17 12:30

Matrix: Water

Date Received: 09/15/17 13:05

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	4.0	J	20	3.5	ug/L			09/19/17 13:07	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			09/19/17 13:07	100
Benzene	4800		20	2.3	ug/L			09/19/17 13:07	100
Ethylbenzene	360		20	2.9	ug/L			09/19/17 13:07	100
Isopropylbenzene	ND		20	2.7	ug/L			09/19/17 13:07	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			09/19/17 13:07	100
m,p-Xylene	110		40	5.4	ug/L			09/19/17 13:07	100
n-Butylbenzene	ND		20	3.1	ug/L			09/19/17 13:07	100
n-Propylbenzene	ND		20	13	ug/L			09/19/17 13:07	100
o-Xylene	91		20	2.7	ug/L			09/19/17 13:07	100
p-Cymene	ND		20	3.0	ug/L			09/19/17 13:07	100
sec-Butylbenzene	ND		20	2.0	ug/L			09/19/17 13:07	100
Toluene	810		20	3.6	ug/L			09/19/17 13:07	100
Xylenes, Total	200		60	5.4	ug/L			09/19/17 13:07	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	90		63 - 129		09/19/17 13:07	100
<i>4-Bromofluorobenzene</i>	83		64 - 128		09/19/17 13:07	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	119000		500	100	ug/L		09/19/17 09:20	09/19/17 21:35	1
Iron	161		50.0	19.3	ug/L		09/19/17 09:20	09/19/17 21:35	1
Magnesium	52600		200	43.4	ug/L		09/19/17 09:20	09/19/17 21:35	1
Potassium	4060		500	100	ug/L		09/19/17 09:20	09/19/17 21:35	1
Sodium	55800		1000	324	ug/L		09/19/17 09:20	09/19/17 21:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		10.0	5.6	mg/L			09/23/17 19:22	20
Sulfate	135		40.0	7.0	mg/L			09/23/17 19:22	20
Alkalinity, Total	395	B	40.0	16.0	mg/L			09/18/17 17:26	4

Client Sample Results

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: OUTSIDE SUMP

Lab Sample ID: 480-124274-5

Date Collected: 09/15/17 12:45

Matrix: Water

Date Received: 09/15/17 13:05

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	17	J	100	17	ug/L			09/19/17 13:39	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			09/19/17 13:39	500
Benzene	6000		100	12	ug/L			09/19/17 13:39	500
Ethylbenzene	490		100	14	ug/L			09/19/17 13:39	500
Isopropylbenzene	ND		100	14	ug/L			09/19/17 13:39	500
Methyl tert-butyl ether	ND		200	22	ug/L			09/19/17 13:39	500
m,p-Xylene	190	J	200	27	ug/L			09/19/17 13:39	500
n-Butylbenzene	ND		100	15	ug/L			09/19/17 13:39	500
n-Propylbenzene	ND		100	65	ug/L			09/19/17 13:39	500
o-Xylene	ND		100	14	ug/L			09/19/17 13:39	500
p-Cymene	ND		100	15	ug/L			09/19/17 13:39	500
sec-Butylbenzene	ND		100	10	ug/L			09/19/17 13:39	500
Toluene	950		100	18	ug/L			09/19/17 13:39	500
Xylenes, Total	190	J	300	27	ug/L			09/19/17 13:39	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	89		63 - 129		09/19/17 13:39	500
4-Bromofluorobenzene	83		64 - 128		09/19/17 13:39	500

Lab Chronicle

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: Post-Carbon 3

Date Collected: 09/15/17 12:15

Date Received: 09/15/17 13:05

Lab Sample ID: 480-124274-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	378386	09/23/17 15:09	NEA	TAL BUF
Total/NA	Prep	3510C			377389	09/18/17 14:24	RLT	TAL BUF
Total/NA	Analysis	8270D		1	377807	09/21/17 12:49	MKP	TAL BUF
Total/NA	Analysis	8021B		1	377325	09/18/17 18:02	JLS	TAL BUF
Total/NA	Prep	3510C			377801	09/20/17 11:32	JMP	TAL BUF
Total/NA	Analysis	608		1	377853	09/20/17 21:35	MAN	TAL BUF
Total/NA	Prep	200.7			377491	09/19/17 09:20	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	377740	09/19/17 21:31	LMH	TAL BUF
Total/NA	Prep	1664B			377580	09/19/17 12:13	DSC	TAL BUF
Total/NA	Analysis	1664B		1	377641	09/19/17 12:13	DSC	TAL BUF
Total/NA	Prep	Distill/CN			378154	09/22/17 01:20	KMB	TAL BUF
Total/NA	Analysis	335.4		1	378312	09/22/17 14:02	JCL	TAL BUF
Total/NA	Prep	Distill/Phenol			377240	09/18/17 00:49	BEV	TAL BUF
Total/NA	Analysis	420.1		1	377471	09/19/17 02:45	KMB	TAL BUF
Total/NA	Analysis	SM 2540C		1	377469	09/19/17 01:29	KMB	TAL BUF
Total/NA	Analysis	SM 2540D		1	377316	09/18/17 09:32	EKB	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	377398	09/18/17 14:04	DSC	TAL BUF
Total/NA	Analysis	SM 5210B		1	377205	09/16/17 16:15	JCL	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 09/15/17 12:20

Date Received: 09/15/17 13:05

Lab Sample ID: 480-124274-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	377325	09/18/17 18:35	JLS	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 09/15/17 12:25

Date Received: 09/15/17 13:05

Lab Sample ID: 480-124274-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	377519	09/19/17 12:35	JLS	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 09/15/17 12:30

Date Received: 09/15/17 13:05

Lab Sample ID: 480-124274-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		25	378371	09/23/17 18:53	KMN	TAL BUF
Total/NA	Analysis	8260C	DL	200	378493	09/25/17 11:43	KMN	TAL BUF
Total/NA	Analysis	8021B		100	377519	09/19/17 13:07	JLS	TAL BUF
Total/NA	Prep	200.7			377491	09/19/17 09:20	EMB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-124274-1

Client Sample ID: Pre-Carbon

Date Collected: 09/15/17 12:30

Date Received: 09/15/17 13:05

Lab Sample ID: 480-124274-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	200.7 Rev 4.4		1	377740	09/19/17 21:35	LMH	TAL BUF
Total/NA	Analysis	300.0		20	378422	09/23/17 19:22	RJS	TAL BUF
Total/NA	Analysis	310.2		4	377445	09/18/17 17:26	LED	TAL BUF

Client Sample ID: OUTSIDE SUMP

Date Collected: 09/15/17 12:45

Date Received: 09/15/17 13:05

Lab Sample ID: 480-124274-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	377519	09/19/17 13:39	JLS	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-124274-1

Laboratory: TestAmerica Buffalo

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

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

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
335.4	Distill/CN	Water	Cyanide, Total

The following analytes are included in this report, but accreditation/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
SM 4500 H+ B		Water	Temperature

Method Summary

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

TestAmerica Job ID: 480-124274-1

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
1664B	HEM and SGT-HEM	1664B	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:

1664B = 1664B

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: 480-124274-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-124274-1	Post-Carbon 3	Water	09/15/17 12:15	09/15/17 13:05
480-124274-2	Post-Carbon 2	Water	09/15/17 12:20	09/15/17 13:05
480-124274-3	Post-Carbon 1	Water	09/15/17 12:25	09/15/17 13:05
480-124274-4	Pre-Carbon	Water	09/15/17 12:30	09/15/17 13:05
480-124274-5	OUTSIDE SUMP	Water	09/15/17 12:45	09/15/17 13:05

10 Hazelwood Drive

phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

[illegible]

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

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-124274-1

Login Number: 124274

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	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: 480-126061-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

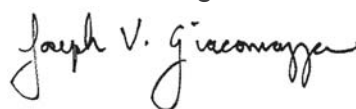
New York State D.E.C.

625 Broadway

11th Floor

Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by:

10/31/2017 4:55:05 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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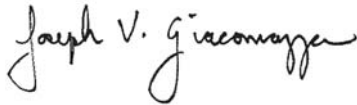
The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail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

- 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.



Joe Giacomazza
Project Management Assistant II
10/31/2017 4:55:05 PM

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Definitions/Glossary

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

TestAmerica Job ID: 480-126061-1

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.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-126061-1

Job ID: 480-126061-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-126061-1

Comments

No additional comments.

Receipt

The samples were received on 10/18/2017 1:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-384755 recovered above the upper control limit for Carbon tetrachloride and Chloromethane. 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 (480-126061-1).

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 (480-126061-4). 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 2 (480-126061-2), Post-Carbon 1 (480-126061-3), Pre-Carbon (480-126061-4) and Outside Sump (480-126061-5). 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 (480-126061-1).

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: 480-126061-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-126061-1

Date Collected: 10/18/17 12:30

Matrix: Wastewater

Date Received: 10/18/17 13:35

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			10/31/17 12:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/31/17 12:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/31/17 12:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/31/17 12:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/31/17 12:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/31/17 12:11	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			10/31/17 12:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/31/17 12:11	1
2-Hexanone	ND		5.0	1.2	ug/L			10/31/17 12:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/31/17 12:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/31/17 12:11	1
Acetone	3.7	J	10	3.0	ug/L			10/31/17 12:11	1
Benzene	ND		1.0	0.41	ug/L			10/31/17 12:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/31/17 12:11	1
Bromoform	ND		1.0	0.26	ug/L			10/31/17 12:11	1
Bromomethane	ND		1.0	0.69	ug/L			10/31/17 12:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/31/17 12:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/31/17 12:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/31/17 12:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/31/17 12:11	1
Chloroethane	ND		1.0	0.32	ug/L			10/31/17 12:11	1
Chloroform	ND		1.0	0.34	ug/L			10/31/17 12:11	1
Chloromethane	ND		1.0	0.35	ug/L			10/31/17 12:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/31/17 12:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/31/17 12:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/31/17 12:11	1
Styrene	ND		1.0	0.73	ug/L			10/31/17 12:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/31/17 12:11	1
Toluene	ND		1.0	0.51	ug/L			10/31/17 12:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/31/17 12:11	1
Trichloroethene	ND		1.0	0.46	ug/L			10/31/17 12:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/31/17 12:11	1
Vinyl acetate	ND		5.0	0.85	ug/L			10/31/17 12:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/31/17 12:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		10/31/17 12:11	1
Toluene-d8 (Surr)	102		80 - 120		10/31/17 12:11	1
4-Bromofluorobenzene (Surr)	98		73 - 120		10/31/17 12:11	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			10/22/17 15:25	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/22/17 15:25	1
Benzene	ND		0.20	0.023	ug/L			10/22/17 15:25	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/22/17 15:25	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/22/17 15:25	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/22/17 15:25	1
m,p-Xylene	ND		0.40	0.054	ug/L			10/22/17 15:25	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/22/17 15:25	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-126061-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-126061-1

Date Collected: 10/18/17 12:30

Matrix: Wastewater

Date Received: 10/18/17 13:35

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			10/22/17 15:25	1
o-Xylene	ND		0.20	0.027	ug/L			10/22/17 15:25	1
p-Cymene	ND		0.20	0.030	ug/L			10/22/17 15:25	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/22/17 15:25	1
Toluene	ND		0.20	0.036	ug/L			10/22/17 15:25	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/22/17 15:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129		10/22/17 15:25	1
4-Bromofluorobenzene	77		64 - 128		10/22/17 15:25	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	72.6		50.0	19.3	ug/L		10/24/17 08:33	10/24/17 18:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.086	F1	0.010	0.0050	mg/L		10/20/17 03:40	10/20/17 13:23	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6	HF	0.1	0.1	SU			10/19/17 21:54	1
Temperature	20.4	HF	0.001	0.001	Degrees C			10/19/17 21:54	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-126061-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-126061-2

Date Collected: 10/18/17 12:35

Matrix: Wastewater

Date Received: 10/18/17 13:35

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			10/22/17 15:57	5
1,3,5-Trimethylbenzene	ND		1.0	0.75	ug/L			10/22/17 15:57	5
Benzene	13		1.0	0.12	ug/L			10/22/17 15:57	5
Ethylbenzene	0.76	J	1.0	0.14	ug/L			10/22/17 15:57	5
Isopropylbenzene	ND		1.0	0.14	ug/L			10/22/17 15:57	5
Methyl tert-butyl ether	ND		2.0	0.22	ug/L			10/22/17 15:57	5
m,p-Xylene	0.45	J	2.0	0.27	ug/L			10/22/17 15:57	5
n-Butylbenzene	ND		1.0	0.15	ug/L			10/22/17 15:57	5
n-Propylbenzene	ND		1.0	0.65	ug/L			10/22/17 15:57	5
o-Xylene	0.53	J	1.0	0.14	ug/L			10/22/17 15:57	5
p-Cymene	ND		1.0	0.15	ug/L			10/22/17 15:57	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			10/22/17 15:57	5
Toluene	2.3		1.0	0.18	ug/L			10/22/17 15:57	5
Xylenes, Total	0.98	J	3.0	0.27	ug/L			10/22/17 15:57	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		63 - 129		10/22/17 15:57	5
4-Bromofluorobenzene	76		64 - 128		10/22/17 15:57	5

Client Sample Results

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

TestAmerica Job ID: 480-126061-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-126061-3

Date Collected: 10/18/17 12:40

Matrix: Water

Date Received: 10/18/17 13:35

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			10/22/17 16:29	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			10/22/17 16:29	100
Benzene	2500		20	2.3	ug/L			10/22/17 16:29	100
Ethylbenzene	120		20	2.9	ug/L			10/22/17 16:29	100
Isopropylbenzene	ND		20	2.7	ug/L			10/22/17 16:29	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			10/22/17 16:29	100
m,p-Xylene	ND		40	5.4	ug/L			10/22/17 16:29	100
n-Butylbenzene	3.3	J	20	3.1	ug/L			10/22/17 16:29	100
n-Propylbenzene	ND		20	13	ug/L			10/22/17 16:29	100
o-Xylene	5.4	J	20	2.7	ug/L			10/22/17 16:29	100
p-Cymene	ND		20	3.0	ug/L			10/22/17 16:29	100
sec-Butylbenzene	ND		20	2.0	ug/L			10/22/17 16:29	100
Toluene	330		20	3.6	ug/L			10/22/17 16:29	100
Xylenes, Total	5.4	J	60	5.4	ug/L			10/22/17 16:29	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129		10/22/17 16:29	100
4-Bromofluorobenzene	78		64 - 128		10/22/17 16:29	100

Client Sample Results

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

TestAmerica Job ID: 480-126061-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-126061-4

Date Collected: 10/18/17 12:45

Matrix: Water

Date Received: 10/18/17 13:35

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	15	J	20	3.5	ug/L			10/22/17 17:01	100
1,3,5-Trimethylbenzene	94		20	15	ug/L			10/22/17 17:01	100
Benzene	3200		20	2.3	ug/L			10/22/17 17:01	100
Ethylbenzene	230		20	2.9	ug/L			10/22/17 17:01	100
Isopropylbenzene	ND		20	2.7	ug/L			10/22/17 17:01	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			10/22/17 17:01	100
m,p-Xylene	140		40	5.4	ug/L			10/22/17 17:01	100
n-Butylbenzene	ND		20	3.1	ug/L			10/22/17 17:01	100
n-Propylbenzene	ND		20	13	ug/L			10/22/17 17:01	100
o-Xylene	180		20	2.7	ug/L			10/22/17 17:01	100
p-Cymene	ND		20	3.0	ug/L			10/22/17 17:01	100
sec-Butylbenzene	ND		20	2.0	ug/L			10/22/17 17:01	100
Toluene	690		20	3.6	ug/L			10/22/17 17:01	100
Xylenes, Total	320		60	5.4	ug/L			10/22/17 17:01	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		63 - 129		10/22/17 17:01	100
4-Bromofluorobenzene	77		64 - 128		10/22/17 17:01	100

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		10/24/17 08:33	10/24/17 18:05	1
Iron	254		50.0	19.3	ug/L		10/24/17 08:33	10/24/17 18:05	1
Magnesium	49000		200	43.4	ug/L		10/24/17 08:33	10/24/17 18:05	1
Potassium	4020		500	100	ug/L		10/24/17 08:33	10/24/17 18:05	1
Sodium	60500		1000	324	ug/L		10/24/17 08:33	10/24/17 18:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.4		2.5	1.4	mg/L			10/25/17 00:38	5
Sulfate	145		10.0	1.7	mg/L			10/25/17 00:38	5
Alkalinity, Total	391		50.0	20.0	mg/L			10/20/17 16:33	5

Client Sample Results

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

TestAmerica Job ID: 480-126061-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-126061-5

Date Collected: 10/18/17 13:00

Matrix: Water

Date Received: 10/18/17 13:35

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			10/22/17 17:33	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			10/22/17 17:33	500
Benzene	4700		100	12	ug/L			10/22/17 17:33	500
Ethylbenzene	350		100	14	ug/L			10/22/17 17:33	500
Isopropylbenzene	ND		100	14	ug/L			10/22/17 17:33	500
Methyl tert-butyl ether	ND		200	22	ug/L			10/22/17 17:33	500
m,p-Xylene	140 J		200	27	ug/L			10/22/17 17:33	500
n-Butylbenzene	ND		100	15	ug/L			10/22/17 17:33	500
n-Propylbenzene	ND		100	65	ug/L			10/22/17 17:33	500
o-Xylene	260		100	14	ug/L			10/22/17 17:33	500
p-Cymene	ND		100	15	ug/L			10/22/17 17:33	500
sec-Butylbenzene	ND		100	10	ug/L			10/22/17 17:33	500
Toluene	860		100	18	ug/L			10/22/17 17:33	500
Xylenes, Total	400		300	27	ug/L			10/22/17 17:33	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129		10/22/17 17:33	500
4-Bromofluorobenzene	76		64 - 128		10/22/17 17:33	500

Lab Chronicle

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

TestAmerica Job ID: 480-126061-1

Client Sample ID: Post-Carbon 3

Date Collected: 10/18/17 12:30

Date Received: 10/18/17 13:35

Lab Sample ID: 480-126061-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	384755	10/31/17 12:11	LCH	TAL BUF
Total/NA	Analysis	8021B		1	383163	10/22/17 15:25	MRB	TAL BUF
Total/NA	Prep	200.7			383387	10/24/17 08:33	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	383696	10/24/17 18:01	LMH	TAL BUF
Total/NA	Prep	Distill/CN			382843	10/20/17 03:40	BEV	TAL BUF
Total/NA	Analysis	335.4		1	382976	10/20/17 13:23	MRF	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	382827	10/19/17 21:54	ALZ	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 10/18/17 12:35

Date Received: 10/18/17 13:35

Lab Sample ID: 480-126061-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		5	383163	10/22/17 15:57	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 10/18/17 12:40

Date Received: 10/18/17 13:35

Lab Sample ID: 480-126061-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	383163	10/22/17 16:29	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 10/18/17 12:45

Date Received: 10/18/17 13:35

Lab Sample ID: 480-126061-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	383163	10/22/17 17:01	MRB	TAL BUF
Total/NA	Prep	200.7			383387	10/24/17 08:33	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	383696	10/24/17 18:05	LMH	TAL BUF
Total/NA	Analysis	300.0		5	383446	10/25/17 00:38	RJS	TAL BUF
Total/NA	Analysis	310.2		5	383062	10/20/17 16:33	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 10/18/17 13:00

Date Received: 10/18/17 13:35

Lab Sample ID: 480-126061-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	383163	10/22/17 17:33	MRB	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-126061-1

Laboratory: TestAmerica Buffalo

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

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

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
335.4	Distill/CN	Wastewater	Cyanide, Total

The following analytes are included in this report, but accreditation/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
SM 4500 H+ B		Wastewater	Temperature

Method Summary

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

TestAmerica Job ID: 480-126061-1

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: 480-126061-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-126061-1	Post-Carbon 3	Wastewater	10/18/17 12:30	10/18/17 13:35
480-126061-2	Post-Carbon 2	Wastewater	10/18/17 12:35	10/18/17 13:35
480-126061-3	Post-Carbon 1	Water	10/18/17 12:40	10/18/17 13:35
480-126061-4	Pre-Carbon	Water	10/18/17 12:45	10/18/17 13:35
480-126061-5	Outside Sump	Water	10/18/17 13:00	10/18/17 13:35

10 Hazelwood Drive

Amherst, NY 14228
phone 716.504.9852 fax 716.691.7991

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

[illegible]

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

~~Page 46 of 47~~

~~10/31/2017~~

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-126061-1

Login Number: 126061

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 (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ges
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	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: 480-127763-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

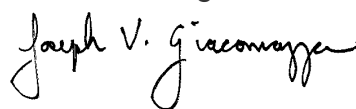
New York State D.E.C.

625 Broadway

11th Floor

Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by:

11/30/2017 1:04:15 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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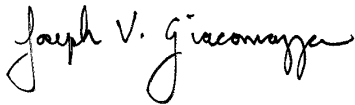
The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail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

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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.



Joe Giacomazza
Project Management Assistant II
11/30/2017 1:04:15 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-127763-1

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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-127763-1

Job ID: 480-127763-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-127763-1

Comments

No additional comments.

Receipt

The samples were received on 11/17/2017 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted based on history: Post-Carbon 3 (480-127763-1). Due to holding time limitations the samples were not reanalyzed.

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 (480-127763-4). 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 (480-127763-3), Pre-Carbon (480-127763-4) and Outside Sump (480-127763-5). Elevated reporting limits (RLs) are provided.

Method(s) 8021B: The continuing calibration verification (CCV) recovered above the upper control limit for n-Butylbenzene. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: Post-Carbon 3 (480-127763-1), Post-Carbon 2 (480-127763-2), Post-Carbon 1 (480-127763-3), Pre-Carbon (480-127763-4) and Outside Sump (480-127763-5).

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 (480-127763-1).

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: 480-127763-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-127763-1

Date Collected: 11/17/17 12:30

Matrix: Wastewater

Date Received: 11/17/17 14:40

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			11/24/17 11:34	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/24/17 11:34	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/24/17 11:34	100
1,1-Dichloroethane	ND		100	38	ug/L			11/24/17 11:34	100
1,1-Dichloroethene	ND		100	29	ug/L			11/24/17 11:34	100
1,2-Dichloroethane	ND		100	21	ug/L			11/24/17 11:34	100
1,2-Dichloroethene, Total	ND		200	81	ug/L			11/24/17 11:34	100
1,2-Dichloropropane	ND		100	72	ug/L			11/24/17 11:34	100
2-Hexanone	ND		500	120	ug/L			11/24/17 11:34	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/24/17 11:34	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/24/17 11:34	100
Acetone	ND		1000	300	ug/L			11/24/17 11:34	100
Benzene	ND		100	41	ug/L			11/24/17 11:34	100
Bromodichloromethane	ND		100	39	ug/L			11/24/17 11:34	100
Bromoform	ND		100	26	ug/L			11/24/17 11:34	100
Bromomethane	ND		100	69	ug/L			11/24/17 11:34	100
Carbon disulfide	ND		100	19	ug/L			11/24/17 11:34	100
Carbon tetrachloride	ND		100	27	ug/L			11/24/17 11:34	100
Chlorobenzene	ND		100	75	ug/L			11/24/17 11:34	100
Dibromochloromethane	ND		100	32	ug/L			11/24/17 11:34	100
Chloroethane	ND		100	32	ug/L			11/24/17 11:34	100
Chloroform	ND		100	34	ug/L			11/24/17 11:34	100
Chloromethane	ND		100	35	ug/L			11/24/17 11:34	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/24/17 11:34	100
Ethylbenzene	ND		100	74	ug/L			11/24/17 11:34	100
Methylene Chloride	52	J	100	44	ug/L			11/24/17 11:34	100
Styrene	ND		100	73	ug/L			11/24/17 11:34	100
Tetrachloroethene	ND		100	36	ug/L			11/24/17 11:34	100
Toluene	ND		100	51	ug/L			11/24/17 11:34	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/24/17 11:34	100
Trichloroethene	ND		100	46	ug/L			11/24/17 11:34	100
Vinyl chloride	ND		100	90	ug/L			11/24/17 11:34	100
Vinyl acetate	ND		500	85	ug/L			11/24/17 11:34	100
Xylenes, Total	ND		200	66	ug/L			11/24/17 11:34	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		77 - 120		11/24/17 11:34	100
Toluene-d8 (Surr)	100		80 - 120		11/24/17 11:34	100
4-Bromofluorobenzene (Surr)	97		73 - 120		11/24/17 11:34	100

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			11/20/17 16:35	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/20/17 16:35	1
Benzene	ND		0.20	0.023	ug/L			11/20/17 16:35	1
Ethylbenzene	ND		0.20	0.029	ug/L			11/20/17 16:35	1
Isopropylbenzene	ND		0.20	0.027	ug/L			11/20/17 16:35	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			11/20/17 16:35	1
m,p-Xylene	ND		0.40	0.054	ug/L			11/20/17 16:35	1
n-Butylbenzene	ND		0.20	0.031	ug/L			11/20/17 16:35	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-127763-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-127763-1

Date Collected: 11/17/17 12:30

Matrix: Wastewater

Date Received: 11/17/17 14:40

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			11/20/17 16:35	1
o-Xylene	ND		0.20	0.027	ug/L			11/20/17 16:35	1
p-Cymene	ND		0.20	0.030	ug/L			11/20/17 16:35	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/20/17 16:35	1
Toluene	ND		0.20	0.036	ug/L			11/20/17 16:35	1
Xylenes, Total	ND		0.60	0.054	ug/L			11/20/17 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	82		63 - 129		11/20/17 16:35	1
4-Bromofluorobenzene	109		64 - 128		11/20/17 16:35	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	109		50.0	19.3	ug/L		11/21/17 08:25	11/25/17 14:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.14		0.010	0.0050	mg/L		11/28/17 01:05	11/28/17 13:00	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.6	HF	0.1	0.1	SU			11/19/17 16:05	1
Temperature	20.3	HF	0.001	0.001	Degrees C			11/19/17 16:05	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-127763-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-127763-2

Date Collected: 11/17/17 12:35

Matrix: Wastewater

Date Received: 11/17/17 14:40

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			11/20/17 17:06	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/20/17 17:06	1
Benzene	14		0.20	0.023	ug/L			11/20/17 17:06	1
Ethylbenzene	0.095	J	0.20	0.029	ug/L			11/20/17 17:06	1
Isopropylbenzene	ND		0.20	0.027	ug/L			11/20/17 17:06	1
Methyl tert-butyl ether	0.31	J	0.40	0.044	ug/L			11/20/17 17:06	1
m,p-Xylene	0.055	J	0.40	0.054	ug/L			11/20/17 17:06	1
n-Butylbenzene	ND		0.20	0.031	ug/L			11/20/17 17:06	1
n-Propylbenzene	ND		0.20	0.13	ug/L			11/20/17 17:06	1
o-Xylene	ND		0.20	0.027	ug/L			11/20/17 17:06	1
p-Cymene	ND		0.20	0.030	ug/L			11/20/17 17:06	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/20/17 17:06	1
Toluene	0.26		0.20	0.036	ug/L			11/20/17 17:06	1
Xylenes, Total	0.055	J	0.60	0.054	ug/L			11/20/17 17:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129		11/20/17 17:06	1
4-Bromofluorobenzene	111		64 - 128		11/20/17 17:06	1

Client Sample Results

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

TestAmerica Job ID: 480-127763-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-127763-3

Date Collected: 11/17/17 12:40

Matrix: Water

Date Received: 11/17/17 14:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	12	J	20	3.5	ug/L			11/20/17 14:58	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			11/20/17 14:58	100
Benzene	2800		20	2.3	ug/L			11/20/17 14:58	100
Ethylbenzene	200		20	2.9	ug/L			11/20/17 14:58	100
Isopropylbenzene	ND		20	2.7	ug/L			11/20/17 14:58	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			11/20/17 14:58	100
m,p-Xylene	120		40	5.4	ug/L			11/20/17 14:58	100
n-Butylbenzene	ND		20	3.1	ug/L			11/20/17 14:58	100
n-Propylbenzene	ND		20	13	ug/L			11/20/17 14:58	100
o-Xylene	150		20	2.7	ug/L			11/20/17 14:58	100
p-Cymene	ND		20	3.0	ug/L			11/20/17 14:58	100
sec-Butylbenzene	ND		20	2.0	ug/L			11/20/17 14:58	100
Toluene	510		20	3.6	ug/L			11/20/17 14:58	100
Xylenes, Total	270		60	5.4	ug/L			11/20/17 14:58	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129		11/20/17 14:58	100
4-Bromofluorobenzene	111		64 - 128		11/20/17 14:58	100

Client Sample Results

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

TestAmerica Job ID: 480-127763-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-127763-4

Date Collected: 11/17/17 12:45

Matrix: Water

Date Received: 11/17/17 14:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	13	J	20	3.5	ug/L			11/20/17 15:30	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			11/20/17 15:30	100
Benzene	2900		20	2.3	ug/L			11/20/17 15:30	100
Ethylbenzene	210		20	2.9	ug/L			11/20/17 15:30	100
Isopropylbenzene	ND		20	2.7	ug/L			11/20/17 15:30	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			11/20/17 15:30	100
m,p-Xylene	120		40	5.4	ug/L			11/20/17 15:30	100
n-Butylbenzene	ND		20	3.1	ug/L			11/20/17 15:30	100
n-Propylbenzene	ND		20	13	ug/L			11/20/17 15:30	100
o-Xylene	150		20	2.7	ug/L			11/20/17 15:30	100
p-Cymene	ND		20	3.0	ug/L			11/20/17 15:30	100
sec-Butylbenzene	ND		20	2.0	ug/L			11/20/17 15:30	100
Toluene	520		20	3.6	ug/L			11/20/17 15:30	100
Xylenes, Total	270		60	5.4	ug/L			11/20/17 15:30	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	86		63 - 129		11/20/17 15:30	100
<i>4-Bromofluorobenzene</i>	111		64 - 128		11/20/17 15:30	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	126000		500	100	ug/L		11/21/17 08:25	11/25/17 14:51	1
Iron	1040		50.0	19.3	ug/L		11/21/17 08:25	11/25/17 14:51	1
Magnesium	44800		200	43.4	ug/L		11/21/17 08:25	11/25/17 14:51	1
Potassium	3810		500	100	ug/L		11/21/17 08:25	11/25/17 14:51	1
Sodium	56800		1000	324	ug/L		11/21/17 08:25	11/25/17 14:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.7		2.5	1.4	mg/L			11/25/17 14:43	5
Sulfate	130		10.0	1.7	mg/L			11/25/17 14:43	5
Alkalinity, Total	389	B	50.0	20.0	mg/L			11/20/17 15:13	5

Client Sample Results

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

TestAmerica Job ID: 480-127763-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-127763-5

Date Collected: 11/17/17 13:00

Matrix: Water

Date Received: 11/17/17 14:40

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			11/20/17 16:02	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			11/20/17 16:02	500
Benzene	4100		100	12	ug/L			11/20/17 16:02	500
Ethylbenzene	330		100	14	ug/L			11/20/17 16:02	500
Isopropylbenzene	ND		100	14	ug/L			11/20/17 16:02	500
Methyl tert-butyl ether	ND		200	22	ug/L			11/20/17 16:02	500
m,p-Xylene	140 J		200	27	ug/L			11/20/17 16:02	500
n-Butylbenzene	ND		100	15	ug/L			11/20/17 16:02	500
n-Propylbenzene	ND		100	65	ug/L			11/20/17 16:02	500
o-Xylene	220		100	14	ug/L			11/20/17 16:02	500
p-Cymene	ND		100	15	ug/L			11/20/17 16:02	500
sec-Butylbenzene	ND		100	10	ug/L			11/20/17 16:02	500
Toluene	680		100	18	ug/L			11/20/17 16:02	500
Xylenes, Total	360		300	27	ug/L			11/20/17 16:02	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	81		63 - 129		11/20/17 16:02	500
4-Bromofluorobenzene	107		64 - 128		11/20/17 16:02	500

Lab Chronicle

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

TestAmerica Job ID: 480-127763-1

Client Sample ID: Post-Carbon 3

Date Collected: 11/17/17 12:30

Date Received: 11/17/17 14:40

Lab Sample ID: 480-127763-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	388967	11/24/17 11:34	KMN	TAL BUF
Total/NA	Analysis	8021B		1	388306	11/20/17 16:35	MAN	TAL BUF
Total/NA	Prep	200.7			388419	11/21/17 08:25	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	389186	11/25/17 14:47	LMH	TAL BUF
Total/NA	Prep	Distill/CN			389317	11/28/17 01:05	KMB	TAL BUF
Total/NA	Analysis	335.4		1	389458	11/28/17 13:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	388251	11/19/17 16:05	DSC	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 11/17/17 12:35

Date Received: 11/17/17 14:40

Lab Sample ID: 480-127763-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	388306	11/20/17 17:06	MAN	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 11/17/17 12:40

Date Received: 11/17/17 14:40

Lab Sample ID: 480-127763-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	388306	11/20/17 14:58	MAN	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 11/17/17 12:45

Date Received: 11/17/17 14:40

Lab Sample ID: 480-127763-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	388306	11/20/17 15:30	MAN	TAL BUF
Total/NA	Prep	200.7			388419	11/21/17 08:25	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	389186	11/25/17 14:51	LMH	TAL BUF
Total/NA	Analysis	300.0		5	389063	11/25/17 14:43	RJS	TAL BUF
Total/NA	Analysis	310.2		5	388478	11/20/17 15:13	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 11/17/17 13:00

Date Received: 11/17/17 14:40

Lab Sample ID: 480-127763-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	388306	11/20/17 16:02	MAN	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-127763-1

Laboratory: TestAmerica Buffalo

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

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

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
335.4	Distill/CN	Wastewater	Cyanide, Total

The following analytes are included in this report, but accreditation/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
SM 4500 H+ B		Wastewater	Temperature

Method Summary

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

TestAmerica Job ID: 480-127763-1

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: 480-127763-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-127763-1	Post-Carbon 3	Wastewater	11/17/17 12:30	11/17/17 14:40
480-127763-2	Post-Carbon 2	Wastewater	11/17/17 12:35	11/17/17 14:40
480-127763-3	Post-Carbon 1	Water	11/17/17 12:40	11/17/17 14:40
480-127763-4	Pre-Carbon	Water	11/17/17 12:45	11/17/17 14:40
480-127763-5	Outside Sump	Water	11/17/17 13:00	11/17/17 14:40

10 Hazelwood Drive

phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

[illegible]

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

Page 16 of 17

11/30/2017

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-127763-1

Login Number: 127763

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 (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	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: 480-129554-1

Client Project/Site: Gastown WWTP #915171

For:

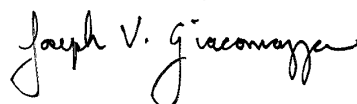
New York State D.E.C.

625 Broadway

11th Floor

Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by:

1/10/2018 9:31:21 AM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

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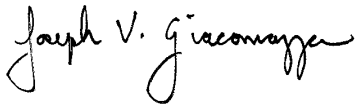
www.testamericainc.com

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.



Joe Giacomazza
Project Management Assistant II
1/10/2018 9:31:21 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-129554-1

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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 480-129554-1

Job ID: 480-129554-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-129554-1

Comments

No additional comments.

Receipt

The samples were received on 12/29/2017 12:08 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-394147 recovered above the upper control limit for Carbon tetrachloride and Tetrachloroethene. 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 (480-129554-1) and Pre-Carbon (480-129554-4).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-394147 recovered outside acceptance criteria, low biased, for 2-Hexanone, Chloromethane and 4-Methyl-2-Pentanone. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported. The following samples are impacted: Post-Carbon 3 (480-129554-1) and Pre-Carbon (480-129554-4).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-129554-4). 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

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 480-394367 was outside the method criteria for the following analyte(s): 2,4,6-Tribromophenol(Surrogate). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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 (480-129554-4). 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 2 (480-129554-2), Post-Carbon 1 (480-129554-3), Pre-Carbon (480-129554-4) and OUTSIDE SUMP (480-129554-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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

Metals

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

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

Case Narrative

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

TestAmerica Job ID: 480-129554-1

Job ID: 480-129554-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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 (480-129554-1).

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: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-129554-1

Date Collected: 12/29/17 11:00

Matrix: Wastewater

Date Received: 12/29/17 12:08

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			12/29/17 23:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/29/17 23:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/29/17 23:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/29/17 23:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/29/17 23:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/29/17 23:23	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			12/29/17 23:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/29/17 23:23	1
2-Hexanone	ND		5.0	1.2	ug/L			12/29/17 23:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/29/17 23:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/29/17 23:23	1
Acetone	ND		10	3.0	ug/L			12/29/17 23:23	1
Benzene	ND		1.0	0.41	ug/L			12/29/17 23:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/29/17 23:23	1
Bromoform	ND		1.0	0.26	ug/L			12/29/17 23:23	1
Bromomethane	ND		1.0	0.69	ug/L			12/29/17 23:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/29/17 23:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/29/17 23:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/29/17 23:23	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/29/17 23:23	1
Chloroethane	ND		1.0	0.32	ug/L			12/29/17 23:23	1
Chloroform	ND		1.0	0.34	ug/L			12/29/17 23:23	1
Chloromethane	ND		1.0	0.35	ug/L			12/29/17 23:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/29/17 23:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/29/17 23:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/29/17 23:23	1
Styrene	ND		1.0	0.73	ug/L			12/29/17 23:23	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/29/17 23:23	1
Toluene	ND		1.0	0.51	ug/L			12/29/17 23:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/29/17 23:23	1
Trichloroethene	ND		1.0	0.46	ug/L			12/29/17 23:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/29/17 23:23	1
Vinyl acetate	ND		5.0	0.85	ug/L			12/29/17 23:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/29/17 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		12/29/17 23:23	1
Toluene-d8 (Surr)	98		80 - 120		12/29/17 23:23	1
4-Bromofluorobenzene (Surr)	113		73 - 120		12/29/17 23:23	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		12/29/17 17:13	01/03/18 15:03	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/29/17 17:13	01/03/18 15:03	1
Acenaphthene	ND		5.0	0.41	ug/L		12/29/17 17:13	01/03/18 15:03	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/29/17 17:13	01/03/18 15:03	1
Anthracene	ND		5.0	0.28	ug/L		12/29/17 17:13	01/03/18 15:03	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		12/29/17 17:13	01/03/18 15:03	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		12/29/17 17:13	01/03/18 15:03	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		12/29/17 17:13	01/03/18 15:03	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-129554-1

Date Collected: 12/29/17 11:00

Matrix: Wastewater

Date Received: 12/29/17 12:08

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		12/29/17 17:13	01/03/18 15:03	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		12/29/17 17:13	01/03/18 15:03	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/29/17 17:13	01/03/18 15:03	1
Carbazole	ND		5.0	0.30	ug/L		12/29/17 17:13	01/03/18 15:03	1
Chrysene	ND		5.0	0.33	ug/L		12/29/17 17:13	01/03/18 15:03	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/29/17 17:13	01/03/18 15:03	1
Dibenzofuran	ND		10	0.51	ug/L		12/29/17 17:13	01/03/18 15:03	1
Fluoranthene	ND		5.0	0.40	ug/L		12/29/17 17:13	01/03/18 15:03	1
Fluorene	ND		5.0	0.36	ug/L		12/29/17 17:13	01/03/18 15:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		12/29/17 17:13	01/03/18 15:03	1
Naphthalene	ND		5.0	0.76	ug/L		12/29/17 17:13	01/03/18 15:03	1
Pentachlorophenol	ND		10	2.2	ug/L		12/29/17 17:13	01/03/18 15:03	1
Phenanthrene	ND		5.0	0.44	ug/L		12/29/17 17:13	01/03/18 15:03	1
Phenol	ND		5.0	0.39	ug/L		12/29/17 17:13	01/03/18 15:03	1
Pyrene	ND		5.0	0.34	ug/L		12/29/17 17:13	01/03/18 15:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		46 - 120	12/29/17 17:13	01/03/18 15:03	1
2-Fluorobiphenyl	96		48 - 120	12/29/17 17:13	01/03/18 15:03	1
p-Terphenyl-d14	87		59 - 136	12/29/17 17:13	01/03/18 15:03	1
Phenol-d5	48		22 - 120	12/29/17 17:13	01/03/18 15:03	1
2-Fluorophenol	74		35 - 120	12/29/17 17:13	01/03/18 15:03	1
2,4,6-Tribromophenol	95		41 - 120	12/29/17 17:13	01/03/18 15:03	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			01/04/18 10:58	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/04/18 10:58	1
Benzene	ND		0.20	0.023	ug/L			01/04/18 10:58	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/04/18 10:58	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/04/18 10:58	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/04/18 10:58	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/04/18 10:58	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/04/18 10:58	1
n-Propylbenzene	ND		0.20	0.13	ug/L			01/04/18 10:58	1
o-Xylene	ND		0.20	0.027	ug/L			01/04/18 10:58	1
p-Cymene	ND		0.20	0.030	ug/L			01/04/18 10:58	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/04/18 10:58	1
Toluene	ND		0.20	0.036	ug/L			01/04/18 10:58	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/04/18 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	128		63 - 129		01/04/18 10:58	1
4-Bromofluorobenzene	122		64 - 128		01/04/18 10:58	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.050	0.0081	ug/L		12/29/17 18:06	01/02/18 11:54	1
alpha-BHC	ND		0.050	0.0077	ug/L		12/29/17 18:06	01/02/18 11:54	1
beta-BHC	ND		0.050	0.025	ug/L		12/29/17 18:06	01/02/18 11:54	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-129554-1

Date Collected: 12/29/17 11:00

Matrix: Wastewater

Date Received: 12/29/17 12:08

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		12/29/17 18:06	01/02/18 11:54	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		12/29/17 18:06	01/02/18 11:54	1
Chlordane (technical)	ND		0.50	0.29	ug/L		12/29/17 18:06	01/02/18 11:54	1
4,4'-DDD	ND		0.050	0.0092	ug/L		12/29/17 18:06	01/02/18 11:54	1
4,4'-DDE	ND		0.050	0.012	ug/L		12/29/17 18:06	01/02/18 11:54	1
4,4'-DDT	ND		0.050	0.011	ug/L		12/29/17 18:06	01/02/18 11:54	1
Dieldrin	ND		0.050	0.0098	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endosulfan I	ND		0.050	0.011	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endosulfan II	ND		0.050	0.012	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endrin	ND		0.050	0.014	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endrin aldehyde	ND		0.050	0.016	ug/L		12/29/17 18:06	01/02/18 11:54	1
Heptachlor	ND		0.050	0.0085	ug/L		12/29/17 18:06	01/02/18 11:54	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		12/29/17 18:06	01/02/18 11:54	1
Toxaphene	ND		0.50	0.12	ug/L		12/29/17 18:06	01/02/18 11:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	73		23 - 120	12/29/17 18:06	01/02/18 11:54	1
Tetrachloro-m-xylene	71		44 - 120	12/29/17 18:06	01/02/18 11:54	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	60.7		50.0	19.3	ug/L		01/02/18 07:50	01/02/18 22:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.2	1.5	mg/L		01/03/18 13:02	01/03/18 13:02	1
Cyanide, Total	0.14		0.010	0.0050	mg/L		01/04/18 01:10	01/04/18 12:34	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		01/04/18 14:15	01/04/18 18:02	1
Total Dissolved Solids	752	B	10.0	4.0	mg/L			01/03/18 06:33	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			12/30/17 09:33	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			01/03/18 03:20	1
pH	7.6	HF	0.1	0.1	SU			12/30/17 10:13	1
Temperature	20.2	HF	0.001	0.001	Degrees C			12/30/17 10:13	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-129554-2

Date Collected: 12/29/17 11:05

Matrix: Wastewater

Date Received: 12/29/17 12:08

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			01/04/18 11:31	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			01/04/18 11:31	50
Benzene	420		10	1.2	ug/L			01/04/18 11:31	50
Ethylbenzene	9.0	J	10	1.4	ug/L			01/04/18 11:31	50
Isopropylbenzene	ND		10	1.4	ug/L			01/04/18 11:31	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			01/04/18 11:31	50
m,p-Xylene	6.2	J	20	2.7	ug/L			01/04/18 11:31	50
n-Butylbenzene	ND		10	1.5	ug/L			01/04/18 11:31	50
n-Propylbenzene	ND		10	6.5	ug/L			01/04/18 11:31	50
o-Xylene	3.2	J	10	1.4	ug/L			01/04/18 11:31	50
p-Cymene	ND		10	1.5	ug/L			01/04/18 11:31	50
sec-Butylbenzene	ND		10	1.0	ug/L			01/04/18 11:31	50
Toluene	35		10	1.8	ug/L			01/04/18 11:31	50
Xylenes, Total	9.4	J	30	2.7	ug/L			01/04/18 11:31	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	122		63 - 129		01/04/18 11:31	50
4-Bromofluorobenzene	120		64 - 128		01/04/18 11:31	50

Client Sample Results

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-129554-3

Date Collected: 12/29/17 11:10

Matrix: Wastewater

Date Received: 12/29/17 12:08

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	9.0	J	20	3.5	ug/L			01/04/18 12:03	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			01/04/18 12:03	100
Benzene	4100		20	2.3	ug/L			01/04/18 12:03	100
Ethylbenzene	180		20	2.9	ug/L			01/04/18 12:03	100
Isopropylbenzene	ND		20	2.7	ug/L			01/04/18 12:03	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			01/04/18 12:03	100
m,p-Xylene	110		40	5.4	ug/L			01/04/18 12:03	100
n-Butylbenzene	ND		20	3.1	ug/L			01/04/18 12:03	100
n-Propylbenzene	ND		20	13	ug/L			01/04/18 12:03	100
o-Xylene	77		20	2.7	ug/L			01/04/18 12:03	100
p-Cymene	ND		20	3.0	ug/L			01/04/18 12:03	100
sec-Butylbenzene	ND		20	2.0	ug/L			01/04/18 12:03	100
Toluene	690		20	3.6	ug/L			01/04/18 12:03	100
Xylenes, Total	190		60	5.4	ug/L			01/04/18 12:03	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	118		63 - 129		01/04/18 12:03	100
4-Bromofluorobenzene	116		64 - 128		01/04/18 12:03	100

Client Sample Results

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-129554-4

Date Collected: 12/29/17 11:15

Matrix: Wastewater

Date Received: 12/29/17 12:08

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			12/29/17 22:34	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			12/29/17 22:34	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	31	ug/L			12/29/17 22:34	100
1,1,2-Trichloroethane	ND		100	23	ug/L			12/29/17 22:34	100
1,1-Dichloroethane	ND		100	38	ug/L			12/29/17 22:34	100
1,1-Dichloroethene	ND		100	29	ug/L			12/29/17 22:34	100
1,2,4-Trichlorobenzene	ND		100	41	ug/L			12/29/17 22:34	100
1,2,4-Trimethylbenzene	ND		100	75	ug/L			12/29/17 22:34	100
1,2-Dibromo-3-Chloropropane	ND		100	39	ug/L			12/29/17 22:34	100
1,2-Dibromoethane	ND		100	73	ug/L			12/29/17 22:34	100
1,2-Dichlorobenzene	ND		100	79	ug/L			12/29/17 22:34	100
1,2-Dichloroethane	ND		100	21	ug/L			12/29/17 22:34	100
1,2-Dichloropropane	ND		100	72	ug/L			12/29/17 22:34	100
1,3,5-Trimethylbenzene	ND		100	77	ug/L			12/29/17 22:34	100
1,3-Dichlorobenzene	ND		100	78	ug/L			12/29/17 22:34	100
1,4-Dichlorobenzene	ND		100	84	ug/L			12/29/17 22:34	100
2-Butanone (MEK)	ND		1000	130	ug/L			12/29/17 22:34	100
2-Hexanone	ND		500	120	ug/L			12/29/17 22:34	100
4-Isopropyltoluene	ND		100	31	ug/L			12/29/17 22:34	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			12/29/17 22:34	100
Acetone	ND		1000	300	ug/L			12/29/17 22:34	100
Benzene	4700		100	41	ug/L			12/29/17 22:34	100
Bromodichloromethane	ND		100	39	ug/L			12/29/17 22:34	100
Bromoform	ND		100	26	ug/L			12/29/17 22:34	100
Bromomethane	ND		100	69	ug/L			12/29/17 22:34	100
Carbon disulfide	ND		100	19	ug/L			12/29/17 22:34	100
Carbon tetrachloride	ND		100	27	ug/L			12/29/17 22:34	100
Chlorobenzene	ND		100	75	ug/L			12/29/17 22:34	100
Chloroethane	ND		100	32	ug/L			12/29/17 22:34	100
Chloroform	ND		100	34	ug/L			12/29/17 22:34	100
Chloromethane	ND		100	35	ug/L			12/29/17 22:34	100
cis-1,2-Dichloroethene	ND		100	81	ug/L			12/29/17 22:34	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			12/29/17 22:34	100
Cyclohexane	ND		100	18	ug/L			12/29/17 22:34	100
Dibromochloromethane	ND		100	32	ug/L			12/29/17 22:34	100
Dichlorodifluoromethane	ND		100	68	ug/L			12/29/17 22:34	100
Ethylbenzene	190		100	74	ug/L			12/29/17 22:34	100
Isopropylbenzene	ND		100	79	ug/L			12/29/17 22:34	100
m,p-Xylene	140 J		200	66	ug/L			12/29/17 22:34	100
Methyl acetate	ND		250	130	ug/L			12/29/17 22:34	100
Methyl tert-butyl ether	ND		100	16	ug/L			12/29/17 22:34	100
Methylcyclohexane	ND		100	16	ug/L			12/29/17 22:34	100
Methylene Chloride	ND		100	44	ug/L			12/29/17 22:34	100
Naphthalene	340		100	43	ug/L			12/29/17 22:34	100
n-Butylbenzene	ND		100	64	ug/L			12/29/17 22:34	100
N-Propylbenzene	ND		100	69	ug/L			12/29/17 22:34	100
o-Xylene	89 J		100	76	ug/L			12/29/17 22:34	100
sec-Butylbenzene	ND		100	75	ug/L			12/29/17 22:34	100
Styrene	ND		100	73	ug/L			12/29/17 22:34	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-129554-4

Date Collected: 12/29/17 11:15

Matrix: Wastewater

Date Received: 12/29/17 12:08

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		100	81	ug/L			12/29/17 22:34	100
Tetrachloroethene	ND		100	36	ug/L			12/29/17 22:34	100
Toluene	780		100	51	ug/L			12/29/17 22:34	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			12/29/17 22:34	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			12/29/17 22:34	100
Trichloroethene	ND		100	46	ug/L			12/29/17 22:34	100
Trichlorofluoromethane	ND		100	88	ug/L			12/29/17 22:34	100
Vinyl chloride	ND		100	90	ug/L			12/29/17 22:34	100
Xylenes, Total	230		200	66	ug/L			12/29/17 22:34	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					12/29/17 22:34	100
4-Bromofluorobenzene (Surr)	108		73 - 120					12/29/17 22:34	100
Toluene-d8 (Surr)	96		80 - 120					12/29/17 22:34	100

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	11	J	20	3.5	ug/L			01/04/18 12:35	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			01/04/18 12:35	100
Benzene	4000		20	2.3	ug/L			01/04/18 12:35	100
Ethylbenzene	180		20	2.9	ug/L			01/04/18 12:35	100
Isopropylbenzene	ND		20	2.7	ug/L			01/04/18 12:35	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			01/04/18 12:35	100
m,p-Xylene	120		40	5.4	ug/L			01/04/18 12:35	100
n-Butylbenzene	ND		20	3.1	ug/L			01/04/18 12:35	100
n-Propylbenzene	ND		20	13	ug/L			01/04/18 12:35	100
o-Xylene	74		20	2.7	ug/L			01/04/18 12:35	100
p-Cymene	ND		20	3.0	ug/L			01/04/18 12:35	100
sec-Butylbenzene	ND		20	2.0	ug/L			01/04/18 12:35	100
Toluene	660		20	3.6	ug/L			01/04/18 12:35	100
Xylenes, Total	190		60	5.4	ug/L			01/04/18 12:35	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	118		63 - 129					01/04/18 12:35	100
4-Bromofluorobenzene	114		64 - 128					01/04/18 12:35	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	125000		500	100	ug/L		01/02/18 07:50	01/02/18 22:22	1
Iron	77.4		50.0	19.3	ug/L		01/02/18 07:50	01/02/18 22:22	1
Magnesium	50700		200	43.4	ug/L		01/02/18 07:50	01/02/18 22:22	1
Potassium	3680		500	100	ug/L		01/02/18 07:50	01/02/18 22:22	1
Sodium	57700		1000	324	ug/L		01/02/18 07:50	01/02/18 22:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.8		2.5	1.4	mg/L			01/08/18 17:01	5
Sulfate	145		10.0	1.7	mg/L			01/08/18 17:01	5
Alkalinity, Total	407		50.0	20.0	mg/L			01/03/18 11:20	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: OUTSIDE SUMP

Lab Sample ID: 480-129554-5

Date Collected: 12/29/17 11:20

Matrix: Water

Date Received: 12/29/17 12:08

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	35	J	100	17	ug/L			01/04/18 13:07	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			01/04/18 13:07	500
Benzene	5400		100	12	ug/L			01/04/18 13:07	500
Ethylbenzene	370		100	14	ug/L			01/04/18 13:07	500
Isopropylbenzene	ND		100	14	ug/L			01/04/18 13:07	500
Methyl tert-butyl ether	ND		200	22	ug/L			01/04/18 13:07	500
m,p-Xylene	160	J	200	27	ug/L			01/04/18 13:07	500
n-Butylbenzene	ND		100	15	ug/L			01/04/18 13:07	500
n-Propylbenzene	ND		100	65	ug/L			01/04/18 13:07	500
o-Xylene	86	J	100	14	ug/L			01/04/18 13:07	500
p-Cymene	ND		100	15	ug/L			01/04/18 13:07	500
sec-Butylbenzene	ND		100	10	ug/L			01/04/18 13:07	500
Toluene	960		100	18	ug/L			01/04/18 13:07	500
Xylenes, Total	250	J	300	27	ug/L			01/04/18 13:07	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	118		63 - 129		01/04/18 13:07	500
4-Bromofluorobenzene	113		64 - 128		01/04/18 13:07	500

Lab Chronicle

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: Post-Carbon 3

Date Collected: 12/29/17 11:00

Date Received: 12/29/17 12:08

Lab Sample ID: 480-129554-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	394147	12/29/17 23:23	ARS	TAL BUF
Total/NA	Prep	3510C			394153	12/29/17 17:13	ATG	TAL BUF
Total/NA	Analysis	8270D		1	394367	01/03/18 15:03	DMR	TAL BUF
Total/NA	Analysis	8021B		1	394444	01/04/18 10:58	MAN	TAL BUF
Total/NA	Prep	3510C			394155	12/29/17 18:06	RLT	TAL BUF
Total/NA	Analysis	608		1	394207	01/02/18 11:54	MAN	TAL BUF
Total/NA	Prep	200.7			394189	01/02/18 07:50	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	394343	01/02/18 22:05	LMH	TAL BUF
Total/NA	Prep	1664B			394380	01/03/18 13:02	DSC	TAL BUF
Total/NA	Analysis	1664B		1	394400	01/03/18 13:02	DSC	TAL BUF
Total/NA	Prep	Distill/CN			394432	01/04/18 01:10	KMB	TAL BUF
Total/NA	Analysis	335.4		1	394521	01/04/18 12:34	MDL	TAL BUF
Total/NA	Prep	Distill/Phenol			394561	01/04/18 14:15	DCB	TAL BUF
Total/NA	Analysis	420.1		1	394564	01/04/18 18:02	LED	TAL BUF
Total/NA	Analysis	SM 2540C		1	394307	01/03/18 06:33	KMB	TAL BUF
Total/NA	Analysis	SM 2540D		1	394300	01/03/18 03:20	KMB	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	394162	12/30/17 10:13	ALZ	TAL BUF
Total/NA	Analysis	SM 5210B		1	394164	12/30/17 09:33	JCL	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 12/29/17 11:05

Date Received: 12/29/17 12:08

Lab Sample ID: 480-129554-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	394444	01/04/18 11:31	MAN	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 12/29/17 11:10

Date Received: 12/29/17 12:08

Lab Sample ID: 480-129554-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	394444	01/04/18 12:03	MAN	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 12/29/17 11:15

Date Received: 12/29/17 12:08

Lab Sample ID: 480-129554-4

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	394147	12/29/17 22:34	ARS	TAL BUF
Total/NA	Analysis	8021B		100	394444	01/04/18 12:35	MAN	TAL BUF
Total/NA	Prep	200.7			394189	01/02/18 07:50	EMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	394343	01/02/18 22:22	LMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-129554-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-129554-4

Date Collected: 12/29/17 11:15

Matrix: Wastewater

Date Received: 12/29/17 12:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	394893	01/08/18 17:01	CLA	TAL BUF
Total/NA	Analysis	310.2		5	394373	01/03/18 11:20	ALZ	TAL BUF

Client Sample ID: OUTSIDE SUMP

Lab Sample ID: 480-129554-5

Date Collected: 12/29/17 11:20

Matrix: Water

Date Received: 12/29/17 12:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	394444	01/04/18 13:07	MAN	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-129554-1

Laboratory: TestAmerica Buffalo

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

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

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
335.4	Distill/CN	Wastewater	Cyanide, Total

The following analytes are included in this report, but accreditation/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
SM 4500 H+ B		Wastewater	Temperature

Method Summary

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

TestAmerica Job ID: 480-129554-1

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
1664B	HEM and SGT-HEM	1664B	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:

1664B = 1664B

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: 480-129554-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-129554-1	Post-Carbon 3	Wastewater	12/29/17 11:00	12/29/17 12:08
480-129554-2	Post-Carbon 2	Wastewater	12/29/17 11:05	12/29/17 12:08
480-129554-3	Post-Carbon 1	Wastewater	12/29/17 11:10	12/29/17 12:08
480-129554-4	Pre-Carbon	Wastewater	12/29/17 11:15	12/29/17 12:08
480-129554-5	OUTSIDE SUMP	Water	12/29/17 11:20	12/29/17 12:08

Buffalo

10 Hazelwood Drive

Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

TestAmerica Laboratories, Inc.

Client Contact Groundwater & Environmental Services, Inc 495 Aero Drive Suite 3 Cheektowaga, NY 14225 (800) 287-7857 Phone (866) 902-2187 FAX Project Name: NYSDEC Gatown WWTP Site: 915171 P O # Callout 120597		Project Manager: Glenn May (NYSDEC) Tel/Fax: (716) 851-7220 Analysis Turnaround Time Calendar (C) or Work Days (W) TAT if different from Below <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: Thomas Palmer Lab Contact: O. Johnson		Date: 12/29/17 Carrier:		COC No: 1 of 1 COCs Job No. SDG No. Sample Specific Notes:			
Sample Identification Post-Carbon 3 Post-Carbon 2 Post-Carbon 1 Pre-Carbon Inside Outside Sump		Sample Date 12/29 1100 1105 1110 1115 1120	Sample Time 1100 1105 1110 1115 1120	Sample Type Grab Grab Grab Grab Grab	Matrix W W W W W	# of Cont. 19 3 3 9 3	Filtered Sample 300.0 - 28B (MOD) Local Method 200.7 - (MOD) Local Method 310.2 - Alkalinity 200.7 - Iron 8260B - (MOD) TCL list OLMO4.2 8021B - (MOD) STARS list - VOA - 8021 335.4 - Cyanide, Total SM4500, H+ - pH 1664A - Calc - Oil & Grease 420.4 - Phenolics, Total Recoverable 608 - Pest - Priority Pollutant Pesticides 5210B - Biochemical Oxygen Demand 2540D - Total Suspended Solids 2540C - Calc'd - Total Dissolved Solids 8270C - (MOD) TCL SVOA - OLMO4.2		Sample Specific Notes: 480-129554 COC		
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: [Signature]		Company: GES		Date/Time: 12/29/17		Received by: [Signature]		Company: TAB		Date/Time: 12/29/17	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-129554-1

Login Number: 129554

List Source: TestAmerica Buffalo

List Number: 1

Creator: Harper, Marcus D

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	