

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

**2016 LAB REPORTS
FOR THE GROUNDWATER COLLECTION
& TREATMENT SYSTEM**

The lab report is missing for January 2016. The July 2016 sample was collected in early August 2016.

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-95205-1

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:

2/29/2016 5:39:04 AM

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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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
2/29/2016 5:39:04 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-95205-1

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.

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 480-95205-1

Job ID: 480-95205-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-95205-1

Receipt

The samples were received on 2/12/2016 1:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

Receipt Exceptions

The chain of custody analysis request was incomplete for samples : Pre-Carbon and Post-Carbon 3. The missing analyses were logged from container information.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-288319 recovered above the upper control limit for 1,1-Dichloroethene, and Carbon disulfide. The samples associated with this CCV were non-detect for the affected analytes; therefore, the data has been reported. The following sample is impacted: Post-Carbon 3 (480-95205-1).

Method(s) 8260C: The laboratory control sample (LCS) for batch analytical batch 480-288319 recovered outside control limits for the following analytes: 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

HPLC/IC

Method(s) 300.0, SM 4110B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-95205-2). 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 (480-95205-2), Post-Carbon 1 (480-95205-4) and Outside Sump (480-95205-5). 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 (480-95205-1).

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: 480-95205-1

Client Sample ID: Post-Carbon 3

Date Collected: 02/12/16 13:00

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/24/16 07:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/24/16 07:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/24/16 07:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/24/16 07:12	1
1,1-Dichloroethene	ND	*	1.0	0.29	ug/L			02/24/16 07:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/24/16 07:12	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			02/24/16 07:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/24/16 07:12	1
2-Hexanone	ND		5.0	1.2	ug/L			02/24/16 07:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/24/16 07:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/24/16 07:12	1
Acetone	ND		10	3.0	ug/L			02/24/16 07:12	1
Benzene	ND		1.0	0.41	ug/L			02/24/16 07:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/24/16 07:12	1
Bromoform	ND		1.0	0.26	ug/L			02/24/16 07:12	1
Bromomethane	ND		1.0	0.69	ug/L			02/24/16 07:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/24/16 07:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/24/16 07:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/24/16 07:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/24/16 07:12	1
Chloroethane	ND		1.0	0.32	ug/L			02/24/16 07:12	1
Chloroform	ND		1.0	0.34	ug/L			02/24/16 07:12	1
Chloromethane	ND		1.0	0.35	ug/L			02/24/16 07:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/24/16 07:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/24/16 07:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/24/16 07:12	1
Styrene	ND		1.0	0.73	ug/L			02/24/16 07:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/24/16 07:12	1
Toluene	ND		1.0	0.51	ug/L			02/24/16 07:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/24/16 07:12	1
Trichloroethene	ND		1.0	0.46	ug/L			02/24/16 07:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/24/16 07:12	1
Vinyl acetate	ND		5.0	0.85	ug/L			02/24/16 07:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/24/16 07:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137		02/24/16 07:12	1
Toluene-d8 (Surr)	94		71 - 126		02/24/16 07:12	1
4-Bromofluorobenzene (Surr)	94		73 - 120		02/24/16 07:12	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/16/16 19:09	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/16/16 19:09	1
Benzene	ND		0.20	0.023	ug/L			02/16/16 19:09	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/16/16 19:09	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/16/16 19:09	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/16/16 19:09	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/16/16 19:09	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/16/16 19:09	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-95205-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-95205-1

Date Collected: 02/12/16 13:00

Matrix: Wastewater

Date Received: 02/12/16 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			02/16/16 19:09	1
o-Xylene	ND		0.20	0.027	ug/L			02/16/16 19:09	1
p-Cymene	ND		0.20	0.030	ug/L			02/16/16 19:09	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/16/16 19:09	1
Toluene	ND		0.20	0.036	ug/L			02/16/16 19:09	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/16/16 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		02/16/16 19:09	1
4-Bromofluorobenzene	93		64 - 141		02/16/16 19:09	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	20.0	J	50.0	19.3	ug/L		02/15/16 08:35	02/16/16 15:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.029		0.010	0.0050	mg/L		02/17/16 03:15	02/17/16 12:28	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.41	HF	0.100	0.100	SU			02/18/16 19:39	1

Client Sample Results

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

TestAmerica Job ID: 480-95205-1

Client Sample ID: Pre-Carbon

Date Collected: 02/12/16 13:15

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-2

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		40	6.9	ug/L			02/16/16 19:41	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			02/16/16 19:41	200
Benzene	690		40	4.7	ug/L			02/16/16 19:41	200
Ethylbenzene	ND		40	5.7	ug/L			02/16/16 19:41	200
Isopropylbenzene	ND		40	5.4	ug/L			02/16/16 19:41	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			02/16/16 19:41	200
m,p-Xylene	29 J		80	11	ug/L			02/16/16 19:41	200
n-Butylbenzene	ND		40	6.2	ug/L			02/16/16 19:41	200
n-Propylbenzene	ND		40	26	ug/L			02/16/16 19:41	200
o-Xylene	30 J		40	5.4	ug/L			02/16/16 19:41	200
p-Cymene	ND		40	5.9	ug/L			02/16/16 19:41	200
sec-Butylbenzene	ND		40	4.1	ug/L			02/16/16 19:41	200
Toluene	53		40	7.1	ug/L			02/16/16 19:41	200
Xylenes, Total	59 J		120	11	ug/L			02/16/16 19:41	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145		02/16/16 19:41	200
4-Bromofluorobenzene	93		64 - 141		02/16/16 19:41	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	141000		500	100	ug/L		02/15/16 08:35	02/16/16 15:28	1
Iron	19300		50.0	19.3	ug/L		02/15/16 08:35	02/16/16 15:28	1
Magnesium	73700		200	43.4	ug/L		02/15/16 08:35	02/16/16 15:28	1
Potassium	5340		500	100	ug/L		02/15/16 08:35	02/16/16 15:28	1
Sodium	76000		1000	324	ug/L		02/15/16 08:35	02/16/16 15:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		10.0	5.6	mg/L			02/24/16 11:09	20
Sulfate	176		40.0	7.0	mg/L			02/24/16 11:09	20
Alkalinity, Total	493 B		50.0	20.0	mg/L			02/24/16 15:56	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-95205-1

Client Sample ID: Post-Carbon 2

Date Collected: 02/12/16 13:05

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-3

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/16/16 20:13	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/16/16 20:13	1
Benzene	ND		0.20	0.023	ug/L			02/16/16 20:13	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/16/16 20:13	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/16/16 20:13	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/16/16 20:13	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/16/16 20:13	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/16/16 20:13	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/16/16 20:13	1
o-Xylene	ND		0.20	0.027	ug/L			02/16/16 20:13	1
p-Cymene	ND		0.20	0.030	ug/L			02/16/16 20:13	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/16/16 20:13	1
Toluene	ND		0.20	0.036	ug/L			02/16/16 20:13	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/16/16 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 145		02/16/16 20:13	1
4-Bromofluorobenzene	92		64 - 141		02/16/16 20:13	1

Client Sample Results

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

TestAmerica Job ID: 480-95205-1

Client Sample ID: Post-Carbon 1

Date Collected: 02/12/16 13:10

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-4

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		2.0	0.35	ug/L			02/16/16 20:45	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			02/16/16 20:45	10
Benzene	3.2		2.0	0.23	ug/L			02/16/16 20:45	10
Ethylbenzene	ND		2.0	0.29	ug/L			02/16/16 20:45	10
Isopropylbenzene	ND		2.0	0.27	ug/L			02/16/16 20:45	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			02/16/16 20:45	10
m,p-Xylene	ND		4.0	0.54	ug/L			02/16/16 20:45	10
n-Butylbenzene	ND		2.0	0.31	ug/L			02/16/16 20:45	10
n-Propylbenzene	ND		2.0	1.3	ug/L			02/16/16 20:45	10
o-Xylene	ND		2.0	0.27	ug/L			02/16/16 20:45	10
p-Cymene	ND		2.0	0.30	ug/L			02/16/16 20:45	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			02/16/16 20:45	10
Toluene	ND		2.0	0.36	ug/L			02/16/16 20:45	10
Xylenes, Total	ND		6.0	0.54	ug/L			02/16/16 20:45	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145		02/16/16 20:45	10
4-Bromofluorobenzene	96		64 - 141		02/16/16 20:45	10

Client Sample Results

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

TestAmerica Job ID: 480-95205-1

Client Sample ID: Outside Sump

Date Collected: 02/12/16 13:20

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-5

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	18	J	20	3.5	ug/L			02/17/16 13:59	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			02/17/16 13:59	100
Benzene	4700		20	2.3	ug/L			02/17/16 13:59	100
Ethylbenzene	340		20	2.9	ug/L			02/17/16 13:59	100
Isopropylbenzene	ND		20	2.7	ug/L			02/17/16 13:59	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			02/17/16 13:59	100
m,p-Xylene	150		40	5.4	ug/L			02/17/16 13:59	100
n-Butylbenzene	ND		20	3.1	ug/L			02/17/16 13:59	100
n-Propylbenzene	ND		20	13	ug/L			02/17/16 13:59	100
o-Xylene	78		20	2.7	ug/L			02/17/16 13:59	100
p-Cymene	ND		20	3.0	ug/L			02/17/16 13:59	100
sec-Butylbenzene	ND		20	2.0	ug/L			02/17/16 13:59	100
Toluene	840		20	3.6	ug/L			02/17/16 13:59	100
Xylenes, Total	230		60	5.4	ug/L			02/17/16 13:59	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		02/17/16 13:59	100
4-Bromofluorobenzene	91		64 - 141		02/17/16 13:59	100

Lab Chronicle

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

TestAmerica Job ID: 480-95205-1

Client Sample ID: Post-Carbon 3

Date Collected: 02/12/16 13:00

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	288319	02/24/16 07:12	GTG	TAL BUF
Total/NA	Analysis	8021B		1	287308	02/16/16 19:09	MRB	TAL BUF
Total/NA	Prep	200.7			287173	02/15/16 08:35	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	287440	02/16/16 15:24	AMH	TAL BUF
Total/NA	Prep	Distill/CN			287392	02/17/16 03:15	LAW	TAL BUF
Total/NA	Analysis	335.4		1	287517	02/17/16 12:28	ZRJ	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	287797	02/18/16 19:39	KMF	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 02/12/16 13:15

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	287308	02/16/16 19:41	MRB	TAL BUF
Total/NA	Prep	200.7			287173	02/15/16 08:35	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	287440	02/16/16 15:28	AMH	TAL BUF
Total/NA	Analysis	300.0		20	288183	02/24/16 11:09	CAS	TAL BUF
Total/NA	Analysis	310.2		5	288485	02/24/16 15:56	LED	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 02/12/16 13:05

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	287308	02/16/16 20:13	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 02/12/16 13:10

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	287308	02/16/16 20:45	MRB	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 02/12/16 13:20

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	287483	02/17/16 13:59	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: 480-95205-1

Laboratory: TestAmerica Buffalo

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

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

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

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

* 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: 480-95205-1

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



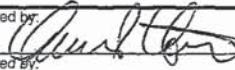
Sample Summary

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

TestAmerica Job ID: 480-95205-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-95205-1	Post-Carbon 3	Wastewater	02/12/16 13:00	02/12/16 13:55
480-95205-2	Pre-Carbon	Wastewater	02/12/16 13:15	02/12/16 13:55
480-95205-3	Post-Carbon 2	Wastewater	02/12/16 13:05	02/12/16 13:55
480-95205-4	Post-Carbon 1	Water	02/12/16 13:10	02/12/16 13:55
480-95205-5	Outside Sump	Water	02/12/16 13:20	02/12/16 13:55

480-95205 Chain of Custody

Client Information		Sampler: 		Lab PM: Johnson, Oriette S		Carrier Track		480-95205 Chain of Custody			
Client Contact: Thomas Palmer		Phone:		E-Mail: oriette.johnson@testamericainc.com				Page 1 of 1			
Company: Groundwater & Environmental Services Inc				Analysis Requested				Job #:			
Address: 495 Aero Drive Suite 3		Due Date Requested:		<div>Field Filtered Sample (Yes or No)</div> <div>Perform MS/MSD (Yes or No)</div> <div>300.0 - 280 - (MOD) Local Method</div> <div>200.7 - (MOD) Local Method</div> <div>310.2 - Alkalinity, Total</div> <div>200.7 - Iron</div> <div>8260B - (MOD) TCL list OL.M04.2</div> <div>8021B - (MOD) STARS List - VOA - 8021</div> <div>336.4 - Cyanide, Total</div> <div>SM4500_H+ - pH</div> <div>Total Number of containers</div>				Preservation Codes:			
City: Cheektowaga		TAT Requested (days):						A - HCL M - Hexane			
State, Zip: NY, 14225								B - NaOH N - None			
Phone:		PO #:						C - Zn Acetate O - AsNaO2			
Email: tpalmer@gesonline.com		CallOut ID 120597						D - Nitric Acid P - Na2O4S			
Project Name: NYSDEC-Gastown WWTP: Site# 915171/Gastow Event Desc: M		WO #:						Q - Na2SO3			
Site: New York		SSOW#:						R - Na2S2SO3			
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Special Instructions/Note:	
Pre-Carbon		2/12		1315		G		Water			
Post-Carbon 3		2/12		1300		G		Water			
Post carbon 2		2/12		1305		G		water			
Post carbon 1		2/12		1310		G		water			
outside sump		2/12		1320		G		water			
Possible Hazard Identification											
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Special Instructions/QC Requirements:											
Deliverable Requested: I, II, III, IV, Other (specify)											
Empty Kit Relinquished by:											
Date:											
Time:											
Method of Shipment:											
Relinquished by: 		Date/Time: 2/12/16 1355		Company: GES		Received by: 		Date/Time: 2/12/16 1355		Company: THWAFLO	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No											
Custody Seal No.:											
Cooler Temperature(s) °C and Other Remarks: #2 3.5											

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-95205-1

Login Number: 95205

List Number: 1

Creator: Wallace, Cameron

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
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: 480-96455-1

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:

3/25/2016 8:33:46 AM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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www.testamericainc.com

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

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

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

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



Orlette Johnson
Senior Project Manager
3/25/2016 8:33:46 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-96455-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery 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.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 480-96455-1

Job ID: 480-96455-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-96455-1

Receipt

The samples were received on 3/11/2016 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-96455-4), (480-96455-E-4 MS) and (480-96455-E-4 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-291233 recovered outside acceptance criteria, low biased, for Carbon disulfide, Vinyl chloride, and Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-96455-1)

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone and 2-Chloro-1,3-butadiene with Vinyl acetate in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) associated with batch 480-291233. The following sample is impacted: Post-Carbon 3 (480-96455-1)

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

GC/MS Semi VOA

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-96455-4). 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 (480-96455-3), Pre-Carbon (480-96455-4) and Outside Sump (480-96455-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 608: The continuing calibration verification (CCV) recovered above the upper control limit for Aldrin, Dieldrin and Heptachlor. 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 (480-96455-1), (480-96455-C-1-A MS) and (480-96455-C-1-B MSD).

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 (480-96455-1).

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

Organic Prep

Case Narrative

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

TestAmerica Job ID: 480-96455-1

Job ID: 480-96455-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

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Client Sample Results

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Post-Carbon 3

Date Collected: 03/11/16 09:15

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/16/16 18:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/16/16 18:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/16/16 18:45	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/16/16 18:45	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/16/16 18:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/16/16 18:45	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			03/16/16 18:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/16/16 18:45	1
2-Hexanone	ND		5.0	1.2	ug/L			03/16/16 18:45	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			03/16/16 18:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/16/16 18:45	1
Acetone	ND		10	3.0	ug/L			03/16/16 18:45	1
Benzene	ND		1.0	0.41	ug/L			03/16/16 18:45	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/16/16 18:45	1
Bromoform	ND		1.0	0.26	ug/L			03/16/16 18:45	1
Bromomethane	ND		1.0	0.69	ug/L			03/16/16 18:45	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/16/16 18:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/16/16 18:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/16/16 18:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/16/16 18:45	1
Chloroethane	ND		1.0	0.32	ug/L			03/16/16 18:45	1
Chloroform	ND		1.0	0.34	ug/L			03/16/16 18:45	1
Chloromethane	ND		1.0	0.35	ug/L			03/16/16 18:45	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/16/16 18:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/16/16 18:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/16/16 18:45	1
Styrene	ND		1.0	0.73	ug/L			03/16/16 18:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/16/16 18:45	1
Toluene	ND		1.0	0.51	ug/L			03/16/16 18:45	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/16/16 18:45	1
Trichloroethene	ND		1.0	0.46	ug/L			03/16/16 18:45	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/16/16 18:45	1
Vinyl acetate	ND	*	5.0	0.85	ug/L			03/16/16 18:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/16/16 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137		03/16/16 18:45	1
Toluene-d8 (Surr)	98		71 - 126		03/16/16 18:45	1
4-Bromofluorobenzene (Surr)	99		73 - 120		03/16/16 18:45	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		03/14/16 14:27	03/21/16 03:08	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		03/14/16 14:27	03/21/16 03:08	1
Acenaphthene	ND		5.0	0.41	ug/L		03/14/16 14:27	03/21/16 03:08	1
Acenaphthylene	ND		5.0	0.38	ug/L		03/14/16 14:27	03/21/16 03:08	1
Anthracene	ND		5.0	0.28	ug/L		03/14/16 14:27	03/21/16 03:08	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		03/14/16 14:27	03/21/16 03:08	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		03/14/16 14:27	03/21/16 03:08	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		03/14/16 14:27	03/21/16 03:08	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-96455-1

Date Collected: 03/11/16 09:15

Matrix: Wastewater

Date Received: 03/11/16 10:15

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		03/14/16 14:27	03/21/16 03:08	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		03/14/16 14:27	03/21/16 03:08	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		03/14/16 14:27	03/21/16 03:08	1
Carbazole	ND		5.0	0.30	ug/L		03/14/16 14:27	03/21/16 03:08	1
Chrysene	ND		5.0	0.33	ug/L		03/14/16 14:27	03/21/16 03:08	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		03/14/16 14:27	03/21/16 03:08	1
Dibenzofuran	ND		10	0.51	ug/L		03/14/16 14:27	03/21/16 03:08	1
Fluoranthene	ND		5.0	0.40	ug/L		03/14/16 14:27	03/21/16 03:08	1
Fluorene	ND		5.0	0.36	ug/L		03/14/16 14:27	03/21/16 03:08	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		03/14/16 14:27	03/21/16 03:08	1
Naphthalene	ND		5.0	0.76	ug/L		03/14/16 14:27	03/21/16 03:08	1
Pentachlorophenol	ND		10	2.2	ug/L		03/14/16 14:27	03/21/16 03:08	1
Phenanthrene	ND		5.0	0.44	ug/L		03/14/16 14:27	03/21/16 03:08	1
Phenol	ND		5.0	0.39	ug/L		03/14/16 14:27	03/21/16 03:08	1
Pyrene	ND		5.0	0.34	ug/L		03/14/16 14:27	03/21/16 03:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	89		46 - 120	03/14/16 14:27	03/21/16 03:08	1
2-Fluorobiphenyl	86		48 - 120	03/14/16 14:27	03/21/16 03:08	1
p-Terphenyl-d14	104		67 - 150	03/14/16 14:27	03/21/16 03:08	1
Phenol-d5	38		16 - 120	03/14/16 14:27	03/21/16 03:08	1
2-Fluorophenol	60		20 - 120	03/14/16 14:27	03/21/16 03:08	1
2,4,6-Tribromophenol	98		52 - 132	03/14/16 14:27	03/21/16 03:08	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/19/16 14:43	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/16 14:43	1
Benzene	ND		0.20	0.023	ug/L			03/19/16 14:43	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/19/16 14:43	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/16 14:43	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/19/16 14:43	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/19/16 14:43	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/16 14:43	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/16 14:43	1
o-Xylene	ND		0.20	0.027	ug/L			03/19/16 14:43	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/16 14:43	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/16 14:43	1
Toluene	ND		0.20	0.036	ug/L			03/19/16 14:43	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/19/16 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145		03/19/16 14:43	1
4-Bromofluorobenzene	94		64 - 141		03/19/16 14:43	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.048	0.0064	ug/L		03/14/16 08:21	03/15/16 11:06	1
alpha-BHC	ND		0.048	0.0064	ug/L		03/14/16 08:21	03/15/16 11:06	1
beta-BHC	ND		0.048	0.024	ug/L		03/14/16 08:21	03/15/16 11:06	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-96455-1

Date Collected: 03/11/16 09:15

Matrix: Wastewater

Date Received: 03/11/16 10:15

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	0.034	J B	0.048	0.0096	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
gamma-BHC (Lindane)	0.0099	J	0.048	0.0058	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Chlordane (technical)	ND		0.48	0.28	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
4,4'-DDD	0.021	J B	0.048	0.0089	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
4,4'-DDE	ND		0.048	0.011	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
4,4'-DDT	ND		0.048	0.011	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Dieldrin	0.032	J B	0.048	0.0094	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Endosulfan I	ND		0.048	0.011	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Endosulfan II	ND		0.048	0.012	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Endosulfan sulfate	ND		0.048	0.015	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Endrin	ND		0.048	0.013	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Endrin aldehyde	ND		0.048	0.016	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Heptachlor	ND		0.048	0.0082	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Heptachlor epoxide	ND		0.048	0.0051	ug/L	—	03/14/16 08:21	03/15/16 11:06	1
Toxaphene	ND		0.48	0.12	ug/L	—	03/14/16 08:21	03/15/16 11:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	67		23 - 120	03/14/16 08:21	03/15/16 11:06	1
Tetrachloro-m-xylene	93		36 - 120	03/14/16 08:21	03/15/16 11:06	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	49.1	J	50.0	19.3	ug/L	—	03/15/16 07:30	03/15/16 20:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.3	1.5	mg/L	—	03/18/16 14:47	03/21/16 14:46	1
Cyanide, Total	0.093		0.010	0.0050	mg/L	—	03/14/16 03:20	03/14/16 13:12	1
Phenolics, Total Recoverable	0.016	B	0.010	0.0050	mg/L	—	03/15/16 22:41	03/16/16 11:16	1
Total Dissolved Solids	778		10.0	4.0	mg/L	—		03/16/16 03:50	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L	—		03/12/16 11:29	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L	—		03/16/16 12:27	1
pH	7.54	HF	0.100	0.100	SU	—		03/14/16 17:32	1

Client Sample Results

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Post-Carbon 2

Date Collected: 03/11/16 09:20

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-2

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/19/16 15:15	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/16 15:15	1
Benzene	ND		0.20	0.023	ug/L			03/19/16 15:15	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/19/16 15:15	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/16 15:15	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/19/16 15:15	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/19/16 15:15	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/16 15:15	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/16 15:15	1
o-Xylene	ND		0.20	0.027	ug/L			03/19/16 15:15	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/16 15:15	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/16 15:15	1
Toluene	ND		0.20	0.036	ug/L			03/19/16 15:15	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/19/16 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		03/19/16 15:15	1
4-Bromofluorobenzene	97		64 - 141		03/19/16 15:15	1

Client Sample Results

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Post-Carbon 1

Date Collected: 03/11/16 09:25

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-3

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.13	J	0.20	0.035	ug/L			03/19/16 15:47	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/16 15:47	1
Benzene	82		1.0	0.12	ug/L			03/22/16 14:30	5
Ethylbenzene	2.8		0.20	0.029	ug/L			03/19/16 15:47	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/16 15:47	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/19/16 15:47	1
m,p-Xylene	1.3		0.40	0.054	ug/L			03/19/16 15:47	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/16 15:47	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/16 15:47	1
o-Xylene	0.92		0.20	0.027	ug/L			03/19/16 15:47	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/16 15:47	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/16 15:47	1
Toluene	8.8		0.20	0.036	ug/L			03/19/16 15:47	1
Xylenes, Total	2.2		0.60	0.054	ug/L			03/19/16 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		63 - 145		03/19/16 15:47	1
4-Bromofluorobenzene	100		64 - 141		03/19/16 15:47	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Pre-Carbon

Date Collected: 03/11/16 09:30

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-4

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			03/16/16 19:09	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			03/16/16 19:09	50
1,1,2-Trichloroethane	ND		50	12	ug/L			03/16/16 19:09	50
1,1-Dichloroethane	ND		50	19	ug/L			03/16/16 19:09	50
1,1-Dichloroethene	ND		50	15	ug/L			03/16/16 19:09	50
1,2-Dichloroethane	ND		50	11	ug/L			03/16/16 19:09	50
1,2-Dichloroethene, Total	ND		100	41	ug/L			03/16/16 19:09	50
1,2-Dichloropropane	ND		50	36	ug/L			03/16/16 19:09	50
2-Hexanone	ND		250	62	ug/L			03/16/16 19:09	50
2-Butanone (MEK)	ND	*	500	66	ug/L			03/16/16 19:09	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			03/16/16 19:09	50
Acetone	ND		500	150	ug/L			03/16/16 19:09	50
Benzene	2900	F1	50	21	ug/L			03/16/16 19:09	50
Bromodichloromethane	ND		50	20	ug/L			03/16/16 19:09	50
Bromoform	ND		50	13	ug/L			03/16/16 19:09	50
Bromomethane	ND		50	35	ug/L			03/16/16 19:09	50
Carbon disulfide	ND		50	9.5	ug/L			03/16/16 19:09	50
Carbon tetrachloride	ND		50	14	ug/L			03/16/16 19:09	50
Chlorobenzene	ND		50	38	ug/L			03/16/16 19:09	50
Dibromochloromethane	ND		50	16	ug/L			03/16/16 19:09	50
Chloroethane	ND		50	16	ug/L			03/16/16 19:09	50
Chloroform	ND		50	17	ug/L			03/16/16 19:09	50
Chloromethane	ND		50	18	ug/L			03/16/16 19:09	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			03/16/16 19:09	50
Ethylbenzene	250		50	37	ug/L			03/16/16 19:09	50
Methylene Chloride	ND		50	22	ug/L			03/16/16 19:09	50
Styrene	ND		50	37	ug/L			03/16/16 19:09	50
Tetrachloroethene	ND		50	18	ug/L			03/16/16 19:09	50
Toluene	540		50	26	ug/L			03/16/16 19:09	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			03/16/16 19:09	50
Trichloroethene	ND		50	23	ug/L			03/16/16 19:09	50
Vinyl chloride	ND		50	45	ug/L			03/16/16 19:09	50
Vinyl acetate	ND	*	250	43	ug/L			03/16/16 19:09	50
Xylenes, Total	120		100	33	ug/L			03/16/16 19:09	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137		03/16/16 19:09	50
Toluene-d8 (Surr)	98		71 - 126		03/16/16 19:09	50
4-Bromofluorobenzene (Surr)	101		73 - 120		03/16/16 19:09	50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		40	6.9	ug/L			03/19/16 16:19	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			03/19/16 16:19	200
Benzene	2700		40	4.7	ug/L			03/19/16 16:19	200
Ethylbenzene	180		40	5.7	ug/L			03/19/16 16:19	200
Isopropylbenzene	ND		40	5.4	ug/L			03/19/16 16:19	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			03/19/16 16:19	200
m,p-Xylene	46	J	80	11	ug/L			03/19/16 16:19	200
n-Butylbenzene	ND		40	6.2	ug/L			03/19/16 16:19	200

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Pre-Carbon

Date Collected: 03/11/16 09:30

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-4

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		40	26	ug/L			03/19/16 16:19	200
o-Xylene	44		40	5.4	ug/L			03/19/16 16:19	200
p-Cymene	ND		40	5.9	ug/L			03/19/16 16:19	200
sec-Butylbenzene	ND		40	4.1	ug/L			03/19/16 16:19	200
Toluene	430		40	7.1	ug/L			03/19/16 16:19	200
Xylenes, Total	90 J		120	11	ug/L			03/19/16 16:19	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145					03/19/16 16:19	200
4-Bromofluorobenzene	97		64 - 141					03/19/16 16:19	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	129000		500	100	ug/L		03/15/16 07:30	03/15/16 20:59	1
Iron	238		50.0	19.3	ug/L		03/15/16 07:30	03/15/16 20:59	1
Magnesium	54800		200	43.4	ug/L		03/15/16 07:30	03/15/16 20:59	1
Potassium	4000		500	100	ug/L		03/15/16 07:30	03/15/16 20:59	1
Sodium	65500		1000	324	ug/L		03/15/16 07:30	03/15/16 20:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109	B	10.0	5.6	mg/L			03/16/16 15:16	20
Sulfate	146	B	40.0	7.0	mg/L			03/16/16 15:16	20
Alkalinity, Total	446	B	100	40.0	mg/L			03/16/16 09:10	10

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Outside Sump

Date Collected: 03/11/16 09:35

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-5

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			03/19/16 16:51	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			03/19/16 16:51	500
Benzene	3200		100	12	ug/L			03/19/16 16:51	500
Ethylbenzene	220		100	14	ug/L			03/19/16 16:51	500
Isopropylbenzene	ND		100	14	ug/L			03/19/16 16:51	500
Methyl tert-butyl ether	ND		200	22	ug/L			03/19/16 16:51	500
m,p-Xylene	79 J		200	27	ug/L			03/19/16 16:51	500
n-Butylbenzene	ND		100	15	ug/L			03/19/16 16:51	500
n-Propylbenzene	ND		100	65	ug/L			03/19/16 16:51	500
o-Xylene	49 J		100	14	ug/L			03/19/16 16:51	500
p-Cymene	ND		100	15	ug/L			03/19/16 16:51	500
sec-Butylbenzene	ND		100	10	ug/L			03/19/16 16:51	500
Toluene	540		100	18	ug/L			03/19/16 16:51	500
Xylenes, Total	130 J		300	27	ug/L			03/19/16 16:51	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		63 - 145		03/19/16 16:51	500
4-Bromofluorobenzene	98		64 - 141		03/19/16 16:51	500

Lab Chronicle

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Post-Carbon 3

Date Collected: 03/11/16 09:15

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	291233	03/16/16 18:45	SMY	TAL BUF
Total/NA	Prep	3510C			290946	03/14/16 14:27	JIL	TAL BUF
Total/NA	Analysis	8270D		1	291896	03/21/16 03:08	DMR	TAL BUF
Total/NA	Analysis	8021B		1	291869	03/19/16 14:43	MRB	TAL BUF
Total/NA	Prep	3510C			290861	03/14/16 08:21	CPH	TAL BUF
Total/NA	Analysis	608		1	291043	03/15/16 11:06	MAN	TAL BUF
Total/NA	Prep	200.7			290913	03/15/16 07:30	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	291228	03/15/16 20:56	LMH	TAL BUF
Total/NA	Prep	1664A			291787	03/18/16 14:47	DSC	TAL BUF
Total/NA	Analysis	1664A		1	292026	03/21/16 14:46	DSC	TAL BUF
Total/NA	Prep	Distill/CN			290829	03/14/16 03:20	LAW	TAL BUF
Total/NA	Analysis	335.4		1	290941	03/14/16 13:12	MDL	TAL BUF
Total/NA	Prep	Distill/Phenol			291193	03/15/16 22:41	MGH	TAL BUF
Total/NA	Analysis	420.1		1	291295	03/16/16 11:16	LED	TAL BUF
Total/NA	Analysis	SM 2540C		1	291201	03/16/16 03:50	CDC	TAL BUF
Total/NA	Analysis	SM 2540D		1	291312	03/16/16 12:27	ELR	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	290991	03/14/16 17:32	JJK	TAL BUF
Total/NA	Analysis	SM 5210B		1	290818	03/12/16 11:29	ELR	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 03/11/16 09:20

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	291869	03/19/16 15:15	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 03/11/16 09:25

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-3

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	291869	03/19/16 15:47	MRB	TAL BUF
Total/NA	Analysis	8021B		5	292150	03/22/16 14:30	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 03/11/16 09:30

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-4

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	291233	03/16/16 19:09	SMY	TAL BUF
Total/NA	Analysis	8021B		200	291869	03/19/16 16:19	MRB	TAL BUF
Total/NA	Prep	200.7			290913	03/15/16 07:30	KJ1	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-96455-1

Client Sample ID: Pre-Carbon

Date Collected: 03/11/16 09:30

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-4

Matrix: Wastewater

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	291228	03/15/16 20:59	LMH	TAL BUF
Total/NA	Analysis	300.0		20	291202	03/16/16 15:16	CAS	TAL BUF
Total/NA	Analysis	310.2		10	291354	03/16/16 09:10	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 03/11/16 09:35

Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	291869	03/19/16 16:51	MRB	TAL BUF

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 480-96455-1

Laboratory: TestAmerica Buffalo

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

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

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

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

* 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: 480-96455-1

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: 480-96455-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-96455-1	Post-Carbon 3	Wastewater	03/11/16 09:15	03/11/16 10:15
480-96455-2	Post-Carbon 2	Wastewater	03/11/16 09:20	03/11/16 10:15
480-96455-3	Post-Carbon 1	Wastewater	03/11/16 09:25	03/11/16 10:15
480-96455-4	Pre-Carbon	Wastewater	03/11/16 09:30	03/11/16 10:15
480-96455-5	Outside Sump	Water	03/11/16 09:35	03/11/16 10:15


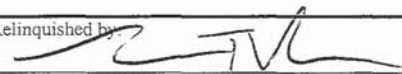
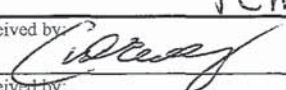
Buffalo
10 Hazelwood Drive

Amherst, NY 14228
phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Glenn May (NYSDEC)		Site Contact: Thomas Palmer		Date: 3/11/16		COC No:															
Groundwater & Environmental Services, Inc		Tel/Fax: (716) 851-7220		Lab Contact: B. Fischer		Carrier:		1 of 1 COCs															
495 Aero Drive Suite 3		Analysis Turnaround Time						Job No.															
Cheektowaga, NY 14225		Calendar (C) or Work Days (W)						SDG No.															
(800) 287-7857 Phone		TAT if different from Below																					
(866) 902-2187 FAX		<input checked="" type="checkbox"/> 2 weeks																					
Project Name: NYSDEC Gatown WWTP		<input type="checkbox"/> 1 week																					
Site: 915171		<input type="checkbox"/> 2 days																					
P O # Callout 120597		<input type="checkbox"/> 1 day																					
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample:	300.0_2SD (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+ - pH	1664A_Cate - Oil & Grease	420.4 - Phenolics, Total Recoverable	608_Pest - Priority Pollutant Pesticides	8210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids	2540C_Cated - Total Dissolved Solids	8270C-(MOD) TCL SVOA - OLM04.2	Sample Specific Notes:	
Post-Carbon 3	3/11	0915	Grab	W	19	N				X	X	X	X	X	X	X	X	X	X	X	X		
Post-Carbon 2	3/11	0920	Grab	W	3	N						X											
Post-Carbon 1	3/11	0925	Grab	W	3	N						X											
Pre-Carbon	3/11	0930	Grab	W	9	N	X	X	X		X	X											
Inside / Outside Sump	3/11	0935	Grab	W	3	N						X											
 480-96455 Chain of Custody																							
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: 						Company: GGS		Date/Time: 3/11 1015		Received by: 		Company: TA		Date/Time: 3/11/16 1015									
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: 480-96455-1

Login Number: 96455

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.	True	Yes: Samples checked, no residual chlorine detected

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: 480-98974-1

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:

5/9/2016 8:47:14 AM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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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.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

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



Orlette Johnson
Senior Project Manager
5/9/2016 8:47:14 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-98974-1

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.

Metals

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

General Chemistry

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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-98974-1

Job ID: 480-98974-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-98974-1

Receipt

The samples were received on 4/25/2016 1:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-299996 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The sample associated with this CCV was non-detect for the affected analytes; therefore, the data has been reported. The following sample is impacted: Post-Carbon 3 (480-98974-1).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-299996 recovered outside control limits for the following analyte: Acetone. 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 affected: Post-Carbon 3 (480-98974-1).

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 (480-98974-4). 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 (480-98974-3), Pre-Carbon (480-98974-4) and Outside Sump (480-98974-5). 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 (480-98974-1).

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: 480-98974-1

Client Sample ID: Post-Carbon 3

Date Collected: 04/25/16 12:15

Date Received: 04/25/16 13:00

Lab Sample ID: 480-98974-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/05/16 03:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/05/16 03:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/05/16 03:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/05/16 03:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/05/16 03:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/05/16 03:06	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			05/05/16 03:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/05/16 03:06	1
2-Hexanone	ND		5.0	1.2	ug/L			05/05/16 03:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/05/16 03:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/05/16 03:06	1
Acetone	ND	*	10	3.0	ug/L			05/05/16 03:06	1
Benzene	ND		1.0	0.41	ug/L			05/05/16 03:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/05/16 03:06	1
Bromoform	ND		1.0	0.26	ug/L			05/05/16 03:06	1
Bromomethane	ND		1.0	0.69	ug/L			05/05/16 03:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/05/16 03:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/05/16 03:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/05/16 03:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/05/16 03:06	1
Chloroethane	ND		1.0	0.32	ug/L			05/05/16 03:06	1
Chloroform	ND		1.0	0.34	ug/L			05/05/16 03:06	1
Chloromethane	ND		1.0	0.35	ug/L			05/05/16 03:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/05/16 03:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/05/16 03:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/05/16 03:06	1
Styrene	ND		1.0	0.73	ug/L			05/05/16 03:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/05/16 03:06	1
Toluene	ND		1.0	0.51	ug/L			05/05/16 03:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/05/16 03:06	1
Trichloroethene	ND		1.0	0.46	ug/L			05/05/16 03:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/05/16 03:06	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/05/16 03:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/05/16 03:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		66 - 137		05/05/16 03:06	1
Toluene-d8 (Surr)	96		71 - 126		05/05/16 03:06	1
4-Bromofluorobenzene (Surr)	89		73 - 120		05/05/16 03:06	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			04/28/16 17:32	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/28/16 17:32	1
Benzene	ND		0.20	0.023	ug/L			04/28/16 17:32	1
Ethylbenzene	ND		0.20	0.029	ug/L			04/28/16 17:32	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/28/16 17:32	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/28/16 17:32	1
m,p-Xylene	ND		0.40	0.054	ug/L			04/28/16 17:32	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/28/16 17:32	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-98974-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-98974-1

Date Collected: 04/25/16 12:15

Matrix: Wastewater

Date Received: 04/25/16 13:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			04/28/16 17:32	1
o-Xylene	ND		0.20	0.027	ug/L			04/28/16 17:32	1
p-Cymene	ND		0.20	0.030	ug/L			04/28/16 17:32	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/28/16 17:32	1
Toluene	ND		0.20	0.036	ug/L			04/28/16 17:32	1
Xylenes, Total	ND		0.60	0.054	ug/L			04/28/16 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		63 - 145		04/28/16 17:32	1
4-Bromofluorobenzene	140		64 - 141		04/28/16 17:32	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	52.9	B	50.0	19.3	ug/L		04/27/16 07:15	04/27/16 13:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.11		0.010	0.0050	mg/L		04/27/16 07:45	04/27/16 13:07	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.66	HF	0.100	0.100	SU			04/27/16 16:27	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-98974-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-98974-2

Date Collected: 04/25/16 12:20

Matrix: Water

Date Received: 04/25/16 13:00

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			04/28/16 18:04	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/28/16 18:04	1
Benzene	3.0		0.20	0.023	ug/L			04/28/16 18:04	1
Ethylbenzene	ND		0.20	0.029	ug/L			04/28/16 18:04	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/28/16 18:04	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/28/16 18:04	1
m,p-Xylene	ND		0.40	0.054	ug/L			04/28/16 18:04	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/28/16 18:04	1
n-Propylbenzene	ND		0.20	0.13	ug/L			04/28/16 18:04	1
o-Xylene	ND		0.20	0.027	ug/L			04/28/16 18:04	1
p-Cymene	ND		0.20	0.030	ug/L			04/28/16 18:04	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/28/16 18:04	1
Toluene	0.13 J		0.20	0.036	ug/L			04/28/16 18:04	1
Xylenes, Total	ND		0.60	0.054	ug/L			04/28/16 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	83		63 - 145		04/28/16 18:04	1
4-Bromofluorobenzene	132		64 - 141		04/28/16 18:04	1

Client Sample Results

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

TestAmerica Job ID: 480-98974-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-98974-3

Date Collected: 04/25/16 12:25

Matrix: Water

Date Received: 04/25/16 13:00

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.8	J	10	1.7	ug/L			05/05/16 12:31	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			05/05/16 12:31	50
Benzene	1700		10	1.2	ug/L			05/05/16 12:31	50
Ethylbenzene	54		10	1.4	ug/L			05/05/16 12:31	50
Isopropylbenzene	ND		10	1.4	ug/L			05/05/16 12:31	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			05/05/16 12:31	50
m,p-Xylene	49		20	2.7	ug/L			05/05/16 12:31	50
n-Butylbenzene	ND		10	1.5	ug/L			05/05/16 12:31	50
n-Propylbenzene	ND		10	6.5	ug/L			05/05/16 12:31	50
o-Xylene	ND		10	1.4	ug/L			05/05/16 12:31	50
p-Cymene	ND		10	1.5	ug/L			05/05/16 12:31	50
sec-Butylbenzene	ND		10	1.0	ug/L			05/05/16 12:31	50
Toluene	260		10	1.8	ug/L			05/05/16 12:31	50
Xylenes, Total	49		30	2.7	ug/L			05/05/16 12:31	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145		05/05/16 12:31	50
4-Bromofluorobenzene	103		64 - 141		05/05/16 12:31	50

Client Sample Results

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

TestAmerica Job ID: 480-98974-1

Client Sample ID: Pre-Carbon

Date Collected: 04/25/16 12:30

Date Received: 04/25/16 13:00

Lab Sample ID: 480-98974-4

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	23	J	40	6.9	ug/L			04/28/16 19:07	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			04/28/16 19:07	200
Benzene	4500		40	4.7	ug/L			04/28/16 19:07	200
Ethylbenzene	180		40	5.7	ug/L			04/28/16 19:07	200
Isopropylbenzene	ND		40	5.4	ug/L			04/28/16 19:07	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			04/28/16 19:07	200
m,p-Xylene	150		80	11	ug/L			04/28/16 19:07	200
n-Butylbenzene	ND		40	6.2	ug/L			04/28/16 19:07	200
n-Propylbenzene	ND		40	26	ug/L			04/28/16 19:07	200
o-Xylene	87		40	5.4	ug/L			04/28/16 19:07	200
p-Cymene	ND		40	5.9	ug/L			04/28/16 19:07	200
sec-Butylbenzene	ND		40	4.1	ug/L			04/28/16 19:07	200
Toluene	790		40	7.1	ug/L			04/28/16 19:07	200
Xylenes, Total	240		120	11	ug/L			04/28/16 19:07	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	85		63 - 145		04/28/16 19:07	200
<i>4-Bromofluorobenzene</i>	133		64 - 141		04/28/16 19:07	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	152000		500	100	ug/L		04/27/16 07:15	04/27/16 13:41	1
Iron	1030	B	50.0	19.3	ug/L		04/27/16 07:15	04/27/16 13:41	1
Magnesium	70900		200	43.4	ug/L		04/27/16 07:15	04/27/16 13:41	1
Potassium	3960		500	100	ug/L		04/27/16 07:15	04/27/16 13:41	1
Sodium	64400		1000	324	ug/L		04/27/16 07:15	04/27/16 13:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		10.0	5.6	mg/L			04/29/16 06:27	20
Sulfate	183		20.0	3.5	mg/L			05/02/16 11:51	10
Alkalinity, Total	471		50.0	20.0	mg/L			05/02/16 16:45	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-98974-1

Client Sample ID: Outside Sump

Date Collected: 04/25/16 12:40

Date Received: 04/25/16 13:00

Lab Sample ID: 480-98974-5

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	34	J	100	17	ug/L			04/28/16 19:39	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			04/28/16 19:39	500
Benzene	6000		100	12	ug/L			04/28/16 19:39	500
Ethylbenzene	470		100	14	ug/L			04/28/16 19:39	500
Isopropylbenzene	ND		100	14	ug/L			04/28/16 19:39	500
Methyl tert-butyl ether	ND		200	22	ug/L			04/28/16 19:39	500
m,p-Xylene	170	J	200	27	ug/L			04/28/16 19:39	500
n-Butylbenzene	ND		100	15	ug/L			04/28/16 19:39	500
n-Propylbenzene	ND		100	65	ug/L			04/28/16 19:39	500
o-Xylene	100		100	14	ug/L			04/28/16 19:39	500
p-Cymene	ND		100	15	ug/L			04/28/16 19:39	500
sec-Butylbenzene	ND		100	10	ug/L			04/28/16 19:39	500
Toluene	1100		100	18	ug/L			04/28/16 19:39	500
Xylenes, Total	270	J	300	27	ug/L			04/28/16 19:39	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		63 - 145		04/28/16 19:39	500
4-Bromofluorobenzene	136		64 - 141		04/28/16 19:39	500

Lab Chronicle

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

TestAmerica Job ID: 480-98974-1

Client Sample ID: Post-Carbon 3

Date Collected: 04/25/16 12:15

Date Received: 04/25/16 13:00

Lab Sample ID: 480-98974-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	299996	05/05/16 03:06	CDC	TAL BUF
Total/NA	Analysis	8021B		1	298767	04/28/16 17:32	MRB	TAL BUF
Total/NA	Prep	200.7			298300	04/27/16 07:15	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	298681	04/27/16 13:25	AMH	TAL BUF
Total/NA	Prep	Distill/CN			298466	04/27/16 07:45	LAW	TAL BUF
Total/NA	Analysis	335.4		1	298552	04/27/16 13:07	MDL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	298738	04/27/16 16:27	KMF	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 04/25/16 12:20

Date Received: 04/25/16 13:00

Lab Sample ID: 480-98974-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	298767	04/28/16 18:04	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 04/25/16 12:25

Date Received: 04/25/16 13:00

Lab Sample ID: 480-98974-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	300069	05/05/16 12:31	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 04/25/16 12:30

Date Received: 04/25/16 13:00

Lab Sample ID: 480-98974-4

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	298767	04/28/16 19:07	MRB	TAL BUF
Total/NA	Prep	200.7			298300	04/27/16 07:15	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	298681	04/27/16 13:41	AMH	TAL BUF
Total/NA	Analysis	300.0		20	298662	04/29/16 06:27	CAV	TAL BUF
Total/NA	Analysis	300.0		10	299265	05/02/16 11:51	CAV	TAL BUF
Total/NA	Analysis	310.2		5	299515	05/02/16 16:45	CEA	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 04/25/16 12:40

Date Received: 04/25/16 13:00

Lab Sample ID: 480-98974-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	298767	04/28/16 19:39	MRB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-98974-1

Laboratory References:

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

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Certification Summary

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

TestAmerica Job ID: 480-98974-1

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

Method Summary

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

TestAmerica Job ID: 480-98974-1

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: 480-98974-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-98974-1	Post-Carbon 3	Wastewater	04/25/16 12:15	04/25/16 13:00
480-98974-2	Post-Carbon 2	Water	04/25/16 12:20	04/25/16 13:00
480-98974-3	Post-Carbon 1	Water	04/25/16 12:25	04/25/16 13:00
480-98974-4	Pre-Carbon	Wastewater	04/25/16 12:30	04/25/16 13:00
480-98974-5	Outside Sump	Water	04/25/16 12:40	04/25/16 13:00

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-98974-1

Login Number: 98974

List Number: 1

Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (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: 480-100478-1

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:

6/6/2016 12:30:22 PM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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

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

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



Orlette Johnson
Senior Project Manager
6/6/2016 12:30:22 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-100478-1

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.
B	Compound was found in the blank and sample.

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-100478-1

Job ID: 480-100478-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-100478-1

Receipt

The samples were received on 5/20/2016 2:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

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 (480-100478-4). 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 (480-100478-3), Pre-Carbon (480-100478-4) and Outside Sump (480-100478-5). 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 (480-100478-1).

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: 480-100478-1

Client Sample ID: Post-Carbon 3

Date Collected: 05/20/16 13:30

Date Received: 05/20/16 14:50

Lab Sample ID: 480-100478-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/25/16 03:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/25/16 03:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/25/16 03:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/25/16 03:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/25/16 03:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/25/16 03:36	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			05/25/16 03:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/25/16 03:36	1
2-Hexanone	ND		5.0	1.2	ug/L			05/25/16 03:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/25/16 03:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/25/16 03:36	1
Acetone	ND		10	3.0	ug/L			05/25/16 03:36	1
Benzene	ND		1.0	0.41	ug/L			05/25/16 03:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/25/16 03:36	1
Bromoform	ND		1.0	0.26	ug/L			05/25/16 03:36	1
Bromomethane	ND		1.0	0.69	ug/L			05/25/16 03:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/25/16 03:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/25/16 03:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/25/16 03:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/25/16 03:36	1
Chloroethane	ND		1.0	0.32	ug/L			05/25/16 03:36	1
Chloroform	ND		1.0	0.34	ug/L			05/25/16 03:36	1
Chloromethane	ND		1.0	0.35	ug/L			05/25/16 03:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/25/16 03:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/25/16 03:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/25/16 03:36	1
Styrene	ND		1.0	0.73	ug/L			05/25/16 03:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/25/16 03:36	1
Toluene	ND		1.0	0.51	ug/L			05/25/16 03:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/25/16 03:36	1
Trichloroethene	ND		1.0	0.46	ug/L			05/25/16 03:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/25/16 03:36	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/25/16 03:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/25/16 03:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137		05/25/16 03:36	1
Toluene-d8 (Surr)	96		71 - 126		05/25/16 03:36	1
4-Bromofluorobenzene (Surr)	104		73 - 120		05/25/16 03:36	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			05/24/16 16:14	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/24/16 16:14	1
Benzene	ND		0.20	0.023	ug/L			05/24/16 16:14	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/24/16 16:14	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/24/16 16:14	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			05/24/16 16:14	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/24/16 16:14	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/24/16 16:14	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-100478-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-100478-1

Date Collected: 05/20/16 13:30

Matrix: Wastewater

Date Received: 05/20/16 14:50

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			05/24/16 16:14	1
o-Xylene	ND		0.20	0.027	ug/L			05/24/16 16:14	1
p-Cymene	ND		0.20	0.030	ug/L			05/24/16 16:14	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/24/16 16:14	1
Toluene	ND		0.20	0.036	ug/L			05/24/16 16:14	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/24/16 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145		05/24/16 16:14	1
4-Bromofluorobenzene	108		64 - 141		05/24/16 16:14	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	49.3	J	50.0	19.3	ug/L		05/23/16 09:05	05/24/16 17:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.12		0.010	0.0050	mg/L		06/02/16 16:20	06/03/16 11:00	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.28	HF	0.100	0.100	SU			05/23/16 14:52	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-100478-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-100478-2

Date Collected: 05/20/16 13:35

Matrix: Water

Date Received: 05/20/16 14:50

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			05/24/16 16:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/24/16 16:46	1
Benzene	6.2		0.20	0.023	ug/L			05/24/16 16:46	1
Ethylbenzene	0.034	J	0.20	0.029	ug/L			05/24/16 16:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/24/16 16:46	1
Methyl tert-butyl ether	0.13	J	0.40	0.044	ug/L			05/24/16 16:46	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/24/16 16:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/24/16 16:46	1
n-Propylbenzene	ND		0.20	0.13	ug/L			05/24/16 16:46	1
o-Xylene	ND		0.20	0.027	ug/L			05/24/16 16:46	1
p-Cymene	ND		0.20	0.030	ug/L			05/24/16 16:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/24/16 16:46	1
Toluene	0.19	J	0.20	0.036	ug/L			05/24/16 16:46	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/24/16 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 145		05/24/16 16:46	1
4-Bromofluorobenzene	111		64 - 141		05/24/16 16:46	1

Client Sample Results

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

TestAmerica Job ID: 480-100478-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-100478-3

Date Collected: 05/20/16 13:40

Matrix: Water

Date Received: 05/20/16 14:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.7	J	10	1.7	ug/L			05/25/16 18:08	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			05/25/16 18:08	50
Benzene	1800		10	1.2	ug/L			05/25/16 18:08	50
Ethylbenzene	70		10	1.4	ug/L			05/25/16 18:08	50
Isopropylbenzene	ND		10	1.4	ug/L			05/25/16 18:08	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			05/25/16 18:08	50
m,p-Xylene	28		20	2.7	ug/L			05/25/16 18:08	50
n-Butylbenzene	ND		10	1.5	ug/L			05/25/16 18:08	50
n-Propylbenzene	ND		10	6.5	ug/L			05/25/16 18:08	50
o-Xylene	17		10	1.4	ug/L			05/25/16 18:08	50
p-Cymene	ND		10	1.5	ug/L			05/25/16 18:08	50
sec-Butylbenzene	ND		10	1.0	ug/L			05/25/16 18:08	50
Toluene	200		10	1.8	ug/L			05/25/16 18:08	50
Xylenes, Total	45		30	2.7	ug/L			05/25/16 18:08	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145		05/25/16 18:08	50
4-Bromofluorobenzene	104		64 - 141		05/25/16 18:08	50

Client Sample Results

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

TestAmerica Job ID: 480-100478-1

Client Sample ID: Pre-Carbon

Date Collected: 05/20/16 13:45

Date Received: 05/20/16 14:50

Lab Sample ID: 480-100478-4

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	21	J	40	6.9	ug/L			05/24/16 18:00	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			05/24/16 18:00	200
Benzene	6200		40	4.7	ug/L			05/24/16 18:00	200
Ethylbenzene	450		40	5.7	ug/L			05/24/16 18:00	200
Isopropylbenzene	ND		40	5.4	ug/L			05/24/16 18:00	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			05/24/16 18:00	200
m,p-Xylene	170		80	11	ug/L			05/24/16 18:00	200
n-Butylbenzene	ND		40	6.2	ug/L			05/24/16 18:00	200
n-Propylbenzene	ND		40	26	ug/L			05/24/16 18:00	200
o-Xylene	110		40	5.4	ug/L			05/24/16 18:00	200
p-Cymene	ND		40	5.9	ug/L			05/24/16 18:00	200
sec-Butylbenzene	ND		40	4.1	ug/L			05/24/16 18:00	200
Toluene	1100		40	7.1	ug/L			05/24/16 18:00	200
Xylenes, Total	280		120	11	ug/L			05/24/16 18:00	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	100		63 - 145		05/24/16 18:00	200
<i>4-Bromofluorobenzene</i>	111		64 - 141		05/24/16 18:00	200

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	134000		500	100	ug/L		05/23/16 09:05	05/24/16 17:31	1
Iron	1300		50.0	19.3	ug/L		05/23/16 09:05	05/24/16 17:31	1
Magnesium	68700		200	43.4	ug/L		05/23/16 09:05	05/24/16 17:31	1
Potassium	4190		500	100	ug/L		05/23/16 09:05	05/24/16 17:31	1
Sodium	60500		1000	324	ug/L		05/23/16 09:05	05/24/16 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	131		10.0	5.6	mg/L			05/24/16 04:28	20
Sulfate	178	B	40.0	7.0	mg/L			05/24/16 04:28	20
Alkalinity, Total	421	B	50.0	20.0	mg/L			05/21/16 14:00	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-100478-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-100478-5

Date Collected: 05/20/16 13:50

Matrix: Water

Date Received: 05/20/16 14:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	22	J	100	17	ug/L			05/24/16 18:32	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			05/24/16 18:32	500
Benzene	7700		100	12	ug/L			05/24/16 18:32	500
Ethylbenzene	600		100	14	ug/L			05/24/16 18:32	500
Isopropylbenzene	ND		100	14	ug/L			05/24/16 18:32	500
Methyl tert-butyl ether	ND		200	22	ug/L			05/24/16 18:32	500
m,p-Xylene	200		200	27	ug/L			05/24/16 18:32	500
n-Butylbenzene	ND		100	15	ug/L			05/24/16 18:32	500
n-Propylbenzene	ND		100	65	ug/L			05/24/16 18:32	500
o-Xylene	130		100	14	ug/L			05/24/16 18:32	500
p-Cymene	ND		100	15	ug/L			05/24/16 18:32	500
sec-Butylbenzene	ND		100	10	ug/L			05/24/16 18:32	500
Toluene	1400		100	18	ug/L			05/24/16 18:32	500
Xylenes, Total	330		300	27	ug/L			05/24/16 18:32	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		05/24/16 18:32	500
4-Bromofluorobenzene	109		64 - 141		05/24/16 18:32	500

Lab Chronicle

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

TestAmerica Job ID: 480-100478-1

Client Sample ID: Post-Carbon 3

Date Collected: 05/20/16 13:30

Date Received: 05/20/16 14:50

Lab Sample ID: 480-100478-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	303434	05/25/16 03:36	GTG	TAL BUF
Total/NA	Analysis	8021B		1	303344	05/24/16 16:14	MRB	TAL BUF
Total/NA	Prep	200.7			303065	05/23/16 09:05	BAE	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	303542	05/24/16 17:28	TRB	TAL BUF
Total/NA	Prep	Distill/CN			304817	06/02/16 16:20	ZRJ	TAL BUF
Total/NA	Analysis	335.4		1	304990	06/03/16 11:00	ZRJ	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	303210	05/23/16 14:52	KMF	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 05/20/16 13:35

Date Received: 05/20/16 14:50

Lab Sample ID: 480-100478-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	303344	05/24/16 16:46	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 05/20/16 13:40

Date Received: 05/20/16 14:50

Lab Sample ID: 480-100478-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	303618	05/25/16 18:08	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 05/20/16 13:45

Date Received: 05/20/16 14:50

Lab Sample ID: 480-100478-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		200	303344	05/24/16 18:00	MRB	TAL BUF
Total/NA	Prep	200.7			303065	05/23/16 09:05	BAE	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	303542	05/24/16 17:31	TRB	TAL BUF
Total/NA	Analysis	300.0		20	303214	05/24/16 04:28	CAV	TAL BUF
Total/NA	Analysis	310.2		5	303008	05/21/16 14:00	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 05/20/16 13:50

Date Received: 05/20/16 14:50

Lab Sample ID: 480-100478-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	303344	05/24/16 18:32	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: 480-100478-1

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

Method Summary

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

TestAmerica Job ID: 480-100478-1

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: 480-100478-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-100478-1	Post-Carbon 3	Wastewater	05/20/16 13:30	05/20/16 14:50
480-100478-2	Post-Carbon 2	Water	05/20/16 13:35	05/20/16 14:50
480-100478-3	Post-Carbon 1	Water	05/20/16 13:40	05/20/16 14:50
480-100478-4	Pre-Carbon	Water	05/20/16 13:45	05/20/16 14:50
480-100478-5	Outside Sump	Water	05/20/16 13:50	05/20/16 14:50

Buffalo

10 Hazelwood Drive

Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact 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		Site Contact: Thomas Palmer Lab Contact: B. Fischer		Date: 5/20/16 Carrier:		COC No: 1 of 1 COCs	
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		Filtered Sample 300.0_28D (MOD) Local Method 200.7 - (MOD) Local Method 310.2 - Alkalinity 200.7 - Iron 8260B - (MOD) TCL list OLM04.2 8021B - (MOD) STARS list - VOA - 8021 335.4 - Cyanide, Total SM4500_H+ pH		Job No. SDG No.		Sample Specific Notes:			
Sample Identification Post-Carbon 3 Post-Carbon 2 Post-Carbon 1 Pre-Carbon Inside / <u>Outside Sump</u>	Sample Date 5/20 1330 1335 1340 1345 1350	Sample Time 1330 1335 1340 1345 1350	Sample Type Grab Grab Grab Grab Grab	Matrix W W W W W	# of Cont. 9 3 3 6 3	N N N N N	X X X X X	X X X X X	X X X X X
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: 3.0 #1			
Relinquished by: <u>[Signature]</u>	Company: <u>GES</u>	Date/Time: <u>5/20 1450</u>	Received by: <u>[Signature]</u>	Company: <u>TA Buf.</u>	Date/Time: <u>5/20/16 1450</u>				
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: 480-100478-1

Login Number: 100478

List Number: 1

Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (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: 480-102466-1

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:

7/12/2016 7:03:07 AM

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
7/12/2016 7:03:07 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-102466-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

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

GC VOA

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

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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: 480-102466-1

Job ID: 480-102466-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-102466-1

Receipt

The samples were received on 6/30/2016 2:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-309723 recovered outside acceptance criteria, low biased, for Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: Pre-Carbon (480-102466-4).

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-102466-4). 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 %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-309488 recovered outside control limits for the following analytes: 2,4,5-Trichlorophenol, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Anthracene, Butyl benzyl phthalate, Chrysene, Diethyl phthalate, Di-n-butyl phthalate, Fluoranthene and Fluorene.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-309641 recovered outside acceptance criteria, low biased, for Benzaldehyde. 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 (480-102466-4). 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 (480-102466-3), Pre-Carbon (480-102466-4) and Outside Sump (480-102466-5). 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 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 (480-102466-1).

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

Case Narrative

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

TestAmerica Job ID: 480-102466-1

Job ID: 480-102466-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-309636.

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: 480-102466-1

Client Sample ID: Post-Carbon 3

Date Collected: 06/30/16 13:30

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-1

Matrix: Wastewater

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/06/16 00:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/16 00:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/06/16 00:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/06/16 00:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/06/16 00:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/06/16 00:51	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			07/06/16 00:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/06/16 00:51	1
2-Hexanone	ND		5.0	1.2	ug/L			07/06/16 00:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/06/16 00:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/06/16 00:51	1
Acetone	ND		10	3.0	ug/L			07/06/16 00:51	1
Benzene	ND		1.0	0.41	ug/L			07/06/16 00:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/06/16 00:51	1
Bromoform	ND		1.0	0.26	ug/L			07/06/16 00:51	1
Bromomethane	ND		1.0	0.69	ug/L			07/06/16 00:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/06/16 00:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/06/16 00:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/06/16 00:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/06/16 00:51	1
Chloroethane	ND		1.0	0.32	ug/L			07/06/16 00:51	1
Chloroform	ND		1.0	0.34	ug/L			07/06/16 00:51	1
Chloromethane	ND		1.0	0.35	ug/L			07/06/16 00:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/06/16 00:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/06/16 00:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/06/16 00:51	1
Styrene	ND		1.0	0.73	ug/L			07/06/16 00:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/06/16 00:51	1
Toluene	ND		1.0	0.51	ug/L			07/06/16 00:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/06/16 00:51	1
Trichloroethene	ND		1.0	0.46	ug/L			07/06/16 00:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/06/16 00:51	1
Vinyl acetate	ND		5.0	0.85	ug/L			07/06/16 00:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/06/16 00:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137		07/06/16 00:51	1
Toluene-d8 (Surr)	92		71 - 126		07/06/16 00:51	1
4-Bromofluorobenzene (Surr)	90		73 - 120		07/06/16 00:51	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		07/01/16 07:32	07/02/16 18:42	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4,5-Trichlorophenol	ND	*	5.0	0.48	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4-Dinitrophenol	ND	*	10	2.2	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/01/16 07:32	07/02/16 18:42	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-102466-1

Date Collected: 06/30/16 13:30

Matrix: Wastewater

Date Received: 06/30/16 14:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/01/16 07:32	07/02/16 18:42	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/01/16 07:32	07/02/16 18:42	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/01/16 07:32	07/02/16 18:42	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/01/16 07:32	07/02/16 18:42	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/01/16 07:32	07/02/16 18:42	1
2-Nitroaniline	ND		10	0.42	ug/L		07/01/16 07:32	07/02/16 18:42	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/01/16 07:32	07/02/16 18:42	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/01/16 07:32	07/02/16 18:42	1
3-Nitroaniline	ND		10	0.48	ug/L		07/01/16 07:32	07/02/16 18:42	1
4,6-Dinitro-2-methylphenol	ND	*	10	2.2	ug/L		07/01/16 07:32	07/02/16 18:42	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/01/16 07:32	07/02/16 18:42	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/01/16 07:32	07/02/16 18:42	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/01/16 07:32	07/02/16 18:42	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/01/16 07:32	07/02/16 18:42	1
4-Methylphenol	ND		10	0.36	ug/L		07/01/16 07:32	07/02/16 18:42	1
4-Nitroaniline	ND		10	0.25	ug/L		07/01/16 07:32	07/02/16 18:42	1
4-Nitrophenol	ND		10	1.5	ug/L		07/01/16 07:32	07/02/16 18:42	1
Acenaphthene	ND		5.0	0.41	ug/L		07/01/16 07:32	07/02/16 18:42	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/01/16 07:32	07/02/16 18:42	1
Acetophenone	ND		5.0	0.54	ug/L		07/01/16 07:32	07/02/16 18:42	1
Anthracene	ND	*	5.0	0.28	ug/L		07/01/16 07:32	07/02/16 18:42	1
Atrazine	ND		5.0	0.46	ug/L		07/01/16 07:32	07/02/16 18:42	1
Benzaldehyde	0.30	J	5.0	0.27	ug/L		07/01/16 07:32	07/02/16 18:42	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		07/01/16 07:32	07/02/16 18:42	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		07/01/16 07:32	07/02/16 18:42	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		07/01/16 07:32	07/02/16 18:42	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		07/01/16 07:32	07/02/16 18:42	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		07/01/16 07:32	07/02/16 18:42	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/01/16 07:32	07/02/16 18:42	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/01/16 07:32	07/02/16 18:42	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/01/16 07:32	07/02/16 18:42	1
Butyl benzyl phthalate	ND	*	5.0	1.0	ug/L		07/01/16 07:32	07/02/16 18:42	1
Caprolactam	ND		5.0	2.2	ug/L		07/01/16 07:32	07/02/16 18:42	1
Carbazole	ND		5.0	0.30	ug/L		07/01/16 07:32	07/02/16 18:42	1
Chrysene	ND	*	5.0	0.33	ug/L		07/01/16 07:32	07/02/16 18:42	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/01/16 07:32	07/02/16 18:42	1
Di-n-butyl phthalate	ND	*	5.0	0.31	ug/L		07/01/16 07:32	07/02/16 18:42	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/01/16 07:32	07/02/16 18:42	1
Dibenzofuran	ND		10	0.51	ug/L		07/01/16 07:32	07/02/16 18:42	1
Diethyl phthalate	ND	*	5.0	0.22	ug/L		07/01/16 07:32	07/02/16 18:42	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/01/16 07:32	07/02/16 18:42	1
Fluoranthene	ND	*	5.0	0.40	ug/L		07/01/16 07:32	07/02/16 18:42	1
Fluorene	ND	*	5.0	0.36	ug/L		07/01/16 07:32	07/02/16 18:42	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/01/16 07:32	07/02/16 18:42	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/01/16 07:32	07/02/16 18:42	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/01/16 07:32	07/02/16 18:42	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/01/16 07:32	07/02/16 18:42	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		07/01/16 07:32	07/02/16 18:42	1
Isophorone	ND		5.0	0.43	ug/L		07/01/16 07:32	07/02/16 18:42	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-102466-1

Date Collected: 06/30/16 13:30

Matrix: Wastewater

Date Received: 06/30/16 14:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/01/16 07:32	07/02/16 18:42	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/01/16 07:32	07/02/16 18:42	1
Naphthalene	ND		5.0	0.76	ug/L		07/01/16 07:32	07/02/16 18:42	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/01/16 07:32	07/02/16 18:42	1
Pentachlorophenol	ND		10	2.2	ug/L		07/01/16 07:32	07/02/16 18:42	1
Phenanthrene	ND		5.0	0.44	ug/L		07/01/16 07:32	07/02/16 18:42	1
Phenol	ND		5.0	0.39	ug/L		07/01/16 07:32	07/02/16 18:42	1
Pyrene	ND		5.0	0.34	ug/L		07/01/16 07:32	07/02/16 18:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	93		46 - 120	07/01/16 07:32	07/02/16 18:42	1
Phenol-d5 (Surr)	52		16 - 120	07/01/16 07:32	07/02/16 18:42	1
p-Terphenyl-d14 (Surr)	102		67 - 150	07/01/16 07:32	07/02/16 18:42	1
2,4,6-Tribromophenol (Surr)	89		52 - 132	07/01/16 07:32	07/02/16 18:42	1
2-Fluorobiphenyl	89		48 - 120	07/01/16 07:32	07/02/16 18:42	1
2-Fluorophenol (Surr)	71		20 - 120	07/01/16 07:32	07/02/16 18:42	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			07/06/16 16:32	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/06/16 16:32	1
Benzene	0.072	J	0.20	0.023	ug/L			07/06/16 16:32	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/06/16 16:32	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/06/16 16:32	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/06/16 16:32	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/06/16 16:32	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/06/16 16:32	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/06/16 16:32	1
o-Xylene	ND		0.20	0.027	ug/L			07/06/16 16:32	1
p-Cymene	ND		0.20	0.030	ug/L			07/06/16 16:32	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/06/16 16:32	1
Toluene	ND		0.20	0.036	ug/L			07/06/16 16:32	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/06/16 16:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		07/06/16 16:32	1
4-Bromofluorobenzene	102		64 - 141		07/06/16 16:32	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.048	0.0063	ug/L		07/02/16 09:58	07/06/16 11:19	1
alpha-BHC	ND		0.048	0.0063	ug/L		07/02/16 09:58	07/06/16 11:19	1
beta-BHC	ND		0.048	0.024	ug/L		07/02/16 09:58	07/06/16 11:19	1
delta-BHC	ND		0.048	0.0096	ug/L		07/02/16 09:58	07/06/16 11:19	1
gamma-BHC (Lindane)	ND		0.048	0.0058	ug/L		07/02/16 09:58	07/06/16 11:19	1
Chlordane (technical)	ND		0.48	0.28	ug/L		07/02/16 09:58	07/06/16 11:19	1
4,4'-DDD	ND		0.048	0.0088	ug/L		07/02/16 09:58	07/06/16 11:19	1
4,4'-DDE	ND		0.048	0.011	ug/L		07/02/16 09:58	07/06/16 11:19	1
4,4'-DDT	ND		0.048	0.011	ug/L		07/02/16 09:58	07/06/16 11:19	1
Dieldrin	ND		0.048	0.0094	ug/L		07/02/16 09:58	07/06/16 11:19	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Post-Carbon 3

Date Collected: 06/30/16 13:30

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-1

Matrix: Wastewater

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND		0.048	0.011	ug/L	-	07/02/16 09:58	07/06/16 11:19	1
Endosulfan II	ND		0.048	0.012	ug/L	-	07/02/16 09:58	07/06/16 11:19	1
Endosulfan sulfate	ND		0.048	0.015	ug/L	-	07/02/16 09:58	07/06/16 11:19	1
Endrin	ND		0.048	0.013	ug/L	-	07/02/16 09:58	07/06/16 11:19	1
Endrin aldehyde	ND		0.048	0.016	ug/L	-	07/02/16 09:58	07/06/16 11:19	1
Heptachlor	ND		0.048	0.0082	ug/L	-	07/02/16 09:58	07/06/16 11:19	1
Heptachlor epoxide	ND		0.048	0.0051	ug/L	-	07/02/16 09:58	07/06/16 11:19	1
Toxaphene	ND		0.48	0.12	ug/L	-	07/02/16 09:58	07/06/16 11:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	71		23 - 120				07/02/16 09:58	07/06/16 11:19	1
Tetrachloro-m-xylene	68		36 - 120				07/02/16 09:58	07/06/16 11:19	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	137		50.0	19.3	ug/L	-	07/01/16 07:55	07/05/16 19:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.3	1.5	mg/L	-	07/05/16 15:39	07/05/16 22:52	1
Cyanide, Total	0.18		0.010	0.0050	mg/L	-	07/01/16 13:02	07/02/16 10:28	1
Phenolics, Total Recoverable	0.15		0.010	0.0050	mg/L	-	07/01/16 01:35	07/01/16 10:52	1
Total Dissolved Solids	546		10.0	4.0	mg/L	-		06/30/16 20:19	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L	-		07/01/16 10:18	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	6.0		4.0	4.0	mg/L	-		07/01/16 16:00	1
pH	7.38	HF	0.100	0.100	SU	-		07/01/16 11:49	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Post-Carbon 2

Date Collected: 06/30/16 13:35

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-2

Matrix: Wastewater

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			07/06/16 17:04	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/06/16 17:04	1
Benzene	2.4		0.20	0.023	ug/L			07/06/16 17:04	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/06/16 17:04	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/06/16 17:04	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/06/16 17:04	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/06/16 17:04	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/06/16 17:04	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/06/16 17:04	1
o-Xylene	ND		0.20	0.027	ug/L			07/06/16 17:04	1
p-Cymene	ND		0.20	0.030	ug/L			07/06/16 17:04	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/06/16 17:04	1
Toluene	ND		0.20	0.036	ug/L			07/06/16 17:04	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/06/16 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145		07/06/16 17:04	1
4-Bromofluorobenzene	101		64 - 141		07/06/16 17:04	1

Client Sample Results

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-102466-3

Date Collected: 06/30/16 13:40

Matrix: Water

Date Received: 06/30/16 14:20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		5.0	0.87	ug/L			07/07/16 17:02	25
1,3,5-Trimethylbenzene	ND		5.0	3.8	ug/L			07/07/16 17:02	25
Benzene	780		5.0	0.58	ug/L			07/07/16 17:02	25
Ethylbenzene	5.1		5.0	0.72	ug/L			07/07/16 17:02	25
Isopropylbenzene	ND		5.0	0.68	ug/L			07/07/16 17:02	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			07/07/16 17:02	25
m,p-Xylene	2.5	J	10	1.4	ug/L			07/07/16 17:02	25
n-Butylbenzene	ND		5.0	0.77	ug/L			07/07/16 17:02	25
n-Propylbenzene	ND		5.0	3.3	ug/L			07/07/16 17:02	25
o-Xylene	3.1	J	5.0	0.68	ug/L			07/07/16 17:02	25
p-Cymene	ND		5.0	0.74	ug/L			07/07/16 17:02	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			07/07/16 17:02	25
Toluene	28		5.0	0.89	ug/L			07/07/16 17:02	25
Xylenes, Total	5.6	J	15	1.4	ug/L			07/07/16 17:02	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145		07/07/16 17:02	25
4-Bromofluorobenzene	104		64 - 141		07/07/16 17:02	25

Client Sample Results

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Pre-Carbon

Date Collected: 06/30/16 13:45

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		200	160	ug/L			07/05/16 20:10	200
1,1,2,2-Tetrachloroethane	ND		200	42	ug/L			07/05/16 20:10	200
1,1,2-Trichloroethane	ND		200	46	ug/L			07/05/16 20:10	200
1,1-Dichloroethane	ND		200	76	ug/L			07/05/16 20:10	200
1,1-Dichloroethene	ND		200	58	ug/L			07/05/16 20:10	200
1,2-Dichloroethane	ND		200	42	ug/L			07/05/16 20:10	200
1,2-Dichloroethene, Total	ND		400	160	ug/L			07/05/16 20:10	200
1,2-Dichloropropane	ND		200	140	ug/L			07/05/16 20:10	200
2-Hexanone	ND		1000	250	ug/L			07/05/16 20:10	200
2-Butanone (MEK)	ND		2000	260	ug/L			07/05/16 20:10	200
4-Methyl-2-pentanone (MIBK)	ND		1000	420	ug/L			07/05/16 20:10	200
Acetone	ND		2000	600	ug/L			07/05/16 20:10	200
Benzene	6900		200	82	ug/L			07/05/16 20:10	200
Bromodichloromethane	ND		200	78	ug/L			07/05/16 20:10	200
Bromoform	ND		200	52	ug/L			07/05/16 20:10	200
Bromomethane	ND		200	140	ug/L			07/05/16 20:10	200
Carbon disulfide	ND		200	38	ug/L			07/05/16 20:10	200
Carbon tetrachloride	ND		200	54	ug/L			07/05/16 20:10	200
Chlorobenzene	ND		200	150	ug/L			07/05/16 20:10	200
Dibromochloromethane	ND		200	64	ug/L			07/05/16 20:10	200
Chloroethane	ND		200	64	ug/L			07/05/16 20:10	200
Chloroform	ND		200	68	ug/L			07/05/16 20:10	200
Chloromethane	ND		200	70	ug/L			07/05/16 20:10	200
cis-1,3-Dichloropropene	ND		200	72	ug/L			07/05/16 20:10	200
Ethylbenzene	200		200	150	ug/L			07/05/16 20:10	200
Methylene Chloride	ND		200	88	ug/L			07/05/16 20:10	200
Styrene	ND		200	150	ug/L			07/05/16 20:10	200
Tetrachloroethene	ND		200	72	ug/L			07/05/16 20:10	200
Toluene	980		200	100	ug/L			07/05/16 20:10	200
trans-1,3-Dichloropropene	ND		200	74	ug/L			07/05/16 20:10	200
Trichloroethene	ND		200	92	ug/L			07/05/16 20:10	200
Vinyl chloride	ND		200	180	ug/L			07/05/16 20:10	200
Vinyl acetate	ND		1000	170	ug/L			07/05/16 20:10	200
Xylenes, Total	140	J	400	130	ug/L			07/05/16 20:10	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137		07/05/16 20:10	200
Toluene-d8 (Surr)	92		71 - 126		07/05/16 20:10	200
4-Bromofluorobenzene (Surr)	90		73 - 120		07/05/16 20:10	200

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	21		20	3.5	ug/L			07/06/16 18:08	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			07/06/16 18:08	100
Benzene	5300		20	2.3	ug/L			07/06/16 18:08	100
Ethylbenzene	210		20	2.9	ug/L			07/06/16 18:08	100
Isopropylbenzene	ND		20	2.7	ug/L			07/06/16 18:08	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			07/06/16 18:08	100
m,p-Xylene	180		40	5.4	ug/L			07/06/16 18:08	100
n-Butylbenzene	ND		20	3.1	ug/L			07/06/16 18:08	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-102466-4

Date Collected: 06/30/16 13:45

Matrix: Water

Date Received: 06/30/16 14:20

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			07/06/16 18:08	100
o-Xylene	95		20	2.7	ug/L			07/06/16 18:08	100
p-Cymene	ND		20	3.0	ug/L			07/06/16 18:08	100
sec-Butylbenzene	5.4 J		20	2.0	ug/L			07/06/16 18:08	100
Toluene	880		20	3.6	ug/L			07/06/16 18:08	100
Xylenes, Total	280		60	5.4	ug/L			07/06/16 18:08	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145		07/06/16 18:08	100
4-Bromofluorobenzene	98		64 - 141		07/06/16 18:08	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	5270		50.0	19.3	ug/L		07/01/16 07:55	07/05/16 19:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.3		10.0	5.6	mg/L			07/01/16 13:55	20
Sulfate	143 B		40.0	7.0	mg/L			07/01/16 13:55	20
Alkalinity, Total	337		60.0	24.0	mg/L			07/07/16 11:24	6

Client Sample Results

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-102466-5

Date Collected: 06/30/16 13:50

Matrix: Water

Date Received: 06/30/16 14:20

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	46	J	100	17	ug/L			07/07/16 16:30	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			07/07/16 16:30	500
Benzene	11000		100	12	ug/L			07/07/16 16:30	500
Ethylbenzene	780		100	14	ug/L			07/07/16 16:30	500
Isopropylbenzene	ND		100	14	ug/L			07/07/16 16:30	500
Methyl tert-butyl ether	ND		200	22	ug/L			07/07/16 16:30	500
m,p-Xylene	340		200	27	ug/L			07/07/16 16:30	500
n-Butylbenzene	ND		100	15	ug/L			07/07/16 16:30	500
n-Propylbenzene	ND		100	65	ug/L			07/07/16 16:30	500
o-Xylene	ND		100	14	ug/L			07/07/16 16:30	500
p-Cymene	ND		100	15	ug/L			07/07/16 16:30	500
sec-Butylbenzene	ND		100	10	ug/L			07/07/16 16:30	500
Toluene	1900		100	18	ug/L			07/07/16 16:30	500
Xylenes, Total	340		300	27	ug/L			07/07/16 16:30	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145		07/07/16 16:30	500
4-Bromofluorobenzene	103		64 - 141		07/07/16 16:30	500

Lab Chronicle

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Post-Carbon 3

Date Collected: 06/30/16 13:30

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	309795	07/06/16 00:51	GTG	TAL BUF
Total/NA	Prep	3510C			309488	07/01/16 07:32	ARS	TAL BUF
Total/NA	Analysis	8270D		1	309641	07/02/16 18:42	DMR	TAL BUF
Total/NA	Analysis	8021B		1	309914	07/06/16 16:32	MRB	TAL BUF
Total/NA	Prep	3510C			309636	07/02/16 09:58	RMZ	TAL BUF
Total/NA	Analysis	608		1	309825	07/06/16 11:19	MAN	TAL BUF
Total/NA	Prep	200.7			309480	07/01/16 07:55	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	309850	07/05/16 19:20	AMH	TAL BUF
Total/NA	Prep	1664A			309792	07/05/16 15:39	DSC	TAL BUF
Total/NA	Analysis	1664A		1	309816	07/05/16 22:52	DSC	TAL BUF
Total/NA	Prep	Distill/CN			309569	07/01/16 13:02	JCL	TAL BUF
Total/NA	Analysis	335.4		1	309646	07/02/16 10:28	ZRJ	TAL BUF
Total/NA	Prep	Distill/Phenol			309470	07/01/16 01:35	DCB	TAL BUF
Total/NA	Analysis	420.1		1	309575	07/01/16 10:52	LED	TAL BUF
Total/NA	Analysis	SM 2540C		1	309460	06/30/16 20:19	CDC	TAL BUF
Total/NA	Analysis	SM 2540D		1	309582	07/01/16 16:00	CDC	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	309563	07/01/16 11:49	ELR	TAL BUF
Total/NA	Analysis	SM 5210B		1	309545	07/01/16 10:18	LED	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 06/30/16 13:35

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	309914	07/06/16 17:04	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 06/30/16 13:40

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		25	310055	07/07/16 17:02	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 06/30/16 13:45

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		200	309723	07/05/16 20:10	RRS	TAL BUF
Total/NA	Analysis	8021B		100	309914	07/06/16 18:08	MRB	TAL BUF
Total/NA	Prep	200.7			309480	07/01/16 07:55	CMM	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	309850	07/05/16 19:23	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-102466-1

Client Sample ID: Pre-Carbon

Date Collected: 06/30/16 13:45

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	309526	07/01/16 13:55	CAV	TAL BUF
Total/NA	Analysis	310.2		6	310146	07/07/16 11:24	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 06/30/16 13:50

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	310055	07/07/16 16:30	MRB	TAL BUF

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 480-102466-1

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
8260C		Water	1,2-Dichloroethene, Total
SM 4500 H+ B		Wastewater	pH

Method Summary

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

TestAmerica Job ID: 480-102466-1

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: 480-102466-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-102466-1	Post-Carbon 3	Wastewater	06/30/16 13:30	06/30/16 14:20
480-102466-2	Post-Carbon 2	Wastewater	06/30/16 13:35	06/30/16 14:20
480-102466-3	Post-Carbon 1	Water	06/30/16 13:40	06/30/16 14:20
480-102466-4	Pre-Carbon	Water	06/30/16 13:45	06/30/16 14:20
480-102466-5	Outside Sump	Water	06/30/16 13:50	06/30/16 14:20

Buffalo

10 Hazelwood Drive

Amherst, NY 14228


phone 716.504.9852 fax 716.691.7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Glenn May (NYSDEC)		Site Contact: Thomas Palmer		Date: 6/30/16		COC No:															
Groundwater & Environmental Services, Inc		Tel/Fax: (716) 851-7220		Lab Contact: B. Fischer		Carrier:		1 of 1 COCs															
495 Aero Drive Suite 3		Analysis Turnaround Time						Job No.															
Cheektowaga, NY 14225		Calendar (C) or Work Days (W)						SDG No.															
(800) 287-7857 Phone		TAT if different from Below																					
(866) 902-2187 FAX		<input checked="" type="checkbox"/> 2 weeks																					
Project Name: NYSDEC Gatown WWTP		<input type="checkbox"/> 1 week																					
Site: 915171		<input type="checkbox"/> 2 days																					
P O # Callout 120597		<input type="checkbox"/> 1 day																					
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	300.0 - 28D (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+ - pH	1664A_Calc - Oil & Grease	420.4 - Phenolics, Total Recoverable	608_Pest - Priority Pollutant Pesticides	5210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids	2540C_Calc - Total Dissolved Solids	8270C - (MOD) TCL SYOA - OLM04.2	Sample Specific Notes:
Post-Carbon 3	6/30	1330	Grab	W	19	N					X	X	X	X	X	X	X	X	X	X	X	X	
Post-Carbon 2		1335	Grab	W	3	N							X										
Post-Carbon 1		1340	Grab	W	3	N							X										
Pre-Carbon		1345	Grab	W	9	N	X	X	X		X	X											
Inside / Outside Sump		1350	Grab	W	3	N							X										
																							
480-102466 Chain of Custody																							
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other _____																							
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>											Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months												
Special Instructions/QC Requirements & Comments:																							
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	
[Signature]		GG5		6/30/1420		[Signature]		TABut.		6/30/16 1420													
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		Received by:		Company:		Date/Time:	

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7/12/2016

3.0 #1

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-102466-1

Login Number: 102466

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.	True	Yes: Samples checked, no residual chlorine detected

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-104197-1

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:

8/16/2016 9:15:33 AM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

LINKS

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results through

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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
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- 10
- 11

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



Orlette Johnson
Senior Project Manager
8/16/2016 9:15:33 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-104197-1

Qualifiers

GC VOA

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

Metals

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

General Chemistry

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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-104197-1

Job ID: 480-104197-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-104197-1

Receipt

The samples were received on 8/5/2016 12:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7° C.

GC/MS VOA

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 (480-104197-4). 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 laboratory control sample (LCS) recovered outside control limits for the following analytes: n-Propylbenzene. These analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-104197-3), Pre-Carbon (480-104197-4) and Outside Sump (480-104197-5). 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 (480-104197-1). Reanalysis was performed, and the result(s) confirmed.

Method(s) 9040B, 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 (480-104197-1).

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: 480-104197-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-104197-1

Date Collected: 08/05/16 11:00

Matrix: Water

Date Received: 08/05/16 12:45

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			08/11/16 00:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/11/16 00:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/11/16 00:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/11/16 00:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/11/16 00:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/11/16 00:30	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			08/11/16 00:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/11/16 00:30	1
2-Hexanone	ND		5.0	1.2	ug/L			08/11/16 00:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/11/16 00:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/11/16 00:30	1
Acetone	ND		10	3.0	ug/L			08/11/16 00:30	1
Benzene	ND		1.0	0.41	ug/L			08/11/16 00:30	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/11/16 00:30	1
Bromoform	ND		1.0	0.26	ug/L			08/11/16 00:30	1
Bromomethane	ND		1.0	0.69	ug/L			08/11/16 00:30	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/11/16 00:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/11/16 00:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/11/16 00:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/11/16 00:30	1
Chloroethane	ND		1.0	0.32	ug/L			08/11/16 00:30	1
Chloroform	ND		1.0	0.34	ug/L			08/11/16 00:30	1
Chloromethane	ND		1.0	0.35	ug/L			08/11/16 00:30	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/11/16 00:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/11/16 00:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/11/16 00:30	1
Styrene	ND		1.0	0.73	ug/L			08/11/16 00:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/11/16 00:30	1
Toluene	ND		1.0	0.51	ug/L			08/11/16 00:30	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/11/16 00:30	1
Trichloroethene	ND		1.0	0.46	ug/L			08/11/16 00:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/11/16 00:30	1
Vinyl acetate	ND		5.0	0.85	ug/L			08/11/16 00:30	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/11/16 00:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		08/11/16 00:30	1
Toluene-d8 (Surr)	95		80 - 120		08/11/16 00:30	1
4-Bromofluorobenzene (Surr)	111		73 - 120		08/11/16 00:30	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			08/09/16 14:05	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/09/16 14:05	1
Benzene	ND		0.20	0.023	ug/L			08/09/16 14:05	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/09/16 14:05	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/09/16 14:05	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/09/16 14:05	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/09/16 14:05	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/09/16 14:05	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-104197-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-104197-1

Date Collected: 08/05/16 11:00

Matrix: Water

Date Received: 08/05/16 12:45

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	-		08/09/16 14:05	1
o-Xylene	ND		0.20	0.027	ug/L	-		08/09/16 14:05	1
p-Cymene	ND		0.20	0.030	ug/L	-		08/09/16 14:05	1
sec-Butylbenzene	ND		0.20	0.020	ug/L	-		08/09/16 14:05	1
Toluene	ND		0.20	0.036	ug/L	-		08/09/16 14:05	1
Xylenes, Total	ND		0.60	0.054	ug/L	-		08/09/16 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129		08/09/16 14:05	1
4-Bromofluorobenzene	105		64 - 128		08/09/16 14:05	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	677		50.0	19.3	ug/L	-	08/09/16 08:15	08/09/16 17:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	2.7		0.10	0.050	mg/L	-	08/09/16 17:52	08/10/16 14:32	10

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.4	HF	0.1	0.1	SU	-		08/10/16 15:30	1

Client Sample Results

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

TestAmerica Job ID: 480-104197-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-104197-2

Date Collected: 08/05/16 11:05

Matrix: Water

Date Received: 08/05/16 12:45

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			08/09/16 14:37	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/09/16 14:37	1
Benzene	5.2		0.20	0.023	ug/L			08/09/16 14:37	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/09/16 14:37	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/09/16 14:37	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/09/16 14:37	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/09/16 14:37	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/09/16 14:37	1
n-Propylbenzene	ND *		0.20	0.13	ug/L			08/09/16 14:37	1
o-Xylene	ND		0.20	0.027	ug/L			08/09/16 14:37	1
p-Cymene	ND		0.20	0.030	ug/L			08/09/16 14:37	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/09/16 14:37	1
Toluene	ND		0.20	0.036	ug/L			08/09/16 14:37	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/09/16 14:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108		63 - 129		08/09/16 14:37	1
4-Bromofluorobenzene	106		64 - 128		08/09/16 14:37	1

Client Sample Results

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

TestAmerica Job ID: 480-104197-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-104197-3

Date Collected: 08/05/16 11:10

Matrix: Water

Date Received: 08/05/16 12:45

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		5.0	0.87	ug/L			08/09/16 15:09	25
1,3,5-Trimethylbenzene	ND		5.0	3.8	ug/L			08/09/16 15:09	25
Benzene	820		5.0	0.58	ug/L			08/09/16 15:09	25
Ethylbenzene	4.4	J	5.0	0.72	ug/L			08/09/16 15:09	25
Isopropylbenzene	ND		5.0	0.68	ug/L			08/09/16 15:09	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			08/09/16 15:09	25
m,p-Xylene	ND		10	1.4	ug/L			08/09/16 15:09	25
n-Butylbenzene	ND		5.0	0.77	ug/L			08/09/16 15:09	25
n-Propylbenzene	ND	*	5.0	3.3	ug/L			08/09/16 15:09	25
o-Xylene	1.1	J	5.0	0.68	ug/L			08/09/16 15:09	25
p-Cymene	ND		5.0	0.74	ug/L			08/09/16 15:09	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			08/09/16 15:09	25
Toluene	19		5.0	0.89	ug/L			08/09/16 15:09	25
Xylenes, Total	ND		15	1.4	ug/L			08/09/16 15:09	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 129		08/09/16 15:09	25
4-Bromofluorobenzene	103		64 - 128		08/09/16 15:09	25

Client Sample Results

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

TestAmerica Job ID: 480-104197-1

Client Sample ID: Pre-Carbon

Date Collected: 08/05/16 11:15

Date Received: 08/05/16 12:45

Lab Sample ID: 480-104197-4

Matrix: Water

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			08/09/16 16:14	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			08/09/16 16:14	100
Benzene	4600		20	2.3	ug/L			08/09/16 16:14	100
Ethylbenzene	180		20	2.9	ug/L			08/09/16 16:14	100
Isopropylbenzene	ND		20	2.7	ug/L			08/09/16 16:14	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			08/09/16 16:14	100
m,p-Xylene	39	J	40	5.4	ug/L			08/09/16 16:14	100
n-Butylbenzene	ND		20	3.1	ug/L			08/09/16 16:14	100
n-Propylbenzene	ND	*	20	13	ug/L			08/09/16 16:14	100
o-Xylene	34		20	2.7	ug/L			08/09/16 16:14	100
p-Cymene	ND		20	3.0	ug/L			08/09/16 16:14	100
sec-Butylbenzene	ND		20	2.0	ug/L			08/09/16 16:14	100
Toluene	460		20	3.6	ug/L			08/09/16 16:14	100
Xylenes, Total	73		60	5.4	ug/L			08/09/16 16:14	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	112		63 - 129		08/09/16 16:14	100
4-Bromofluorobenzene	110		64 - 128		08/09/16 16:14	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	135000	B	500	100	ug/L		08/09/16 08:15	08/09/16 17:48	1
Iron	8560		50.0	19.3	ug/L		08/09/16 08:15	08/09/16 17:48	1
Magnesium	48100		200	43.4	ug/L		08/09/16 08:15	08/09/16 17:48	1
Potassium	3700		500	100	ug/L		08/09/16 08:15	08/09/16 17:48	1
Sodium	36500		1000	324	ug/L		08/09/16 08:15	08/09/16 17:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	193		10.0	5.6	mg/L			08/08/16 14:23	20
Sulfate	84.7		40.0	7.0	mg/L			08/08/16 14:23	20
Alkalinity, Total	298		40.0	16.0	mg/L			08/09/16 11:38	4

Client Sample Results

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

TestAmerica Job ID: 480-104197-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-104197-5

Date Collected: 08/05/16 11:30

Matrix: Water

Date Received: 08/05/16 12:45

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			08/09/16 17:19	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			08/09/16 17:19	500
Benzene	7400		100	12	ug/L			08/09/16 17:19	500
Ethylbenzene	520		100	14	ug/L			08/09/16 17:19	500
Isopropylbenzene	ND		100	14	ug/L			08/09/16 17:19	500
Methyl tert-butyl ether	ND		200	22	ug/L			08/09/16 17:19	500
m,p-Xylene	100	J	200	27	ug/L			08/09/16 17:19	500
n-Butylbenzene	ND		100	15	ug/L			08/09/16 17:19	500
n-Propylbenzene	ND	*	100	65	ug/L			08/09/16 17:19	500
o-Xylene	93	J	100	14	ug/L			08/09/16 17:19	500
p-Cymene	ND		100	15	ug/L			08/09/16 17:19	500
sec-Butylbenzene	ND		100	10	ug/L			08/09/16 17:19	500
Toluene	1100		100	18	ug/L			08/09/16 17:19	500
Xylenes, Total	190	J	300	27	ug/L			08/09/16 17:19	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	109		63 - 129		08/09/16 17:19	500
4-Bromofluorobenzene	107		64 - 128		08/09/16 17:19	500

Lab Chronicle

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

TestAmerica Job ID: 480-104197-1

Client Sample ID: Post-Carbon 3

Date Collected: 08/05/16 11:00

Date Received: 08/05/16 12:45

Lab Sample ID: 480-104197-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	315399	08/11/16 00:30	GTG	TAL BUF
Total/NA	Analysis	8021B		1	315106	08/09/16 14:05	MAN	TAL BUF
Total/NA	Prep	200.7			315062	08/09/16 08:15	RMZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	315244	08/09/16 17:45	LMH	TAL BUF
Total/NA	Prep	Distill/CN			315222	08/09/16 17:52	DJS	TAL BUF
Total/NA	Analysis	335.4		10	315388	08/10/16 14:32	KRT	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	315476	08/10/16 15:30	EKB	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 08/05/16 11:05

Date Received: 08/05/16 12:45

Lab Sample ID: 480-104197-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	315106	08/09/16 14:37	MAN	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 08/05/16 11:10

Date Received: 08/05/16 12:45

Lab Sample ID: 480-104197-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		25	315106	08/09/16 15:09	MAN	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 08/05/16 11:15

Date Received: 08/05/16 12:45

Lab Sample ID: 480-104197-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	315106	08/09/16 16:14	MAN	TAL BUF
Total/NA	Prep	200.7			315062	08/09/16 08:15	RMZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	315244	08/09/16 17:48	LMH	TAL BUF
Total/NA	Analysis	300.0		20	314916	08/08/16 14:23	CAV	TAL BUF
Total/NA	Analysis	310.2		4	315172	08/09/16 11:38	CEA	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 08/05/16 11:30

Date Received: 08/05/16 12:45

Lab Sample ID: 480-104197-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	315106	08/09/16 17:19	MAN	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: 480-104197-1

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

Method Summary

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

TestAmerica Job ID: 480-104197-1

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: 480-104197-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-104197-1	Post-Carbon 3	Water	08/05/16 11:00	08/05/16 12:45
480-104197-2	Post-Carbon 2	Water	08/05/16 11:05	08/05/16 12:45
480-104197-3	Post-Carbon 1	Water	08/05/16 11:10	08/05/16 12:45
480-104197-4	Pre-Carbon	Water	08/05/16 11:15	08/05/16 12:45
480-104197-5	Outside Sump	Water	08/05/16 11:30	08/05/16 12:45

10 Hazelwood Drive

Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

480-104197 COC

TestAmerica Laboratories, Inc.

[illegible]

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

Page 16 of 17

8/16/2016

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-104197-1

Login Number: 104197

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: 480-105111-1

Client Project/Site: Gastown WWTP #915171

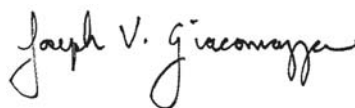
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

9/7/2016 5:09:49 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

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orlette.johnson@testamericainc.com

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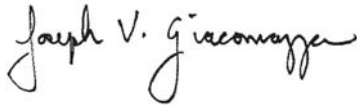
www.testamericainc.com

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
9/7/2016 5:09:49 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-105111-1

Qualifiers

GC/MS VOA

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

GC VOA

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

General Chemistry

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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-105111-1

Job ID: 480-105111-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-105111-1

Receipt

The samples were received on 8/26/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-317936 recovered outside control limits for the following analytes: acetone. These analytes were biased high in the LCS and were not detected above the reporting limit in the associated samples; therefore, the data has been reported for the following affected samples Post-Carbon 3 (480-105111-1) .

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-317936 recovered above the upper control limit for Acetone, Carbon tetrachloride and 2-Butanone (MEK). The samples associated with this CCV were non-detect above the reporting limit for the affected analytes; therefore, the data has been reported. The following sample is impacted: Post-Carbon 3 (480-105111-1).

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 nature of the sample matrix: Pre-Carbon (480-105111-4). 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 (480-105111-3), Pre-Carbon (480-105111-4) and Outside Sump (480-105111-5). 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 (480-105111-1).

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: 480-105111-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-105111-1

Date Collected: 08/26/16 08:45

Matrix: Water

Date Received: 08/26/16 09:40

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			08/27/16 05:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/27/16 05:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/27/16 05:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/27/16 05:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/27/16 05:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/27/16 05:10	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			08/27/16 05:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/27/16 05:10	1
2-Hexanone	ND		5.0	1.2	ug/L			08/27/16 05:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/27/16 05:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/27/16 05:10	1
Acetone	ND	*	10	3.0	ug/L			08/27/16 05:10	1
Benzene	ND		1.0	0.41	ug/L			08/27/16 05:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/27/16 05:10	1
Bromoform	ND		1.0	0.26	ug/L			08/27/16 05:10	1
Bromomethane	ND		1.0	0.69	ug/L			08/27/16 05:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/27/16 05:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/27/16 05:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/27/16 05:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/27/16 05:10	1
Chloroethane	ND		1.0	0.32	ug/L			08/27/16 05:10	1
Chloroform	ND		1.0	0.34	ug/L			08/27/16 05:10	1
Chloromethane	ND		1.0	0.35	ug/L			08/27/16 05:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/27/16 05:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/27/16 05:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/27/16 05:10	1
Styrene	ND		1.0	0.73	ug/L			08/27/16 05:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/27/16 05:10	1
Toluene	ND		1.0	0.51	ug/L			08/27/16 05:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/27/16 05:10	1
Trichloroethene	ND		1.0	0.46	ug/L			08/27/16 05:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/27/16 05:10	1
Vinyl acetate	ND		5.0	0.85	ug/L			08/27/16 05:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/27/16 05:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		77 - 120		08/27/16 05:10	1
Toluene-d8 (Surr)	89		80 - 120		08/27/16 05:10	1
4-Bromofluorobenzene (Surr)	104		73 - 120		08/27/16 05:10	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			08/31/16 16:16	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/31/16 16:16	1
Benzene	ND		0.20	0.023	ug/L			08/31/16 16:16	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/31/16 16:16	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/31/16 16:16	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/31/16 16:16	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/31/16 16:16	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/31/16 16:16	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-105111-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-105111-1

Date Collected: 08/26/16 08:45

Matrix: Water

Date Received: 08/26/16 09:40

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			08/31/16 16:16	1
o-Xylene	ND		0.20	0.027	ug/L			08/31/16 16:16	1
p-Cymene	ND		0.20	0.030	ug/L			08/31/16 16:16	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/31/16 16:16	1
Toluene	ND		0.20	0.036	ug/L			08/31/16 16:16	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/31/16 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	115		63 - 129		08/31/16 16:16	1
4-Bromofluorobenzene	115		64 - 128		08/31/16 16:16	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	453		50.0	19.3	ug/L		08/30/16 09:18	08/30/16 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1		0.10	0.050	mg/L		08/29/16 06:21	08/29/16 13:31	10

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3	HF	0.1	0.1	SU			08/30/16 10:43	1

Client Sample Results

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

TestAmerica Job ID: 480-105111-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-105111-2

Date Collected: 08/26/16 08:50

Matrix: Water

Date Received: 08/26/16 09:40

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			08/31/16 16:48	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/31/16 16:48	1
Benzene	19		0.20	0.023	ug/L			08/31/16 16:48	1
Ethylbenzene	0.72		0.20	0.029	ug/L			08/31/16 16:48	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/31/16 16:48	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/31/16 16:48	1
m,p-Xylene	0.30	J	0.40	0.054	ug/L			08/31/16 16:48	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/31/16 16:48	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/31/16 16:48	1
o-Xylene	0.24		0.20	0.027	ug/L			08/31/16 16:48	1
p-Cymene	ND		0.20	0.030	ug/L			08/31/16 16:48	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/31/16 16:48	1
Toluene	1.6		0.20	0.036	ug/L			08/31/16 16:48	1
Xylenes, Total	0.54	J	0.60	0.054	ug/L			08/31/16 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	125		63 - 129		08/31/16 16:48	1
4-Bromofluorobenzene	123		64 - 128		08/31/16 16:48	1

Client Sample Results

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

TestAmerica Job ID: 480-105111-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-105111-3

Date Collected: 08/26/16 08:55

Matrix: Water

Date Received: 08/26/16 09:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	11		10	1.7	ug/L			08/31/16 18:55	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			08/31/16 18:55	50
Benzene	2700		10	1.2	ug/L			08/31/16 18:55	50
Ethylbenzene	170		10	1.4	ug/L			08/31/16 18:55	50
Isopropylbenzene	ND		10	1.4	ug/L			08/31/16 18:55	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			08/31/16 18:55	50
m,p-Xylene	79		20	2.7	ug/L			08/31/16 18:55	50
n-Butylbenzene	ND		10	1.5	ug/L			08/31/16 18:55	50
n-Propylbenzene	ND		10	6.5	ug/L			08/31/16 18:55	50
o-Xylene	70		10	1.4	ug/L			08/31/16 18:55	50
p-Cymene	ND		10	1.5	ug/L			08/31/16 18:55	50
sec-Butylbenzene	ND		10	1.0	ug/L			08/31/16 18:55	50
Toluene	390		10	1.8	ug/L			08/31/16 18:55	50
Xylenes, Total	150		30	2.7	ug/L			08/31/16 18:55	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	123		63 - 129		08/31/16 18:55	50
4-Bromofluorobenzene	115		64 - 128		08/31/16 18:55	50

Client Sample Results

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

TestAmerica Job ID: 480-105111-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-105111-4

Date Collected: 08/26/16 09:00

Matrix: Water

Date Received: 08/26/16 09:40

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			08/31/16 18:24	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			08/31/16 18:24	100
Benzene	3500		20	2.3	ug/L			08/31/16 18:24	100
Ethylbenzene	260		20	2.9	ug/L			08/31/16 18:24	100
Isopropylbenzene	ND		20	2.7	ug/L			08/31/16 18:24	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			08/31/16 18:24	100
m,p-Xylene	130		40	5.4	ug/L			08/31/16 18:24	100
n-Butylbenzene	ND		20	3.1	ug/L			08/31/16 18:24	100
n-Propylbenzene	ND		20	13	ug/L			08/31/16 18:24	100
o-Xylene	110		20	2.7	ug/L			08/31/16 18:24	100
p-Cymene	ND		20	3.0	ug/L			08/31/16 18:24	100
sec-Butylbenzene	ND		20	2.0	ug/L			08/31/16 18:24	100
Toluene	570		20	3.6	ug/L			08/31/16 18:24	100
Xylenes, Total	240		60	5.4	ug/L			08/31/16 18:24	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	119		63 - 129		08/31/16 18:24	100
4-Bromofluorobenzene	113		64 - 128		08/31/16 18:24	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	69400		500	100	ug/L		08/30/16 09:18	08/30/16 17:00	1
Iron	2870		50.0	19.3	ug/L		08/30/16 09:18	08/30/16 17:00	1
Magnesium	26300		200	43.4	ug/L		08/30/16 09:18	08/30/16 17:00	1
Potassium	3090		500	100	ug/L		08/30/16 09:18	08/30/16 17:00	1
Sodium	25200		1000	324	ug/L		08/30/16 09:18	08/30/16 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.8		10.0	5.6	mg/L			08/31/16 14:04	20
Sulfate	74.4		40.0	7.0	mg/L			08/31/16 14:04	20
Alkalinity, Total	200		50.0	20.0	mg/L			08/27/16 12:11	5

Client Sample Results

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

TestAmerica Job ID: 480-105111-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-105111-5

Date Collected: 08/26/16 09:15

Matrix: Water

Date Received: 08/26/16 09:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	36	J	100	17	ug/L			08/31/16 17:20	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			08/31/16 17:20	500
Benzene	3600		100	12	ug/L			08/31/16 17:20	500
Ethylbenzene	400		100	14	ug/L			08/31/16 17:20	500
Isopropylbenzene	ND		100	14	ug/L			08/31/16 17:20	500
Methyl tert-butyl ether	ND		200	22	ug/L			08/31/16 17:20	500
m,p-Xylene	210		200	27	ug/L			08/31/16 17:20	500
n-Butylbenzene	ND		100	15	ug/L			08/31/16 17:20	500
n-Propylbenzene	ND		100	65	ug/L			08/31/16 17:20	500
o-Xylene	230		100	14	ug/L			08/31/16 17:20	500
p-Cymene	ND		100	15	ug/L			08/31/16 17:20	500
sec-Butylbenzene	ND		100	10	ug/L			08/31/16 17:20	500
Toluene	690		100	18	ug/L			08/31/16 17:20	500
Xylenes, Total	440		300	27	ug/L			08/31/16 17:20	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	114		63 - 129		08/31/16 17:20	500
4-Bromofluorobenzene	113		64 - 128		08/31/16 17:20	500

Lab Chronicle

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

TestAmerica Job ID: 480-105111-1

Client Sample ID: Post-Carbon 3

Date Collected: 08/26/16 08:45

Date Received: 08/26/16 09:40

Lab Sample ID: 480-105111-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	317936	08/27/16 05:10	GTG	TAL BUF
Total/NA	Analysis	8021B		1	318505	08/31/16 16:16	MRB	TAL BUF
Total/NA	Prep	200.7			318224	08/30/16 09:18	RMZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	318458	08/30/16 16:56	AMH	TAL BUF
Total/NA	Prep	Distill/CN			318039	08/29/16 06:21	LAW	TAL BUF
Total/NA	Analysis	335.4		10	318161	08/29/16 13:31	KMF	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	318307	08/30/16 10:43	KMF	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 08/26/16 08:50

Date Received: 08/26/16 09:40

Lab Sample ID: 480-105111-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	318505	08/31/16 16:48	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 08/26/16 08:55

Date Received: 08/26/16 09:40

Lab Sample ID: 480-105111-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	318505	08/31/16 18:55	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 08/26/16 09:00

Date Received: 08/26/16 09:40

Lab Sample ID: 480-105111-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	318505	08/31/16 18:24	MRB	TAL BUF
Total/NA	Prep	200.7			318224	08/30/16 09:18	RMZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	318458	08/30/16 17:00	AMH	TAL BUF
Total/NA	Analysis	300.0		20	318409	08/31/16 14:04	CAV	TAL BUF
Total/NA	Analysis	310.2		5	318010	08/27/16 12:11	LED	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 08/26/16 09:15

Date Received: 08/26/16 09:40

Lab Sample ID: 480-105111-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	318505	08/31/16 17:20	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: 480-105111-1

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

Method Summary

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

TestAmerica Job ID: 480-105111-1

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: 480-105111-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-105111-1	Post-Carbon 3	Water	08/26/16 08:45	08/26/16 09:40
480-105111-2	Post-Carbon 2	Water	08/26/16 08:50	08/26/16 09:40
480-105111-3	Post-Carbon 1	Water	08/26/16 08:55	08/26/16 09:40
480-105111-4	Pre-Carbon	Water	08/26/16 09:00	08/26/16 09:40
480-105111-5	Outside Sump	Water	08/26/16 09:15	08/26/16 09:40

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: 480-105111-1

Login Number: 105111

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: 480-106738-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

10/7/2016 1:10:18 PM

Joe Giacomazza, Project Management Assistant II

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Designee for

Orlette Johnson, Senior Project Manager

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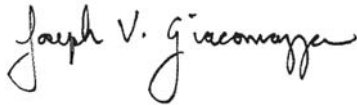
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions 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
10/7/2016 1:10:18 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-106738-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

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

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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: 480-106738-1

Job ID: 480-106738-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-106738-1

Receipt

The samples were received on 9/29/2016 3:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-106738-4), (480-106738-E-4 MS) and (480-106738-E-4 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-323323 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported. The following sample is impacted: Pre-Carbon (480-106738-4).

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 (480-106738-4). 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 (480-106738-3), Pre-Carbon (480-106738-4) and Outside Sump (480-106738-5). 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 2540D: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: Post-Carbon 3 (480-106738-1). The reporting limits (RLs) have been adjusted proportionately.

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 (480-106738-1).

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

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 480-323151.

Case Narrative

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

TestAmerica Job ID: 480-106738-1

Job ID: 480-106738-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

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Client Sample Results

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-106738-1

Date Collected: 09/29/16 14:20

Matrix: Water

Date Received: 09/29/16 15:05

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			09/30/16 16:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/30/16 16:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/30/16 16:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/30/16 16:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/30/16 16:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/30/16 16:29	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			09/30/16 16:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/30/16 16:29	1
2-Hexanone	ND		5.0	1.2	ug/L			09/30/16 16:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/30/16 16:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/30/16 16:29	1
Acetone	ND		10	3.0	ug/L			09/30/16 16:29	1
Benzene	ND		1.0	0.41	ug/L			09/30/16 16:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/30/16 16:29	1
Bromoform	ND		1.0	0.26	ug/L			09/30/16 16:29	1
Bromomethane	ND		1.0	0.69	ug/L			09/30/16 16:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/30/16 16:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/30/16 16:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/30/16 16:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/30/16 16:29	1
Chloroethane	ND		1.0	0.32	ug/L			09/30/16 16:29	1
Chloroform	ND		1.0	0.34	ug/L			09/30/16 16:29	1
Chloromethane	ND		1.0	0.35	ug/L			09/30/16 16:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/30/16 16:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/30/16 16:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/30/16 16:29	1
Styrene	ND		1.0	0.73	ug/L			09/30/16 16:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/30/16 16:29	1
Toluene	ND		1.0	0.51	ug/L			09/30/16 16:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/30/16 16:29	1
Trichloroethene	ND		1.0	0.46	ug/L			09/30/16 16:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/30/16 16:29	1
Vinyl acetate	ND		5.0	0.85	ug/L			09/30/16 16:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/30/16 16:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		77 - 120		09/30/16 16:29	1
Toluene-d8 (Surr)	95		80 - 120		09/30/16 16:29	1
4-Bromofluorobenzene (Surr)	98		73 - 120		09/30/16 16:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		09/30/16 07:01	10/02/16 04:44	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/30/16 07:01	10/02/16 04:44	1
Acenaphthene	ND		5.0	0.41	ug/L		09/30/16 07:01	10/02/16 04:44	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/30/16 07:01	10/02/16 04:44	1
Anthracene	ND		5.0	0.28	ug/L		09/30/16 07:01	10/02/16 04:44	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/30/16 07:01	10/02/16 04:44	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/30/16 07:01	10/02/16 04:44	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/30/16 07:01	10/02/16 04:44	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-106738-1

Date Collected: 09/29/16 14:20

Matrix: Water

Date Received: 09/29/16 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/30/16 07:01	10/02/16 04:44	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/30/16 07:01	10/02/16 04:44	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/30/16 07:01	10/02/16 04:44	1
Carbazole	ND		5.0	0.30	ug/L		09/30/16 07:01	10/02/16 04:44	1
Chrysene	ND		5.0	0.33	ug/L		09/30/16 07:01	10/02/16 04:44	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/30/16 07:01	10/02/16 04:44	1
Dibenzofuran	ND		10	0.51	ug/L		09/30/16 07:01	10/02/16 04:44	1
Fluoranthene	ND		5.0	0.40	ug/L		09/30/16 07:01	10/02/16 04:44	1
Fluorene	ND		5.0	0.36	ug/L		09/30/16 07:01	10/02/16 04:44	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/30/16 07:01	10/02/16 04:44	1
Naphthalene	ND		5.0	0.76	ug/L		09/30/16 07:01	10/02/16 04:44	1
Pentachlorophenol	ND		10	2.2	ug/L		09/30/16 07:01	10/02/16 04:44	1
Phenanthrene	ND		5.0	0.44	ug/L		09/30/16 07:01	10/02/16 04:44	1
Phenol	ND		5.0	0.39	ug/L		09/30/16 07:01	10/02/16 04:44	1
Pyrene	ND		5.0	0.34	ug/L		09/30/16 07:01	10/02/16 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	85		46 - 120	09/30/16 07:01	10/02/16 04:44	1
2-Fluorobiphenyl	89		48 - 120	09/30/16 07:01	10/02/16 04:44	1
p-Terphenyl-d14	97		67 - 150	09/30/16 07:01	10/02/16 04:44	1
Phenol-d5	50		16 - 120	09/30/16 07:01	10/02/16 04:44	1
2-Fluorophenol	68		20 - 120	09/30/16 07:01	10/02/16 04:44	1
2,4,6-Tribromophenol	100		52 - 132	09/30/16 07:01	10/02/16 04:44	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			09/30/16 16:14	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/30/16 16:14	1
Benzene	ND		0.20	0.023	ug/L			09/30/16 16:14	1
Ethylbenzene	ND		0.20	0.029	ug/L			09/30/16 16:14	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/30/16 16:14	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/30/16 16:14	1
m,p-Xylene	ND		0.40	0.054	ug/L			09/30/16 16:14	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/30/16 16:14	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/30/16 16:14	1
o-Xylene	ND		0.20	0.027	ug/L			09/30/16 16:14	1
p-Cymene	ND		0.20	0.030	ug/L			09/30/16 16:14	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/30/16 16:14	1
Toluene	ND		0.20	0.036	ug/L			09/30/16 16:14	1
Xylenes, Total	ND		0.60	0.054	ug/L			09/30/16 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 129		09/30/16 16:14	1
4-Bromofluorobenzene	94		64 - 128		09/30/16 16:14	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.049	0.0064	ug/L		09/30/16 06:52	10/04/16 13:19	1
alpha-BHC	ND		0.049	0.0064	ug/L		09/30/16 06:52	10/04/16 13:19	1
beta-BHC	ND		0.049	0.024	ug/L		09/30/16 06:52	10/04/16 13:19	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-106738-1

Date Collected: 09/29/16 14:20

Matrix: Water

Date Received: 09/29/16 15:05

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.049	0.0097	ug/L		09/30/16 06:52	10/04/16 13:19	1
gamma-BHC (Lindane)	ND		0.049	0.0058	ug/L		09/30/16 06:52	10/04/16 13:19	1
Chlordane (technical)	ND		0.49	0.28	ug/L		09/30/16 06:52	10/04/16 13:19	1
4,4'-DDD	ND		0.049	0.0090	ug/L		09/30/16 06:52	10/04/16 13:19	1
4,4'-DDE	ND		0.049	0.011	ug/L		09/30/16 06:52	10/04/16 13:19	1
4,4'-DDT	ND		0.049	0.011	ug/L		09/30/16 06:52	10/04/16 13:19	1
Dieldrin	ND		0.049	0.0096	ug/L		09/30/16 06:52	10/04/16 13:19	1
Endosulfan I	ND		0.049	0.011	ug/L		09/30/16 06:52	10/04/16 13:19	1
Endosulfan II	ND		0.049	0.012	ug/L		09/30/16 06:52	10/04/16 13:19	1
Endosulfan sulfate	ND		0.049	0.015	ug/L		09/30/16 06:52	10/04/16 13:19	1
Endrin	ND		0.049	0.013	ug/L		09/30/16 06:52	10/04/16 13:19	1
Endrin aldehyde	ND		0.049	0.016	ug/L		09/30/16 06:52	10/04/16 13:19	1
Heptachlor	ND		0.049	0.0083	ug/L		09/30/16 06:52	10/04/16 13:19	1
Heptachlor epoxide	ND		0.049	0.0052	ug/L		09/30/16 06:52	10/04/16 13:19	1
Toxaphene	ND		0.49	0.12	ug/L		09/30/16 06:52	10/04/16 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	58		23 - 120	09/30/16 06:52	10/04/16 13:19	1
Tetrachloro-m-xylene	71		44 - 120	09/30/16 06:52	10/04/16 13:19	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	153		50.0	19.3	ug/L		10/01/16 08:05	10/03/16 16:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.1	1.4	mg/L		09/30/16 19:10	09/30/16 21:01	1
Cyanide, Total	0.14		0.010	0.0050	mg/L		09/30/16 15:10	10/02/16 13:35	1
Phenolics, Total Recoverable	0.0061	J	0.010	0.0050	mg/L		10/04/16 00:20	10/04/16 08:31	1
Total Dissolved Solids	610	B	10.0	4.0	mg/L			09/30/16 13:36	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			09/30/16 17:15	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	161		8.5	8.5	mg/L			09/30/16 19:26	1
pH	7.4	HF	0.1	0.1	SU			10/03/16 12:05	1

Client Sample Results

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-106738-2

Date Collected: 09/29/16 14:25

Matrix: Water

Date Received: 09/29/16 15:05

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.22		0.20	0.035	ug/L			09/30/16 16:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/30/16 16:46	1
Benzene	36		0.20	0.023	ug/L			09/30/16 16:46	1
Ethylbenzene	3.1		0.20	0.029	ug/L			09/30/16 16:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/30/16 16:46	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/30/16 16:46	1
m,p-Xylene	1.8		0.40	0.054	ug/L			09/30/16 16:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/30/16 16:46	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/30/16 16:46	1
o-Xylene	1.2		0.20	0.027	ug/L			09/30/16 16:46	1
p-Cymene	ND		0.20	0.030	ug/L			09/30/16 16:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/30/16 16:46	1
Toluene	5.7		0.20	0.036	ug/L			09/30/16 16:46	1
Xylenes, Total	3.0		0.60	0.054	ug/L			09/30/16 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 129		09/30/16 16:46	1
4-Bromofluorobenzene	101		64 - 128		09/30/16 16:46	1

Client Sample Results

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-106738-3

Date Collected: 09/29/16 14:30

Matrix: Water

Date Received: 09/29/16 15:05

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.9	J	10	1.7	ug/L			09/30/16 18:23	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			09/30/16 18:23	50
Benzene	430		10	1.2	ug/L			09/30/16 18:23	50
Ethylbenzene	48		10	1.4	ug/L			09/30/16 18:23	50
Isopropylbenzene	ND		10	1.4	ug/L			09/30/16 18:23	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			09/30/16 18:23	50
m,p-Xylene	26		20	2.7	ug/L			09/30/16 18:23	50
n-Butylbenzene	ND		10	1.5	ug/L			09/30/16 18:23	50
n-Propylbenzene	ND		10	6.5	ug/L			09/30/16 18:23	50
o-Xylene	16		10	1.4	ug/L			09/30/16 18:23	50
p-Cymene	ND		10	1.5	ug/L			09/30/16 18:23	50
sec-Butylbenzene	ND		10	1.0	ug/L			09/30/16 18:23	50
Toluene	96		10	1.8	ug/L			09/30/16 18:23	50
Xylenes, Total	42		30	2.7	ug/L			09/30/16 18:23	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	98		63 - 129		09/30/16 18:23	50
<i>4-Bromofluorobenzene</i>	99		64 - 128		09/30/16 18:23	50

Client Sample Results

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-106738-4

Date Collected: 09/29/16 14:35

Matrix: Water

Date Received: 09/29/16 15:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			10/01/16 01:45	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			10/01/16 01:45	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			10/01/16 01:45	10
1,1-Dichloroethane	ND		10	3.8	ug/L			10/01/16 01:45	10
1,1-Dichloroethene	ND		10	2.9	ug/L			10/01/16 01:45	10
1,2-Dichloroethane	ND		10	2.1	ug/L			10/01/16 01:45	10
1,2-Dichloroethene, Total	ND		20	8.1	ug/L			10/01/16 01:45	10
1,2-Dichloropropane	ND		10	7.2	ug/L			10/01/16 01:45	10
2-Hexanone	ND		50	12	ug/L			10/01/16 01:45	10
2-Butanone (MEK)	ND		100	13	ug/L			10/01/16 01:45	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			10/01/16 01:45	10
Acetone	ND		100	30	ug/L			10/01/16 01:45	10
Benzene	470	F1	10	4.1	ug/L			10/01/16 01:45	10
Bromodichloromethane	5.1	J	10	3.9	ug/L			10/01/16 01:45	10
Bromoform	ND		10	2.6	ug/L			10/01/16 01:45	10
Bromomethane	ND		10	6.9	ug/L			10/01/16 01:45	10
Carbon disulfide	ND		10	1.9	ug/L			10/01/16 01:45	10
Carbon tetrachloride	ND		10	2.7	ug/L			10/01/16 01:45	10
Chlorobenzene	ND		10	7.5	ug/L			10/01/16 01:45	10
Dibromochloromethane	ND		10	3.2	ug/L			10/01/16 01:45	10
Chloroethane	ND		10	3.2	ug/L			10/01/16 01:45	10
Chloroform	25		10	3.4	ug/L			10/01/16 01:45	10
Chloromethane	ND		10	3.5	ug/L			10/01/16 01:45	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			10/01/16 01:45	10
Ethylbenzene	51		10	7.4	ug/L			10/01/16 01:45	10
Methylene Chloride	9.1	J	10	4.4	ug/L			10/01/16 01:45	10
Styrene	ND		10	7.3	ug/L			10/01/16 01:45	10
Tetrachloroethene	ND		10	3.6	ug/L			10/01/16 01:45	10
Toluene	100		10	5.1	ug/L			10/01/16 01:45	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			10/01/16 01:45	10
Trichloroethene	ND		10	4.6	ug/L			10/01/16 01:45	10
Vinyl chloride	ND		10	9.0	ug/L			10/01/16 01:45	10
Vinyl acetate	ND		50	8.5	ug/L			10/01/16 01:45	10
Xylenes, Total	47		20	6.6	ug/L			10/01/16 01:45	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		77 - 120		10/01/16 01:45	10
Toluene-d8 (Surr)	93		80 - 120		10/01/16 01:45	10
4-Bromofluorobenzene (Surr)	100		73 - 120		10/01/16 01:45	10

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			09/30/16 17:51	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			09/30/16 17:51	100
Benzene	420		20	2.3	ug/L			09/30/16 17:51	100
Ethylbenzene	48		20	2.9	ug/L			09/30/16 17:51	100
Isopropylbenzene	ND		20	2.7	ug/L			09/30/16 17:51	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			09/30/16 17:51	100
m,p-Xylene	25	J	40	5.4	ug/L			09/30/16 17:51	100
n-Butylbenzene	ND		20	3.1	ug/L			09/30/16 17:51	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-106738-4

Date Collected: 09/29/16 14:35

Matrix: Water

Date Received: 09/29/16 15:05

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			09/30/16 17:51	100
o-Xylene	18	J	20	2.7	ug/L			09/30/16 17:51	100
p-Cymene	ND		20	3.0	ug/L			09/30/16 17:51	100
sec-Butylbenzene	ND		20	2.0	ug/L			09/30/16 17:51	100
Toluene	94		20	3.6	ug/L			09/30/16 17:51	100
Xylenes, Total	43	J	60	5.4	ug/L			09/30/16 17:51	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129					09/30/16 17:51	100
4-Bromofluorobenzene	100		64 - 128					09/30/16 17:51	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	102000		500	100	ug/L		10/01/16 08:05	10/03/16 16:44	1
Iron	4220		50.0	19.3	ug/L		10/01/16 08:05	10/03/16 16:44	1
Magnesium	46200		200	43.4	ug/L		10/01/16 08:05	10/03/16 16:44	1
Potassium	4090		500	100	ug/L		10/01/16 08:05	10/03/16 16:44	1
Sodium	51300		1000	324	ug/L		10/01/16 08:05	10/03/16 16:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.1		10.0	5.6	mg/L			10/03/16 12:11	20
Sulfate	133		40.0	7.0	mg/L			10/03/16 12:11	20
Alkalinity, Total	301		50.0	20.0	mg/L			10/03/16 12:02	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-106738-5

Date Collected: 09/29/16 14:45

Matrix: Water

Date Received: 09/29/16 15:05

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	50	J	100	17	ug/L			09/30/16 17:18	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			09/30/16 17:18	500
Benzene	2100		100	12	ug/L			09/30/16 17:18	500
Ethylbenzene	130		100	14	ug/L			09/30/16 17:18	500
Isopropylbenzene	ND		100	14	ug/L			09/30/16 17:18	500
Methyl tert-butyl ether	ND		200	22	ug/L			09/30/16 17:18	500
m,p-Xylene	59	J	200	27	ug/L			09/30/16 17:18	500
n-Butylbenzene	ND		100	15	ug/L			09/30/16 17:18	500
n-Propylbenzene	ND		100	65	ug/L			09/30/16 17:18	500
o-Xylene	45	J	100	14	ug/L			09/30/16 17:18	500
p-Cymene	ND		100	15	ug/L			09/30/16 17:18	500
sec-Butylbenzene	ND		100	10	ug/L			09/30/16 17:18	500
Toluene	350		100	18	ug/L			09/30/16 17:18	500
Xylenes, Total	100	J	300	27	ug/L			09/30/16 17:18	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 129		09/30/16 17:18	500
4-Bromofluorobenzene	101		64 - 128		09/30/16 17:18	500

Lab Chronicle

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Post-Carbon 3

Date Collected: 09/29/16 14:20

Date Received: 09/29/16 15:05

Lab Sample ID: 480-106738-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	323181	09/30/16 16:29	RRS	TAL BUF
Total/NA	Prep	3510C			323155	09/30/16 07:01	CPH	TAL BUF
Total/NA	Analysis	8270D		1	323368	10/02/16 04:44	PJQ	TAL BUF
Total/NA	Analysis	8021B		1	323283	09/30/16 16:14	MRB	TAL BUF
Total/NA	Prep	3510C			323151	09/30/16 06:52	CPH	TAL BUF
Total/NA	Analysis	608		1	323634	10/04/16 13:19	MAN	TAL BUF
Total/NA	Prep	200.7			323379	10/01/16 08:05	BMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	323665	10/03/16 16:41	LMH	TAL BUF
Total/NA	Prep	1664A			323314	09/30/16 19:10	DJS	TAL BUF
Total/NA	Analysis	1664A		1	323337	09/30/16 21:01	DJS	TAL BUF
Total/NA	Prep	Distill/CN			323277	09/30/16 15:10	JCL	TAL BUF
Total/NA	Analysis	335.4		1	323416	10/02/16 13:35	MDL	TAL BUF
Total/NA	Prep	Distill/Phenol			323615	10/04/16 00:20	DCB	TAL BUF
Total/NA	Analysis	420.1		1	323681	10/04/16 08:31	KMB	TAL BUF
Total/NA	Analysis	SM 2540C		1	323262	09/30/16 13:36	KMB	TAL BUF
Total/NA	Analysis	SM 2540D		1	323321	09/30/16 19:26	CDC	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	323535	10/03/16 12:05	KMF	TAL BUF
Total/NA	Analysis	SM 5210B		1	323339	09/30/16 17:15	DJS	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 09/29/16 14:25

Date Received: 09/29/16 15:05

Lab Sample ID: 480-106738-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	323283	09/30/16 16:46	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 09/29/16 14:30

Date Received: 09/29/16 15:05

Lab Sample ID: 480-106738-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	323283	09/30/16 18:23	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 09/29/16 14:35

Date Received: 09/29/16 15:05

Lab Sample ID: 480-106738-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	323323	10/01/16 01:45	GTG	TAL BUF
Total/NA	Analysis	8021B		100	323283	09/30/16 17:51	MRB	TAL BUF
Total/NA	Prep	200.7			323379	10/01/16 08:05	BMB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	323665	10/03/16 16:44	LMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-106738-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-106738-4

Date Collected: 09/29/16 14:35

Matrix: Water

Date Received: 09/29/16 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	323437	10/03/16 12:11	CAV	TAL BUF
Total/NA	Analysis	310.2		5	323554	10/03/16 12:02	LED	TAL BUF

Client Sample ID: Outside Sump

Lab Sample ID: 480-106738-5

Date Collected: 09/29/16 14:45

Matrix: Water

Date Received: 09/29/16 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	323283	09/30/16 17:18	MRB	TAL BUF

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 480-106738-1

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

Method Summary

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

TestAmerica Job ID: 480-106738-1

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: 480-106738-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-106738-1	Post-Carbon 3	Water	09/29/16 14:20	09/29/16 15:05
480-106738-2	Post-Carbon 2	Water	09/29/16 14:25	09/29/16 15:05
480-106738-3	Post-Carbon 1	Water	09/29/16 14:30	09/29/16 15:05
480-106738-4	Pre-Carbon	Water	09/29/16 14:35	09/29/16 15:05
480-106738-5	Outside Sump	Water	09/29/16 14:45	09/29/16 15:05

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

#13.6

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-106738-1

Login Number: 106738

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: 480-107725-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

10/26/2016 3:33:53 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager

(484)685-0864

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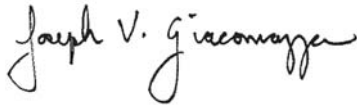
The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail 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
10/26/2016 3:33:53 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-107725-1

Qualifiers

GC VOA

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

General Chemistry

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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-107725-1

Job ID: 480-107725-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-107725-1

Receipt

The samples were received on 10/14/2016 1:25 PM; the samples 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.

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-107725-4). 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 (480-107725-3), Pre-Carbon (480-107725-4) and Outside Sump (480-107725-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-107725-1).

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: 480-107725-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-107725-1

Date Collected: 10/14/16 12:30

Matrix: Water

Date Received: 10/14/16 13:25

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			10/18/16 15:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/16 15:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/16 15:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/16 15:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/16 15:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/16 15:22	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			10/18/16 15:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/16 15:22	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/16 15:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/16 15:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/16 15:22	1
Acetone	ND		10	3.0	ug/L			10/18/16 15:22	1
Benzene	ND		1.0	0.41	ug/L			10/18/16 15:22	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/18/16 15:22	1
Bromoform	ND		1.0	0.26	ug/L			10/18/16 15:22	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/16 15:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/18/16 15:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/16 15:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/16 15:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/16 15:22	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/16 15:22	1
Chloroform	ND		1.0	0.34	ug/L			10/18/16 15:22	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/16 15:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/16 15:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/16 15:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/16 15:22	1
Styrene	ND		1.0	0.73	ug/L			10/18/16 15:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/16 15:22	1
Toluene	ND		1.0	0.51	ug/L			10/18/16 15:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/18/16 15:22	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/16 15:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/16 15:22	1
Vinyl acetate	ND		5.0	0.85	ug/L			10/18/16 15:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/16 15:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		10/18/16 15:22	1
Toluene-d8 (Surr)	98		80 - 120		10/18/16 15:22	1
4-Bromofluorobenzene (Surr)	92		73 - 120		10/18/16 15:22	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			10/20/16 18:34	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/20/16 18:34	1
Benzene	ND		0.20	0.023	ug/L			10/20/16 18:34	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/20/16 18:34	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/20/16 18:34	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/20/16 18:34	1
m,p-Xylene	ND		0.40	0.054	ug/L			10/20/16 18:34	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/20/16 18:34	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-107725-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-107725-1

Date Collected: 10/14/16 12:30

Matrix: Water

Date Received: 10/14/16 13:25

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			10/20/16 18:34	1
o-Xylene	ND		0.20	0.027	ug/L			10/20/16 18:34	1
p-Cymene	ND		0.20	0.030	ug/L			10/20/16 18:34	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/20/16 18:34	1
Toluene	ND		0.20	0.036	ug/L			10/20/16 18:34	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/20/16 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 129		10/20/16 18:34	1
4-Bromofluorobenzene	97		64 - 128		10/20/16 18:34	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	175		50.0	19.3	ug/L		10/18/16 12:55	10/19/16 23:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.21	B	0.010	0.0050	mg/L		10/18/16 05:10	10/19/16 13:25	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.2	HF	0.1	0.1	SU			10/17/16 14:09	1

Client Sample Results

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

TestAmerica Job ID: 480-107725-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-107725-2

Date Collected: 10/14/16 12:35

Matrix: Water

Date Received: 10/14/16 13:25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.14	J	0.20	0.035	ug/L			10/20/16 19:06	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/20/16 19:06	1
Benzene	13		0.20	0.023	ug/L			10/20/16 19:06	1
Ethylbenzene	0.83		0.20	0.029	ug/L			10/20/16 19:06	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/20/16 19:06	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/20/16 19:06	1
m,p-Xylene	0.57		0.40	0.054	ug/L			10/20/16 19:06	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/20/16 19:06	1
n-Propylbenzene	ND		0.20	0.13	ug/L			10/20/16 19:06	1
o-Xylene	0.34		0.20	0.027	ug/L			10/20/16 19:06	1
p-Cymene	ND		0.20	0.030	ug/L			10/20/16 19:06	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/20/16 19:06	1
Toluene	0.84		0.20	0.036	ug/L			10/20/16 19:06	1
Xylenes, Total	0.91		0.60	0.054	ug/L			10/20/16 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 129		10/20/16 19:06	1
4-Bromofluorobenzene	94		64 - 128		10/20/16 19:06	1

Client Sample Results

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

TestAmerica Job ID: 480-107725-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-107725-3

Date Collected: 10/14/16 12:40

Matrix: Water

Date Received: 10/14/16 13:25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.5		2.0	0.35	ug/L			10/22/16 18:51	10
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			10/22/16 18:51	10
Benzene	88		2.0	0.23	ug/L			10/22/16 18:51	10
Ethylbenzene	15		2.0	0.29	ug/L			10/22/16 18:51	10
Isopropylbenzene	ND		2.0	0.27	ug/L			10/22/16 18:51	10
Methyl tert-butyl ether	ND		4.0	0.44	ug/L			10/22/16 18:51	10
m,p-Xylene	10		4.0	0.54	ug/L			10/22/16 18:51	10
n-Butylbenzene	ND		2.0	0.31	ug/L			10/22/16 18:51	10
n-Propylbenzene	ND		2.0	1.3	ug/L			10/22/16 18:51	10
o-Xylene	5.2		2.0	0.27	ug/L			10/22/16 18:51	10
p-Cymene	ND		2.0	0.30	ug/L			10/22/16 18:51	10
sec-Butylbenzene	ND		2.0	0.20	ug/L			10/22/16 18:51	10
Toluene	15		2.0	0.36	ug/L			10/22/16 18:51	10
Xylenes, Total	15		6.0	0.54	ug/L			10/22/16 18:51	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 129		10/22/16 18:51	10
4-Bromofluorobenzene	106		64 - 128		10/22/16 18:51	10

Client Sample Results

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

TestAmerica Job ID: 480-107725-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-107725-4

Date Collected: 10/14/16 12:45

Matrix: Water

Date Received: 10/14/16 13:25

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1.4		1.0	0.17	ug/L			10/22/16 19:23	5
1,3,5-Trimethylbenzene	ND		1.0	0.75	ug/L			10/22/16 19:23	5
Benzene	35		1.0	0.12	ug/L			10/22/16 19:23	5
Ethylbenzene	11		1.0	0.14	ug/L			10/22/16 19:23	5
Isopropylbenzene	ND		1.0	0.14	ug/L			10/22/16 19:23	5
Methyl tert-butyl ether	ND		2.0	0.22	ug/L			10/22/16 19:23	5
m,p-Xylene	6.7		2.0	0.27	ug/L			10/22/16 19:23	5
n-Butylbenzene	ND		1.0	0.15	ug/L			10/22/16 19:23	5
n-Propylbenzene	ND		1.0	0.65	ug/L			10/22/16 19:23	5
o-Xylene	3.6		1.0	0.14	ug/L			10/22/16 19:23	5
p-Cymene	ND		1.0	0.15	ug/L			10/22/16 19:23	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			10/22/16 19:23	5
Toluene	9.7		1.0	0.18	ug/L			10/22/16 19:23	5
Xylenes, Total	10		3.0	0.27	ug/L			10/22/16 19:23	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	100		63 - 129		10/22/16 19:23	5
<i>4-Bromofluorobenzene</i>	103		64 - 128		10/22/16 19:23	5

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	83600		500	100	ug/L		10/18/16 12:55	10/19/16 23:35	1
Iron	2550		50.0	19.3	ug/L		10/18/16 12:55	10/19/16 23:35	1
Magnesium	46000		200	43.4	ug/L		10/18/16 12:55	10/19/16 23:35	1
Potassium	3510		500	100	ug/L		10/18/16 12:55	10/19/16 23:35	1
Sodium	35000		1000	324	ug/L		10/18/16 12:55	10/19/16 23:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.8		0.50	0.28	mg/L			10/18/16 16:50	1
Sulfate	106	B	10.0	1.7	mg/L			10/19/16 16:29	5
Alkalinity, Total	252		30.0	12.0	mg/L			10/19/16 11:22	3

Client Sample Results

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

TestAmerica Job ID: 480-107725-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-107725-5

Date Collected: 10/14/16 13:00

Matrix: Water

Date Received: 10/14/16 13:25

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			10/20/16 19:38	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			10/20/16 19:38	500
Benzene	260		100	12	ug/L			10/20/16 19:38	500
Ethylbenzene	69	J	100	14	ug/L			10/20/16 19:38	500
Isopropylbenzene	ND		100	14	ug/L			10/20/16 19:38	500
Methyl tert-butyl ether	ND		200	22	ug/L			10/20/16 19:38	500
m,p-Xylene	ND		200	27	ug/L			10/20/16 19:38	500
n-Butylbenzene	ND		100	15	ug/L			10/20/16 19:38	500
n-Propylbenzene	ND		100	65	ug/L			10/20/16 19:38	500
o-Xylene	17	J	100	14	ug/L			10/20/16 19:38	500
p-Cymene	ND		100	15	ug/L			10/20/16 19:38	500
sec-Butylbenzene	ND		100	10	ug/L			10/20/16 19:38	500
Toluene	82	J	100	18	ug/L			10/20/16 19:38	500
Xylenes, Total	ND		300	27	ug/L			10/20/16 19:38	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		63 - 129		10/20/16 19:38	500
4-Bromofluorobenzene	91		64 - 128		10/20/16 19:38	500

Lab Chronicle

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

TestAmerica Job ID: 480-107725-1

Client Sample ID: Post-Carbon 3

Date Collected: 10/14/16 12:30

Date Received: 10/14/16 13:25

Lab Sample ID: 480-107725-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	326165	10/18/16 15:22	SWO	TAL BUF
Total/NA	Analysis	8021B		1	326739	10/20/16 18:34	MRB	TAL BUF
Total/NA	Prep	200.7			326225	10/18/16 12:55	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	326672	10/19/16 23:32	AMH	TAL BUF
Total/NA	Prep	Distill/CN			326141	10/18/16 05:10	DJS	TAL BUF
Total/NA	Analysis	335.4		1	326529	10/19/16 13:25	KRT	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	326056	10/17/16 14:09	KMF	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 10/14/16 12:35

Date Received: 10/14/16 13:25

Lab Sample ID: 480-107725-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	326739	10/20/16 19:06	MRB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 10/14/16 12:40

Date Received: 10/14/16 13:25

Lab Sample ID: 480-107725-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		10	327140	10/22/16 18:51	MRB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 10/14/16 12:45

Date Received: 10/14/16 13:25

Lab Sample ID: 480-107725-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		5	327140	10/22/16 19:23	MRB	TAL BUF
Total/NA	Prep	200.7			326225	10/18/16 12:55	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	326672	10/19/16 23:35	AMH	TAL BUF
Total/NA	Analysis	300.0		1	326053	10/18/16 16:50	CAV	TAL BUF
Total/NA	Analysis	300.0		5	326477	10/19/16 16:29	CAV	TAL BUF
Total/NA	Analysis	310.2		3	326570	10/19/16 11:22	CEA	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 10/14/16 13:00

Date Received: 10/14/16 13:25

Lab Sample ID: 480-107725-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	326739	10/20/16 19:38	MRB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-107725-1

Laboratory References:

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

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Certification Summary

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

TestAmerica Job ID: 480-107725-1

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

Method Summary

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

TestAmerica Job ID: 480-107725-1

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: 480-107725-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-107725-1	Post-Carbon 3	Water	10/14/16 12:30	10/14/16 13:25
480-107725-2	Post-Carbon 2	Water	10/14/16 12:35	10/14/16 13:25
480-107725-3	Post-Carbon 1	Water	10/14/16 12:40	10/14/16 13:25
480-107725-4	Pre-Carbon	Water	10/14/16 12:45	10/14/16 13:25
480-107725-5	Outside Sump	Water	10/14/16 13:00	10/14/16 13:25

10 Hazelwood Drive

phone 716.504.9852 fax 716.691.7991

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TestAmerica Laboratories, Inc.

[illegible]

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

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~~10/26/2016~~

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-107725-1

Login Number: 107725

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: 480-109991-1

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:

12/2/2016 11:23:00 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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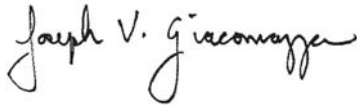
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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
12/2/2016 11:23:00 AM



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Definitions/Glossary

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

TestAmerica Job ID: 480-109991-1

Qualifiers

GC/MS VOA

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

GC VOA

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

General Chemistry

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

Glossary

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

Case Narrative

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

TestAmerica Job ID: 480-109991-1

Job ID: 480-109991-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-109991-1

Receipt

The samples were received on 11/21/2016 4:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-334020 recovered above the upper control limit for 2-Hexanone and 2-Butanone (MEK). The sample associated with this CCV was non-detects for the affected analytes; therefore, the data has been reported. The following sample was impacted: Post-Carbon 3 (480-109991-1).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-334020 recovered outside control limits for the following analytes: Acetone, 2-Hexanone and Tetrachloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following sample was affected Post-Carbon 3 (480-109991-1) .

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 (480-109991-4). 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 (480-109991-2), Post-Carbon 1 (480-109991-3), Pre-Carbon (480-109991-4) and Outside Sump (480-109991-5). 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 (480-109991-1). 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 (480-109991-1).

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: 480-109991-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-109991-1

Date Collected: 11/21/16 16:00

Matrix: Water

Date Received: 11/21/16 16:55

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			12/01/16 03:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/01/16 03:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/01/16 03:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/01/16 03:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/01/16 03:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/01/16 03:37	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			12/01/16 03:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/01/16 03:37	1
2-Hexanone	ND	*	5.0	1.2	ug/L			12/01/16 03:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/01/16 03:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/01/16 03:37	1
Acetone	ND	*	10	3.0	ug/L			12/01/16 03:37	1
Benzene	ND		1.0	0.41	ug/L			12/01/16 03:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/01/16 03:37	1
Bromoform	ND		1.0	0.26	ug/L			12/01/16 03:37	1
Bromomethane	ND		1.0	0.69	ug/L			12/01/16 03:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/01/16 03:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/01/16 03:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/01/16 03:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/01/16 03:37	1
Chloroethane	ND		1.0	0.32	ug/L			12/01/16 03:37	1
Chloroform	ND		1.0	0.34	ug/L			12/01/16 03:37	1
Chloromethane	ND		1.0	0.35	ug/L			12/01/16 03:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/01/16 03:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/01/16 03:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/01/16 03:37	1
Styrene	ND		1.0	0.73	ug/L			12/01/16 03:37	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			12/01/16 03:37	1
Toluene	ND		1.0	0.51	ug/L			12/01/16 03:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/01/16 03:37	1
Trichloroethene	ND		1.0	0.46	ug/L			12/01/16 03:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/01/16 03:37	1
Vinyl acetate	ND		5.0	0.85	ug/L			12/01/16 03:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/01/16 03:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		77 - 120		12/01/16 03:37	1
Toluene-d8 (Surr)	115		80 - 120		12/01/16 03:37	1
4-Bromofluorobenzene (Surr)	120		73 - 120		12/01/16 03:37	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			11/23/16 10:07	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/23/16 10:07	1
Benzene	ND		0.20	0.023	ug/L			11/23/16 10:07	1
Ethylbenzene	ND		0.20	0.029	ug/L			11/23/16 10:07	1
Isopropylbenzene	ND		0.20	0.027	ug/L			11/23/16 10:07	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			11/23/16 10:07	1
m,p-Xylene	ND		0.40	0.054	ug/L			11/23/16 10:07	1
n-Butylbenzene	ND		0.20	0.031	ug/L			11/23/16 10:07	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-109991-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-109991-1

Date Collected: 11/21/16 16:00

Matrix: Water

Date Received: 11/21/16 16:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			11/23/16 10:07	1
o-Xylene	ND		0.20	0.027	ug/L			11/23/16 10:07	1
p-Cymene	ND		0.20	0.030	ug/L			11/23/16 10:07	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/23/16 10:07	1
Toluene	ND		0.20	0.036	ug/L			11/23/16 10:07	1
Xylenes, Total	ND		0.60	0.054	ug/L			11/23/16 10:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	113		63 - 129		11/23/16 10:07	1
4-Bromofluorobenzene	104		64 - 128		11/23/16 10:07	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	61.2		50.0	19.3	ug/L		11/23/16 09:45	11/26/16 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.037		0.010	0.0050	mg/L		11/29/16 01:05	11/29/16 15:30	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.2	HF	0.1	0.1	SU			11/22/16 13:36	1

Client Sample Results

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

TestAmerica Job ID: 480-109991-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-109991-2

Date Collected: 11/21/16 16:10

Matrix: Water

Date Received: 11/21/16 16:55

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			11/23/16 10:39	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/23/16 10:39	1
Ethylbenzene	8.2		0.20	0.029	ug/L			11/23/16 10:39	1
Isopropylbenzene	0.11	J	0.20	0.027	ug/L			11/23/16 10:39	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			11/23/16 10:39	1
m,p-Xylene	1.4		0.40	0.054	ug/L			11/23/16 10:39	1
n-Butylbenzene	0.24		0.20	0.031	ug/L			11/23/16 10:39	1
n-Propylbenzene	ND		0.20	0.13	ug/L			11/23/16 10:39	1
o-Xylene	2.1		0.20	0.027	ug/L			11/23/16 10:39	1
p-Cymene	ND		0.20	0.030	ug/L			11/23/16 10:39	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/23/16 10:39	1
Toluene	12		0.20	0.036	ug/L			11/23/16 10:39	1
Xylenes, Total	3.5		0.60	0.054	ug/L			11/23/16 10:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 129		11/23/16 10:39	1
4-Bromofluorobenzene	100		64 - 128		11/23/16 10:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	53		1.0	0.12	ug/L			11/23/16 12:47	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129		11/23/16 12:47	5
4-Bromofluorobenzene	101		64 - 128		11/23/16 12:47	5

Client Sample Results

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

TestAmerica Job ID: 480-109991-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-109991-3

Date Collected: 11/21/16 16:15

Matrix: Water

Date Received: 11/21/16 16:55

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			11/23/16 11:11	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			11/23/16 11:11	50
Benzene	670		10	1.2	ug/L			11/23/16 11:11	50
Ethylbenzene	79		10	1.4	ug/L			11/23/16 11:11	50
Isopropylbenzene	ND		10	1.4	ug/L			11/23/16 11:11	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			11/23/16 11:11	50
m,p-Xylene	12 J		20	2.7	ug/L			11/23/16 11:11	50
n-Butylbenzene	ND		10	1.5	ug/L			11/23/16 11:11	50
n-Propylbenzene	ND		10	6.5	ug/L			11/23/16 11:11	50
o-Xylene	17		10	1.4	ug/L			11/23/16 11:11	50
p-Cymene	ND		10	1.5	ug/L			11/23/16 11:11	50
sec-Butylbenzene	ND		10	1.0	ug/L			11/23/16 11:11	50
Toluene	120		10	1.8	ug/L			11/23/16 11:11	50
Xylenes, Total	29 J		30	2.7	ug/L			11/23/16 11:11	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	115		63 - 129		11/23/16 11:11	50
4-Bromofluorobenzene	107		64 - 128		11/23/16 11:11	50

Client Sample Results

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

TestAmerica Job ID: 480-109991-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-109991-4

Date Collected: 11/21/16 16:20

Matrix: Water

Date Received: 11/21/16 16:55

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			11/23/16 11:43	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			11/23/16 11:43	100
Benzene	750		20	2.3	ug/L			11/23/16 11:43	100
Ethylbenzene	86		20	2.9	ug/L			11/23/16 11:43	100
Isopropylbenzene	ND		20	2.7	ug/L			11/23/16 11:43	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			11/23/16 11:43	100
m,p-Xylene	17 J		40	5.4	ug/L			11/23/16 11:43	100
n-Butylbenzene	ND		20	3.1	ug/L			11/23/16 11:43	100
n-Propylbenzene	ND		20	13	ug/L			11/23/16 11:43	100
o-Xylene	24		20	2.7	ug/L			11/23/16 11:43	100
p-Cymene	ND		20	3.0	ug/L			11/23/16 11:43	100
sec-Butylbenzene	ND		20	2.0	ug/L			11/23/16 11:43	100
Toluene	150		20	3.6	ug/L			11/23/16 11:43	100
Xylenes, Total	41 J		60	5.4	ug/L			11/23/16 11:43	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 129		11/23/16 11:43	100
4-Bromofluorobenzene	102		64 - 128		11/23/16 11:43	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95300		500	100	ug/L		11/23/16 09:45	11/26/16 09:57	1
Iron	1530		50.0	19.3	ug/L		11/23/16 09:45	11/26/16 09:57	1
Magnesium	45600		200	43.4	ug/L		11/23/16 09:45	11/26/16 09:57	1
Potassium	3820		500	100	ug/L		11/23/16 09:45	11/26/16 09:57	1
Sodium	48900		1000	324	ug/L		11/23/16 09:45	11/26/16 09:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.3		10.0	5.6	mg/L			11/25/16 20:03	20
Sulfate	121		40.0	7.0	mg/L			11/25/16 20:03	20
Alkalinity, Total	289		40.0	16.0	mg/L			12/01/16 14:29	4

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-109991-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-109991-5

Date Collected: 11/21/16 16:30

Matrix: Water

Date Received: 11/21/16 16:55

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			11/23/16 12:15	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			11/23/16 12:15	500
Benzene	3300		100	12	ug/L			11/23/16 12:15	500
Ethylbenzene	250		100	14	ug/L			11/23/16 12:15	500
Isopropylbenzene	ND		100	14	ug/L			11/23/16 12:15	500
Methyl tert-butyl ether	ND		200	22	ug/L			11/23/16 12:15	500
m,p-Xylene	110	J	200	27	ug/L			11/23/16 12:15	500
n-Butylbenzene	ND		100	15	ug/L			11/23/16 12:15	500
n-Propylbenzene	ND		100	65	ug/L			11/23/16 12:15	500
o-Xylene	64	J	100	14	ug/L			11/23/16 12:15	500
p-Cymene	ND		100	15	ug/L			11/23/16 12:15	500
sec-Butylbenzene	ND		100	10	ug/L			11/23/16 12:15	500
Toluene	500		100	18	ug/L			11/23/16 12:15	500
Xylenes, Total	170	J	300	27	ug/L			11/23/16 12:15	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129		11/23/16 12:15	500
4-Bromofluorobenzene	104		64 - 128		11/23/16 12:15	500

Lab Chronicle

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

TestAmerica Job ID: 480-109991-1

Client Sample ID: Post-Carbon 3

Date Collected: 11/21/16 16:00

Date Received: 11/21/16 16:55

Lab Sample ID: 480-109991-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	334020	12/01/16 03:37	GTG	TAL BUF
Total/NA	Analysis	8021B		1	333221	11/23/16 10:07	MAN	TAL BUF
Total/NA	Prep	200.7			333230	11/23/16 09:45	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	333629	11/26/16 09:42	AMH	TAL BUF
Total/NA	Prep	Distill/CN			333755	11/29/16 01:05	DJS	TAL BUF
Total/NA	Analysis	335.4		1	333904	11/29/16 15:30	KRT	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1	333092	11/22/16 13:36	CEA	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 11/21/16 16:10

Date Received: 11/21/16 16:55

Lab Sample ID: 480-109991-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	333221	11/23/16 10:39	MAN	TAL BUF
Total/NA	Analysis	8021B	DL	5	333221	11/23/16 12:47	MAN	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 11/21/16 16:15

Date Received: 11/21/16 16:55

Lab Sample ID: 480-109991-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		50	333221	11/23/16 11:11	MAN	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 11/21/16 16:20

Date Received: 11/21/16 16:55

Lab Sample ID: 480-109991-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	333221	11/23/16 11:43	MAN	TAL BUF
Total/NA	Prep	200.7			333230	11/23/16 09:45	MVZ	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	333629	11/26/16 09:57	AMH	TAL BUF
Total/NA	Analysis	300.0		20	333509	11/25/16 20:03	CAV	TAL BUF
Total/NA	Analysis	310.2		4	334301	12/01/16 14:29	KRT	TAL BUF

Client Sample ID: Outside Sump

Date Collected: 11/21/16 16:30

Date Received: 11/21/16 16:55

Lab Sample ID: 480-109991-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	333221	11/23/16 12:15	MAN	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-109991-1

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

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Certification Summary

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

TestAmerica Job ID: 480-109991-1

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

Method Summary

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

TestAmerica Job ID: 480-109991-1

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: 480-109991-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-109991-1	Post-Carbon 3	Water	11/21/16 16:00	11/21/16 16:55
480-109991-2	Post-Carbon 2	Water	11/21/16 16:10	11/21/16 16:55
480-109991-3	Post-Carbon 1	Water	11/21/16 16:15	11/21/16 16:55
480-109991-4	Pre-Carbon	Water	11/21/16 16:20	11/21/16 16:55
480-109991-5	Outside Sump	Water	11/21/16 16:30	11/21/16 16:55

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 17 of 18

12/2/2016

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-109991-1

Login Number: 109991

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: 480-111162-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Quarterly

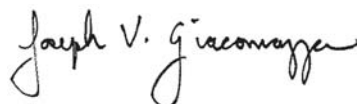
For:

New York State D.E.C.

270 Michigan Avenue

Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by:

12/23/2016 1:18:07 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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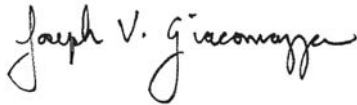
www.testamericainc.com

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

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

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



Joe Giacomazza
Project Management Assistant II
12/23/2016 1:18:07 PM



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Definitions/Glossary

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

TestAmerica Job ID: 480-111162-1

Qualifiers

GC/MS SeV i OAc

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

GC OAc

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

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These are only used abbreviations that 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: 480-111162-1

Job ID: 480-111162-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-111162-1

Receipt

The samples were received on 12/15/2016 1:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5° C.

GC/MS VOA

Method(s) 8260C: The following sample were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-111162-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-336974 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. The following sample is impacted: Pre-Carbon (480-111162-4).

Method(s) 8260C: The results reported for the following sample do not concur with results previously reported for this site: Pre-Carbon (480-111162-4). Reanalysis was performed, and the results confirmed.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-337178 recovered above the upper control limit for Vinyl chloride. 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 (480-111162-1).

Method(s) 8260C: The results reported for the following sample do not concur with results previously reported for this site: Post-Carbon 3 (480-111162-1). 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.

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, SM 4110B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-111162-4). 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 (480-111162-2), Post-Carbon 1 (480-111162-3), Pre-Carbon (480-111162-4) and Outside Sump (480-111162-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 608: The continuing calibration verification (CCV) recovered above the upper control limit for delta-BHC. 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 (480-111162-1).

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

Metals

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

General Chemistry

Case Narrative

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

TestAmerica Job ID: 480-111162-1

Job ID: 480-111162-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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 (480-111162-1).

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: 480-111162-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-111162-1

Date Collected: 12/15/16 13:00

Matrix: Wastewater

Date Received: 12/15/16 13:55

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			12/19/16 23:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/19/16 23:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/19/16 23:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/19/16 23:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/19/16 23:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/19/16 23:39	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			12/19/16 23:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/19/16 23:39	1
2-Hexanone	ND		5.0	1.2	ug/L			12/19/16 23:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/19/16 23:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/19/16 23:39	1
Acetone	ND		10	3.0	ug/L			12/19/16 23:39	1
Benzene	ND		1.0	0.41	ug/L			12/19/16 23:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/19/16 23:39	1
Bromoform	ND		1.0	0.26	ug/L			12/19/16 23:39	1
Bromomethane	ND		1.0	0.69	ug/L			12/19/16 23:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/19/16 23:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/19/16 23:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/19/16 23:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/19/16 23:39	1
Chloroethane	ND		1.0	0.32	ug/L			12/19/16 23:39	1
Chloroform	ND		1.0	0.34	ug/L			12/19/16 23:39	1
Chloromethane	ND		1.0	0.35	ug/L			12/19/16 23:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/19/16 23:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/19/16 23:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/19/16 23:39	1
Styrene	ND		1.0	0.73	ug/L			12/19/16 23:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/19/16 23:39	1
Toluene	ND		1.0	0.51	ug/L			12/19/16 23:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/19/16 23:39	1
Trichloroethene	ND		1.0	0.46	ug/L			12/19/16 23:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/19/16 23:39	1
Vinyl acetate	ND		5.0	0.85	ug/L			12/19/16 23:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/19/16 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		12/19/16 23:39	1
Toluene-d8 (Surr)	101		80 - 120		12/19/16 23:39	1
4-Bromofluorobenzene (Surr)	90		73 - 120		12/19/16 23:39	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		12/17/16 07:50	12/19/16 14:05	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/17/16 07:50	12/19/16 14:05	1
Acenaphthene	ND		5.0	0.41	ug/L		12/17/16 07:50	12/19/16 14:05	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/17/16 07:50	12/19/16 14:05	1
Anthracene	ND		5.0	0.28	ug/L		12/17/16 07:50	12/19/16 14:05	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		12/17/16 07:50	12/19/16 14:05	1
Benzo[a]pyrene	ND	F2	5.0	0.47	ug/L		12/17/16 07:50	12/19/16 14:05	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		12/17/16 07:50	12/19/16 14:05	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-111162-1

Client Sample ID: Post-Carbon 3

Date Collected: 12/15/16 13:00

Date Received: 12/15/16 13:55

Lab Sample ID: 480-111162-1

Matrix: Wastewater

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		12/17/16 07:50	12/19/16 14:05	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		12/17/16 07:50	12/19/16 14:05	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/17/16 07:50	12/19/16 14:05	1
Carbazole	ND		5.0	0.30	ug/L		12/17/16 07:50	12/19/16 14:05	1
Chrysene	ND	F2	5.0	0.33	ug/L		12/17/16 07:50	12/19/16 14:05	1
Dibenz(a,h)anthracene	ND	F2	5.0	0.42	ug/L		12/17/16 07:50	12/19/16 14:05	1
Dibenzofuran	ND		10	0.51	ug/L		12/17/16 07:50	12/19/16 14:05	1
Fluoranthene	ND		5.0	0.40	ug/L		12/17/16 07:50	12/19/16 14:05	1
Fluorene	ND		5.0	0.36	ug/L		12/17/16 07:50	12/19/16 14:05	1
Indeno[1,2,3-cd]pyrene	ND	F2	5.0	0.47	ug/L		12/17/16 07:50	12/19/16 14:05	1
Naphthalene	ND		5.0	0.76	ug/L		12/17/16 07:50	12/19/16 14:05	1
Pentachlorophenol	ND		10	2.2	ug/L		12/17/16 07:50	12/19/16 14:05	1
Phenanthrene	ND		5.0	0.44	ug/L		12/17/16 07:50	12/19/16 14:05	1
Phenol	ND		5.0	0.39	ug/L		12/17/16 07:50	12/19/16 14:05	1
Pyrene	ND		5.0	0.34	ug/L		12/17/16 07:50	12/19/16 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		46 - 120	12/17/16 07:50	12/19/16 14:05	1
2-Fluorobiphenyl	85		48 - 120	12/17/16 07:50	12/19/16 14:05	1
p-Terphenyl-d14	85		67 - 150	12/17/16 07:50	12/19/16 14:05	1
Phenol-d5	43		16 - 120	12/17/16 07:50	12/19/16 14:05	1
2-Fluorophenol	59		20 - 120	12/17/16 07:50	12/19/16 14:05	1
2,4,6-Tribromophenol	62		52 - 132	12/17/16 07:50	12/19/16 14:05	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			12/16/16 14:32	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			12/16/16 14:32	1
Benzene	0.27		0.20	0.023	ug/L			12/16/16 14:32	1
Ethylbenzene	ND		0.20	0.029	ug/L			12/16/16 14:32	1
Isopropylbenzene	ND		0.20	0.027	ug/L			12/16/16 14:32	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			12/16/16 14:32	1
m,p-Xylene	0.070	J	0.40	0.054	ug/L			12/16/16 14:32	1
n-Butylbenzene	ND		0.20	0.031	ug/L			12/16/16 14:32	1
n-Propylbenzene	ND		0.20	0.13	ug/L			12/16/16 14:32	1
o-Xylene	ND		0.20	0.027	ug/L			12/16/16 14:32	1
p-Cymene	ND		0.20	0.030	ug/L			12/16/16 14:32	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			12/16/16 14:32	1
Toluene	0.046	J	0.20	0.036	ug/L			12/16/16 14:32	1
Xylenes, Total	0.070	J	0.60	0.054	ug/L			12/16/16 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108		63 - 129		12/16/16 14:32	1
4-Bromofluorobenzene	96		64 - 128		12/16/16 14:32	1

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.048	0.0078	ug/L		12/16/16 08:06	12/19/16 13:31	1
alpha-BHC	ND		0.048	0.0074	ug/L		12/16/16 08:06	12/19/16 13:31	1
beta-BHC	ND		0.048	0.024	ug/L		12/16/16 08:06	12/19/16 13:31	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-111162-1

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-111162-1

Date Collected: 12/15/16 13:00

Matrix: Wastewater

Date Received: 12/15/16 13:55

Method: 608 - Organochlorine Pesticides in Water (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.048	0.0096	ug/L		12/16/16 08:06	12/19/16 13:31	1
gamma-BHC (Lindane)	ND		0.048	0.0077	ug/L		12/16/16 08:06	12/19/16 13:31	1
Chlordane (technical)	ND		0.48	0.28	ug/L		12/16/16 08:06	12/19/16 13:31	1
4,4'-DDD	ND		0.048	0.0088	ug/L		12/16/16 08:06	12/19/16 13:31	1
4,4'-DDE	ND		0.048	0.011	ug/L		12/16/16 08:06	12/19/16 13:31	1
4,4'-DDT	ND		0.048	0.011	ug/L		12/16/16 08:06	12/19/16 13:31	1
Dieldrin	ND		0.048	0.0094	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endosulfan I	ND		0.048	0.011	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endosulfan II	ND		0.048	0.012	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endrin	ND		0.048	0.013	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endrin aldehyde	ND		0.048	0.016	ug/L		12/16/16 08:06	12/19/16 13:31	1
Heptachlor	ND		0.048	0.0082	ug/L		12/16/16 08:06	12/19/16 13:31	1
Heptachlor epoxide	ND		0.048	0.0071	ug/L		12/16/16 08:06	12/19/16 13:31	1
Toxaphene	ND		0.48	0.12	ug/L		12/16/16 08:06	12/19/16 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	74		23 - 120	12/16/16 08:06	12/19/16 13:31	1
Tetrachloro-m-xylene	70		44 - 120	12/16/16 08:06	12/19/16 13:31	1

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	92.7		50.0	19.3	ug/L		12/16/16 09:15	12/19/16 16:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	2.2	J	4.8	1.4	mg/L		12/16/16 17:51	12/16/16 22:00	1
Cyanide, Total	0.060	F1	0.010	0.0050	mg/L		12/19/16 04:30	12/19/16 13:06	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		12/16/16 19:40	12/19/16 02:55	1
Total Dissolved Solids	716		10.0	4.0	mg/L			12/20/16 12:27	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			12/17/16 08:08	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			12/20/16 00:54	1
pH	8.0	HF	0.1	0.1	SU			12/20/16 10:22	1

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-111162-1

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-111162-2

Date Collected: 12/15/16 13:05

Matrix: Wastewater

Date Received: 12/15/16 13:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.7	J	10	1.7	ug/L			12/16/16 15:04	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			12/16/16 15:04	50
Benzene	1100		10	1.2	ug/L			12/16/16 15:04	50
Ethylbenzene	76		10	1.4	ug/L			12/16/16 15:04	50
Isopropylbenzene	ND		10	1.4	ug/L			12/16/16 15:04	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			12/16/16 15:04	50
m,p-Xylene	37		20	2.7	ug/L			12/16/16 15:04	50
n-Butylbenzene	ND		10	1.5	ug/L			12/16/16 15:04	50
n-Propylbenzene	ND		10	6.5	ug/L			12/16/16 15:04	50
o-Xylene	22		10	1.4	ug/L			12/16/16 15:04	50
p-Cymene	ND		10	1.5	ug/L			12/16/16 15:04	50
sec-Butylbenzene	ND		10	1.0	ug/L			12/16/16 15:04	50
Toluene	190		10	1.8	ug/L			12/16/16 15:04	50
Xylenes, Total	59		30	2.7	ug/L			12/16/16 15:04	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		63 - 129		12/16/16 15:04	50
4-Bromofluorobenzene	98		64 - 128		12/16/16 15:04	50

Client Sample Results

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

TestAmerica Job ID: 480-111162-1

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-111162-3

Date Collected: 12/15/16 13:10

Matrix: Water

Date Received: 12/15/16 13:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	20		20	3.5	ug/L			12/16/16 18:22	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			12/16/16 18:22	100
Benzene	4900		20	2.3	ug/L			12/16/16 18:22	100
Ethylbenzene	350		20	2.9	ug/L			12/16/16 18:22	100
Isopropylbenzene	ND		20	2.7	ug/L			12/16/16 18:22	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			12/16/16 18:22	100
m,p-Xylene	170		40	5.4	ug/L			12/16/16 18:22	100
n-Butylbenzene	ND		20	3.1	ug/L			12/16/16 18:22	100
n-Propylbenzene	ND		20	13	ug/L			12/16/16 18:22	100
o-Xylene	99		20	2.7	ug/L			12/16/16 18:22	100
p-Cymene	ND		20	3.0	ug/L			12/16/16 18:22	100
sec-Butylbenzene	ND		20	2.0	ug/L			12/16/16 18:22	100
Toluene	930		20	3.6	ug/L			12/16/16 18:22	100
Xylenes, Total	270		60	5.4	ug/L			12/16/16 18:22	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129		12/16/16 18:22	100
4-Bromofluorobenzene	98		64 - 128		12/16/16 18:22	100

Client Sample Results

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

TestAmerica Job ID: 480-111162-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-111162-4

Date Collected: 12/15/16 13:15

Matrix: Water

Date Received: 12/15/16 13:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			12/17/16 21:42	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			12/17/16 21:42	100
1,1,2-Trichloroethane	ND		100	23	ug/L			12/17/16 21:42	100
1,1-Dichloroethane	ND		100	38	ug/L			12/17/16 21:42	100
1,1-Dichloroethene	ND		100	29	ug/L			12/17/16 21:42	100
1,2-Dichloroethane	ND		100	21	ug/L			12/17/16 21:42	100
1,2-Dichloroethene, Total	ND		200	81	ug/L			12/17/16 21:42	100
1,2-Dichloropropane	ND		100	72	ug/L			12/17/16 21:42	100
2-Hexanone	ND		500	120	ug/L			12/17/16 21:42	100
2-Butanone (MEK)	ND		1000	130	ug/L			12/17/16 21:42	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			12/17/16 21:42	100
Acetone	ND		1000	300	ug/L			12/17/16 21:42	100
Benzene	5300		100	41	ug/L			12/17/16 21:42	100
Bromodichloromethane	ND		100	39	ug/L			12/17/16 21:42	100
Bromoform	ND		100	26	ug/L			12/17/16 21:42	100
Bromomethane	ND		100	69	ug/L			12/17/16 21:42	100
Carbon disulfide	ND		100	19	ug/L			12/17/16 21:42	100
Carbon tetrachloride	ND		100	27	ug/L			12/17/16 21:42	100
Chlorobenzene	ND		100	75	ug/L			12/17/16 21:42	100
Dibromochloromethane	ND		100	32	ug/L			12/17/16 21:42	100
Chloroethane	ND		100	32	ug/L			12/17/16 21:42	100
Chloroform	ND		100	34	ug/L			12/17/16 21:42	100
Chloromethane	ND		100	35	ug/L			12/17/16 21:42	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			12/17/16 21:42	100
Ethylbenzene	370		100	74	ug/L			12/17/16 21:42	100
Methylene Chloride	ND		100	44	ug/L			12/17/16 21:42	100
Styrene	ND		100	73	ug/L			12/17/16 21:42	100
Tetrachloroethene	ND		100	36	ug/L			12/17/16 21:42	100
Toluene	940		100	51	ug/L			12/17/16 21:42	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			12/17/16 21:42	100
Trichloroethene	ND		100	46	ug/L			12/17/16 21:42	100
Vinyl chloride	ND		100	90	ug/L			12/17/16 21:42	100
Vinyl acetate	ND		500	85	ug/L			12/17/16 21:42	100
Xylenes, Total	260		200	66	ug/L			12/17/16 21:42	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		12/17/16 21:42	100
Toluene-d8 (Surr)	97		80 - 120		12/17/16 21:42	100
4-Bromofluorobenzene (Surr)	101		73 - 120		12/17/16 21:42	100

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	17	J	20	3.5	ug/L			12/16/16 16:09	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			12/16/16 16:09	100
Benzene	4200		20	2.3	ug/L			12/16/16 16:09	100
Ethylbenzene	320		20	2.9	ug/L			12/16/16 16:09	100
Isopropylbenzene	ND		20	2.7	ug/L			12/16/16 16:09	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			12/16/16 16:09	100
m,p-Xylene	150		40	5.4	ug/L			12/16/16 16:09	100
n-Butylbenzene	ND		20	3.1	ug/L			12/16/16 16:09	100

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-111162-1

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-111162-4

Date Collected: 12/15/16 13:15

Matrix: Water

Date Received: 12/15/16 13:55

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			12/16/16 16:09	100
o-Xylene	85		20	2.7	ug/L			12/16/16 16:09	100
p-Cymene	ND		20	3.0	ug/L			12/16/16 16:09	100
sec-Butylbenzene	ND		20	2.0	ug/L			12/16/16 16:09	100
Toluene	810		20	3.6	ug/L			12/16/16 16:09	100
Xylenes, Total	240		60	5.4	ug/L			12/16/16 16:09	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	106		63 - 129		12/16/16 16:09	100
4-Bromofluorobenzene	100		64 - 128		12/16/16 16:09	100

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	116000		500	100	ug/L		12/16/16 09:15	12/19/16 16:34	1
Iron	1130		50.0	19.3	ug/L		12/16/16 09:15	12/19/16 16:34	1
Magnesium	57400		200	43.4	ug/L		12/16/16 09:15	12/19/16 16:34	1
Potassium	4260		500	100	ug/L		12/16/16 09:15	12/19/16 16:34	1
Sodium	62900		1000	324	ug/L		12/16/16 09:15	12/19/16 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		5.0	2.8	mg/L			12/21/16 19:53	10
Sulfate	127		20.0	3.5	mg/L			12/21/16 19:53	10
Alkalinity, Total	442		50.0	20.0	mg/L			12/21/16 14:07	5

TestAmerica Buffalo

Client Sample Results

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

TestAmerica Job ID: 480-111162-1

Client Sample ID: Outside Sump

Lab Sample ID: 480-111162-5

Date Collected: 12/15/16 13:30

Matrix: Water

Date Received: 12/15/16 13:55

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	53	J	100	17	ug/L			12/16/16 16:41	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			12/16/16 16:41	500
Benzene	8300		100	12	ug/L			12/16/16 16:41	500
Ethylbenzene	700		100	14	ug/L			12/16/16 16:41	500
Isopropylbenzene	ND		100	14	ug/L			12/16/16 16:41	500
Methyl tert-butyl ether	ND		200	22	ug/L			12/16/16 16:41	500
m,p-Xylene	290		200	27	ug/L			12/16/16 16:41	500
n-Butylbenzene	ND		100	15	ug/L			12/16/16 16:41	500
n-Propylbenzene	ND		100	65	ug/L			12/16/16 16:41	500
o-Xylene	ND		100	14	ug/L			12/16/16 16:41	500
p-Cymene	ND		100	15	ug/L			12/16/16 16:41	500
sec-Butylbenzene	ND		100	10	ug/L			12/16/16 16:41	500
Toluene	1400		100	18	ug/L			12/16/16 16:41	500
Xylenes, Total	290	J	300	27	ug/L			12/16/16 16:41	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		63 - 129		12/16/16 16:41	500
4-Bromofluorobenzene	99		64 - 128		12/16/16 16:41	500

Lab Chronicle

Client: New York State D.E.C.
 j ro/ectSite: Wastown # # Tj 571y121

TestAmerica Job ID: 480-11119P-1

Client Sample ID: Post-Carbon 3

Date Collected: 12/15/16 13:00

Date Received: 12/15/16 13:55

Lab Sample ID: 480-111162-1

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Anal	8P90C		1	332128	1P37G9 P3:37	NEA	TAL BUF
Total	j reM	3y10C			33974P	1P32G9 02:y0	Sp j	TAL BUF
Total	Anal	8P20D		1	332039	1P37G9 14:0y	Lp #	TAL BUF
Total	Anal	80P1B		1	339824	1P39G9 14:3P	p VB	TAL BUF
Total	j reM	3y10C			33924P	1P39G9 08:09	Cj Z	TAL BUF
Total	Anal	908		1	3320P2	1P37G9 13:31	p AN	TAL BUF
Total	j reM	P00.2			339247	1P39G9 07:1y	p Rv	TAL BUF
Total	Anal	P00.2 VeH4.4		1	332P4P	1P37G9 19:31	Ap Z	TAL BUF
Total	j reM	1994A			33971y	1P39G9 12:y1	DSC	TAL BUF
Total	Anal	1994A		1	3397P2	1P39G9 PP:00	DSC	TAL BUF
Total	j reM	Distill			332001	1P37G9 04:30	DJS	TAL BUF
Total	Anal	33y.4		1	33213y	1P37G9 13:09	p DL	TAL BUF
Total	j reM	Distill			3397P4	1P39G9 17:40	DCB	TAL BUF
Total	Anal	4P0.1		1	332000	1P37G9 0P:yy	+p B	TAL BUF
Total	Anal	Sp Py40C		1	332349	1P30G9 1P:P2	E+B	TAL BUF
Total	Anal	Sp Py40D		1	332177	1P30G9 00:y4	+p B	TAL BUF
Total	Anal	Sp 4y00 Zu B		1	332307	1P30G9 10:PP	CEA	TAL BUF
Total	Anal	Sp yP10B		1	3397yP	1P32G9 08:08	JCL	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 12/15/16 13:05

Date Received: 12/15/16 13:55

Lab Sample ID: 480-111162-2

Matrix: Wastewater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Anal	80P1B		y0	339824	1P39G9 1y:04	p VB	TAL BUF

Client Sample ID: Post-Carbon 1

Date Collected: 12/15/16 13:10

Date Received: 12/15/16 13:55

Lab Sample ID: 480-111162-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Anal	80P1B		100	339824	1P39G9 18:PP	p VB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 12/15/16 13:15

Date Received: 12/15/16 13:55

Lab Sample ID: 480-111162-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Anal	8P90C		100	339724	1P32G9 P1:4P	NEA	TAL BUF
Total	Anal	80P1B		100	339824	1P39G9 19:07	p VB	TAL BUF
Total	j reM	P00.2			339247	1P39G9 07:1y	p Rv	TAL BUF
Total	Anal	P00.2 VeH4.4		1	332P4P	1P37G9 19:34	Ap Z	TAL BUF

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Lab Chronicle

Client: New York State D.E.C.
j ro/ectSite: Wastown # # Tj 571y121

TestAmerica Job ID: 480-11119P-1

Client Sample ID: Pre-Carbon
Date Collected: 12/15/16 13:15
Date Received: 12/15/16 13:55

Lab Sample ID: 480-111162-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TotalChloride	Analysis	300.0		10	332y8y	1P01G9 17:53	CAR	TAL BUF
TotalChloride	Analysis	310.P		y	3329P0	1P01G9 14:02	LED	TAL BUF

Client Sample ID: Outside Sump
Date Collected: 12/15/16 13:30
Date Received: 12/15/16 13:55

Lab Sample ID: 480-111162-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TotalChloride	Analysis	80P1B		y00	339824	1P39G9 19:41	p VB	TAL BUF

Laboratory References:

TAL BUF , TestAmerica Bf =aloz 10 Zadelwooh DriHbzAmKerstzNY 14PP8-PP78zTEL (219)971-P900

Certification Summary

Client: New York State D.E.C.
Project Site: Wastown # # Tj 571U1h1

TestAmerica Job ID: 480-11119P-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes were analyzed by the laboratory.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELA	P	100P9	03-31-1h
The following analytes are included in this report because certification is not required by the governing act, or it is:				
Analysis Method	Sample Method	Matrix	Analyte	
80P1B		# astewater	mfp-Xylene	
80P1B		# astewater	o-Xylene	
80P1B		# ater	mfp-Xylene	
80P1B		# ater	o-Xylene	
8P90C		# astewater	1fP-Dic, Iroet, enef Total	
8P90C		# ater	1fP-Dic, Iroet, enef Total	
SM 4U00 H+ B		# astewater	pH	

Method Summary

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

TestAmerica Job ID: 480-111162-1

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: weY korS. tate DPE E
Project: WasteYN# # Tj 5713121

TestAmerica Job ID: 480-11119C-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-11119C-1	post-l arboN6	# asteYater	10/3/2016 16:00	10/3/2016 16:33
480-11119C-C	post-l arboNC	# asteYater	10/3/2016 16:03	10/3/2016 16:33
480-11119C-6	post-l arboN1	# ater	10/3/2016 16:10	10/3/2016 16:33
480-11119C-4	pre-l arboN	# ater	10/3/2016 16:13	10/3/2016 16:33
480-11119C-3	Outside . ump	# ater	10/3/2016 16:60	10/3/2016 16:33

10 Hazelwood Drive

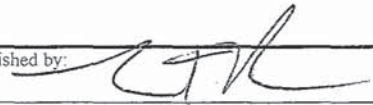
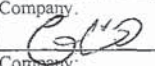
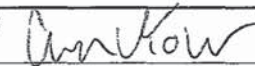
Amherst, NY 14228
phone 716.504.9852 fax 716.691.7991

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: 12/15/16		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						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.	Unfiltered Sample	300.0_280 (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+ - pH	1664A_Calc - Oil & Grease	420.4 - Phenolics, Total Recoverable	608_Pest - Priority Pollutant Pesticides	5210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids	2540C_Calc - Total Dissolved Solids	8270C-(MOD) TCL SYOA - OLM04.2	Sample Specific Notes:						
Post-Carbon 3	12/15	1300	Grab	W	19	N					X	X	X	X	X	X	X	X	X	X	X	X	X						
Post-Carbon 2	12/15	1305	Grab	W	3	N							X																
Post-Carbon 1	12/15	1210	Grab	W	3	N							X																
Pre-Carbon	12/15	1315	Grab	W	9	N	X	X	X			X	X																
Inside <u>Outside Sump</u>	12/15	1330	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: 					Company: 					Date/Time: 12/15/16 1355					Received by: 					Company: TA					Date/Time: 12/15/16 1355				
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

Page 20 of 21

12/23/2016

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-111162-1

Login Number: 111162

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	