FORMER GASTOWN MGP SITE SITE NO. 915171

2017 LAB REPORTS FOR THE GROUNDWATER COLLECTION & TREATMENT SYSTEM





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: 480-112538-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

New York State D.E.C. 270 Michigan Avenue Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by: 1/27/2017 4:35:45 PM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

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Have a Question?



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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.

Joe Giacomazza

1/27/2017 4:35:45 PM

Project Management Assistant II

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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.

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-112538-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

Qualifiers

GC VOA

Qualifier	Qualifier Description

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

These commonly used abbreviations may or may not be present in this report.

Relative Percent Difference, a measure of the relative difference between two points

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.
В	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.
В	Compound was found in the blank and sample.

Glossary Abbreviation

RER

RL RPD

¤	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

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

Relative error ratio

Reporting Limit or Requested Limit (Radiochemistry)

TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

Job ID: 480-112538-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-112538-1

Receipt

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

GC/MS VOA

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

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-112538-2). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-112538-2), Post-Carbon 1 (480-112538-4) and OUTSIDE SUMP (480-112538-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 335.4: The results reported for the following sample do not concur with results previously reported for this site: Post-Carbon 3 (480-112538-1). Reanalysis was performed, and the result(s) confirmed.

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-112538-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-112538-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 01/20/17 14:30 Date Received: 01/20/17 15:25

Method: 8260C - Volatile Organic Compounds by GC/MS Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac ND 1.0 1,1,1-Trichloroethane 0.82 ug/L 01/25/17 03:21 ND 1,1,2,2-Tetrachloroethane 1.0 0.21 ug/L 01/25/17 03:21 1,1,2-Trichloroethane ND 1.0 0.23 ug/L 01/25/17 03:21 ND 1,1-Dichloroethane 1.0 0.38 ug/L 01/25/17 03:21 1,1-Dichloroethene ND 1.0 0.29 ug/L 01/25/17 03:21 0.21 ug/L 1.2-Dichloroethane ND 1.0 01/25/17 03:21 1,2-Dichloroethene, Total ND 2.0 0.81 ug/L 01/25/17 03:21 1,2-Dichloropropane 0.72 ug/L ND 1.0 01/25/17 03:21 2-Hexanone ND 5.0 1.2 ug/L 01/25/17 03:21 2-Butanone (MEK) ND 10 1.3 ug/L 01/25/17 03:21 4-Methyl-2-pentanone (MIBK) ND 5.0 2.1 ug/L 01/25/17 03:21 Acetone ND 10 3.0 ug/L 01/25/17 03:21 Benzene ND 1.0 0.41 ug/L 01/25/17 03:21 Bromodichloromethane ND 1.0 0.39 ug/L 01/25/17 03:21 ug/L Bromoform ND 1.0 0.26 01/25/17 03:21 ND 1.0 01/25/17 03:21 Bromomethane 0.69 ug/L Carbon disulfide NΠ 1.0 0.19 ug/L 01/25/17 03:21 Carbon tetrachloride ND 1.0 0.27 ug/L 01/25/17 03:21 Chlorobenzene ND 1.0 0.75 ug/L 01/25/17 03:21 Dibromochloromethane ND 1.0 0.32 ug/L 01/25/17 03:21 Chloroethane ND 1.0 0.32 ug/L 01/25/17 03:21 Chloroform ND 1.0 0.34 ug/L 01/25/17 03:21 0.35 ug/L Chloromethane ND 1.0 01/25/17 03:21 cis-1,3-Dichloropropene ND 1.0 0.36 ug/L 01/25/17 03:21 Ethylbenzene ND 1.0 0.74 ug/L 01/25/17 03:21 Methylene Chloride ND 1.0 0.44 ug/L 01/25/17 03:21 Styrene ND 1.0 0.73 ug/L 01/25/17 03:21 Tetrachloroethene ND 1.0 0.36 ug/L 01/25/17 03:21 ND 1.0 0.51 ug/L 01/25/17 03:21 ND trans-1,3-Dichloropropene 1.0 0.37 ug/L 01/25/17 03:21 Trichloroethene ND 1.0 0.46 ug/L 01/25/17 03:21 Vinyl chloride ND 1.0 0.90 ug/L 01/25/17 03:21 Vinyl acetate ND 5.0 0.85 ug/L 01/25/17 03:21 Xylenes, Total ND 2.0 0.66 ug/L 01/25/17 03:21

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		01/25/17 03:21	1
Toluene-d8 (Surr)	101		80 - 120		01/25/17 03:21	1
4-Bromofluorobenzene (Surr)	99		73 - 120		01/25/17 03:21	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			01/23/17 18:33	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			01/23/17 18:33	1
Benzene	ND	0.20	0.023	ug/L			01/23/17 18:33	1
Ethylbenzene	ND	0.20	0.029	ug/L			01/23/17 18:33	1
Isopropylbenzene	ND	0.20	0.027	ug/L			01/23/17 18:33	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			01/23/17 18:33	1
m,p-Xylene	ND	0.40	0.054	ug/L			01/23/17 18:33	1
n-Butylbenzene	ND	0.20	0.031	ug/L			01/23/17 18:33	1

TestAmerica Buffalo

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

Lab Sample ID: 480-112538-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 01/20/17 14:30 Date Received: 01/20/17 15:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			01/23/17 18:33	1
o-Xylene	ND		0.20	0.027	ug/L			01/23/17 18:33	1
p-Cymene	ND		0.20	0.030	ug/L			01/23/17 18:33	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/23/17 18:33	1
Toluene	ND		0.20	0.036	ug/L			01/23/17 18:33	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/23/17 18:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129					01/23/17 18:33	1
4-Bromofluorobenzene	93		64 - 128					01/23/17 18:33	1
Method: 200.7 Rev 4.4 - Meta	als (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	38.6	J	50.0	19.3	ug/L		01/23/17 09:35	01/24/17 01:21	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0050	mg/L		01/24/17 15:31	01/25/17 10:22	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН	7.6	HF	0.1	0.1	SU			01/23/17 12:59	

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

Lab Sample ID: 480-112538-2

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 01/20/17 14:45

Method: 8021B - Volatile Org Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	12	J	20	3.5	ug/L			01/23/17 16:24	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			01/23/17 16:24	100
Benzene	2000		20	2.3	ug/L			01/23/17 16:24	100
Ethylbenzene	150		20	2.9	ug/L			01/23/17 16:24	100
Isopropylbenzene	ND		20	2.7	ug/L			01/23/17 16:24	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			01/23/17 16:24	100
m,p-Xylene	80		40	5.4	ug/L			01/23/17 16:24	100
n-Butylbenzene	ND		20	3.1	ug/L			01/23/17 16:24	100
n-Propylbenzene	ND		20	13	ug/L			01/23/17 16:24	100
o-Xylene	43		20	2.7	ug/L			01/23/17 16:24	100
p-Cymene	ND		20	3.0	ug/L			01/23/17 16:24	100
sec-Butylbenzene	ND		20	2.0	ug/L			01/23/17 16:24	100
Toluene	410		20	3.6	ug/L			01/23/17 16:24	100
Xylenes, Total	120		60	5.4	ug/L			01/23/17 16:24	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129			-		01/23/17 16:24	100
4-Bromofluorobenzene	92		64 - 128					01/23/17 16:24	100

—	32		04 - 120					01/25/11 10.24	700
- Method: 200.7 Rev 4.4 - Meta	Is (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	131000	В	500	100	ug/L		01/23/17 09:35	01/24/17 01:25	1
Iron	1030		50.0	19.3	ug/L		01/23/17 09:35	01/24/17 01:25	1
Magnesium	48900		200	43.4	ug/L		01/23/17 09:35	01/24/17 01:25	1
Potassium	3840		500	100	ug/L		01/23/17 09:35	01/24/17 01:25	1
Sodium	59500		1000	324	ug/L		01/23/17 09:35	01/24/17 01:25	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		10.0	5.6	mg/L			01/24/17 03:03	20
Sulfate	179	В	40.0	7.0	mg/L			01/24/17 03:03	20
Alkalinity, Total	369		50.0	20.0	mg/L			01/24/17 12:22	5

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

Lab Sample ID: 480-112538-3

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 01/20/17 14:35 Date Received: 01/20/17 15:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			01/23/17 18:00	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/23/17 18:00	1
Benzene	0.029	J	0.20	0.023	ug/L			01/23/17 18:00	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/23/17 18:00	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/23/17 18:00	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/23/17 18:00	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/23/17 18:00	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/23/17 18:00	1
n-Propylbenzene	ND		0.20	0.13	ug/L			01/23/17 18:00	1
o-Xylene	ND		0.20	0.027	ug/L			01/23/17 18:00	1
p-Cymene	ND		0.20	0.030	ug/L			01/23/17 18:00	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/23/17 18:00	1
Toluene	ND		0.20	0.036	ug/L			01/23/17 18:00	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/23/17 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129			-		01/23/17 18:00	1
4-Bromofluorobenzene	89		64 - 128					01/23/17 18:00	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

Lab Sample ID: 480-112538-4

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 01/20/17 14:40 Date Received: 01/20/17 15:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.4	J	5.0	0.87	ug/L			01/23/17 16:56	25
1,3,5-Trimethylbenzene	ND		5.0	3.8	ug/L			01/23/17 16:56	25
Benzene	270		5.0	0.58	ug/L			01/23/17 16:56	25
Ethylbenzene	18		5.0	0.72	ug/L			01/23/17 16:56	25
Isopropylbenzene	ND		5.0	0.68	ug/L			01/23/17 16:56	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			01/23/17 16:56	25
m,p-Xylene	10		10	1.4	ug/L			01/23/17 16:56	25
n-Butylbenzene	ND		5.0	0.77	ug/L			01/23/17 16:56	25
n-Propylbenzene	ND		5.0	3.3	ug/L			01/23/17 16:56	25
o-Xylene	6.3		5.0	0.68	ug/L			01/23/17 16:56	25
p-Cymene	ND		5.0	0.74	ug/L			01/23/17 16:56	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			01/23/17 16:56	25
Toluene	55		5.0	0.89	ug/L			01/23/17 16:56	25
Xylenes, Total	16		15	1.4	ug/L			01/23/17 16:56	25
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129			-		01/23/17 16:56	25
4-Bromofluorobenzene	91		64 - 128					01/23/17 16:56	25

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

Lab Sample ID: 480-112538-5

Matrix: Water

Client	Sample	ID:	OU	TSIDE	SUMP

Date Collected: 01/20/17 15:00 Date Received: 01/20/17 15:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	33	J	100	17	ug/L			01/23/17 17:29	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			01/23/17 17:29	500
Benzene	2900		100	12	ug/L			01/23/17 17:29	500
Ethylbenzene	200		100	14	ug/L			01/23/17 17:29	500
Isopropylbenzene	ND		100	14	ug/L			01/23/17 17:29	500
Methyl tert-butyl ether	ND		200	22	ug/L			01/23/17 17:29	500
m,p-Xylene	89	J	200	27	ug/L			01/23/17 17:29	500
n-Butylbenzene	ND		100	15	ug/L			01/23/17 17:29	500
n-Propylbenzene	ND		100	65	ug/L			01/23/17 17:29	500
o-Xylene	49	J	100	14	ug/L			01/23/17 17:29	500
p-Cymene	ND		100	15	ug/L			01/23/17 17:29	500
sec-Butylbenzene	ND		100	10	ug/L			01/23/17 17:29	500
Toluene	510		100	18	ug/L			01/23/17 17:29	500
Xylenes, Total	140	J	300	27	ug/L			01/23/17 17:29	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129			-		01/23/17 17:29	500
4-Bromofluorobenzene	91		64 - 128					01/23/17 17:29	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-112538-1

Lab Sample ID: 480-112538-2

Lab Sample ID: 480-112538-3

Lab Sample ID: 480-112538-4

Lab Sample ID: 480-112538-5

TAL BUF

Matrix: Wastewater

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 01/20/17 14:30 Date Received: 01/20/17 15:25

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

Client Sample ID: Pre-Carbon

Date Collected: 01/20/17 14:45

Date Received: 01/20/17 15:25

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

341221 01/24/17 12:22 LED

Client Sample ID: Post-Carbon 2

Analysis

310.2

Date Collected: 01/20/17 14:35

Date Received: 01/20/17 15:25

Total/NA

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

Client Sample ID: Post-Carbon 1

Date Collected: 01/20/17 14:40

Date Received: 01/20/17 15:25

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

Client Sample ID: OUTSIDE SUMP

Date Collected: 01/20/17 15:00

Date Received: 01/20/17 15:25

_								
	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	340975	01/23/17 17:29	MRB	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-112538-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

uthority	Program		EPA Region	Certification ID	Expiration Date
ew York	NELAP		2	10026	03-31-17 *
The following analytes a	are included in this report, bu	it certification is not offere	d by the governing a	uthority:	
Analysis Method	Prep Method	Matrix	Analyt	е	
8021B		Wastewater	m,p-X	ylene	
8021B		Wastewater	o-Xyle	ne	
8021B		Water	m,p-X	ylene	
8021B		Water	o-Xyle	ne	
8260C		Wastewater	1,2-Di	chloroethene, Total	
SM 4500 H+ B		Wastewater	pН		

TestAmerica Buffalo

 $[\]ensuremath{^{\star}}$ Certification renewal pending - certification considered valid.

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-112538-1

	01: 40 1 15		0 "	
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-112538-1	Post-Carbon 3	Wastewater	01/20/17 14:30	01/20/17 15:25
480-112538-2	Pre-Carbon	Wastewater	01/20/17 14:45	01/20/17 15:25
480-112538-3	Post-Carbon 2	Water	01/20/17 14:35	01/20/17 15:25
480-112538-4	Post-Carbon 1	Water	01/20/17 14:40	01/20/17 15:25
480-112538-5	OUTSIDE SUMP	Water	01/20/17 15:00	01/20/17 15:25

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TestAmerica Buffalo

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Amherst, NY 14228-2298

Chain of Custody Record



Phone (716) 691-2600 Fax (716) 691-7991 Carrier Tracking No(s): me COC No: Johnson, Orlette S 480-75812-15804.1 Client Information Phone: \$00 287 7857 Client Contact: E-Mail: Page: orlette.johnson@testamericainc.com Page 1 of 1 Thomas Palmer Company: Groundwater & Environmental Services Inc. **Analysis Requested** Address: Preservation Codes: STO 495 Aero Drive Suite 3 TAT Requested (days): B - NaOH Cheektowaga C - Zn Acetate State, Zip: D - Nitric Acid E - NaHSO4 NY, 14225 F-MeOH Phone: G - Amchlor CallOut ID 120597 H - Ascorbic A 480-112538 COC Email: I - Ice 8021B - (MOD) STARS List - VOA J - DI Water tpalmer@gesonline.com containers W-pH 4-5 K-EDTA Project #: L-EDA Z - other (specify) NYSDEC-Gastown WWTP: Site# 915171/Gastow Event Desc: N 48002525 300.0_28D - (MOD) Local Total Other: **TC**L New York 310.2 - Alkalinity, Matrix Sample (W=water, Type S=solid, O=waste/oil, (C=comp, Sample Sample Identification Sample Date Time G=grab) BT=Tissue, A=Air Special Instructions/Note: Preservation Code: ×N. D · PostCorbon 3 Water 20 1430 Post Corbon 2 1435 6 Water 1440 Post Corbon 1 (1445 1500 Possible Hazard Identification Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Disposal By Lab Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Archive For Deliverable Requested: I, II, III, IV, Other (specify) Special Instructions/QC Requirements: Method of Shipment: Empty Kit Relinquished by: Time: Relinquished by: Received by: Relinquished by: Date/Time: Company Received by: Date/Time: Company Cooler Temperature(s) °C and Other Remarks: Custody Seals Intact: Custody Seal No .: Δ Yes Δ No

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Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-112538-1

Login Number: 112538 List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

Steator. Conway, Curus R		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or ampered 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	
s 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 ITs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
ppropriate sample containers are used.	True	
sample bottles are completely filled.	True	
sample Preservation Verified	True	
here is sufficient vol. for all requested analyses, incl. any requested //s/MSDs	True	
OA sample vials do not have headspace or bubble is <6mm (1/4") in liameter.	True	
necessary, staff have been informed of any short hold time or quick TAT eeds	True	
fultiphasic samples are not present.	True	
amples 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	

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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: 480-113916-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

New York State D.E.C. 270 Michigan Avenue Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by: 3/7/2017 2:45:24 PM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864

orlette.johnson@testamericainc.com

LINKS

Review your project results through

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Have a Question?



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

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

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

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

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Joseph V. gireomorge

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Joe Giacomazza Project Management Assistant II

3/7/2017 2:45:24 PM

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Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-113916-1

Table of Contents

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

Qualifiers

GC/MS VOA

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
Qualifier	Qualifier	Description

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

Glossary

CNF

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

DER Duplicate error ratio (normalized absolute difference)

Contains no Free Liquid

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)

TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

Job ID: 480-113916-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-113916-1

Receipt

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

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-345334 recovered above the upper control limit for 2-Hexanone. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-113916-1).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted due to the abundance of non-target analytes: Pre-Carbon (480-113916-2). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-113916-2) and OUTSIDE SUMP (480-113916-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-113916-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-113916-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 02/24/17 12:30 Date Received: 02/24/17 13:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	MD		1.0	0.82	ug/L			02/26/17 14:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/26/17 14:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/26/17 14:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/26/17 14:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/26/17 14:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/26/17 14:25	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			02/26/17 14:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/26/17 14:25	1
2-Hexanone	ND		5.0	1.2	ug/L			02/26/17 14:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/26/17 14:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/26/17 14:25	1
Acetone	4.3	J	10	3.0	ug/L			02/26/17 14:25	1
Benzene	ND		1.0	0.41	ug/L			02/26/17 14:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/26/17 14:25	1
Bromoform	ND		1.0	0.26	ug/L			02/26/17 14:25	1
Bromomethane	ND		1.0	0.69	ug/L			02/26/17 14:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/26/17 14:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/26/17 14:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/26/17 14:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/26/17 14:25	1
Chloroethane	ND		1.0	0.32				02/26/17 14:25	1
Chloroform	ND		1.0	0.34	ug/L			02/26/17 14:25	1
Chloromethane	ND		1.0	0.35	ug/L			02/26/17 14:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/26/17 14:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/26/17 14:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/26/17 14:25	1
Styrene	ND		1.0	0.73	ug/L			02/26/17 14:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/26/17 14:25	1
Toluene	ND		1.0	0.51	ug/L			02/26/17 14:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/26/17 14:25	1
Trichloroethene	ND		1.0	0.46	ug/L			02/26/17 14:25	1
Vinyl chloride	ND		1.0	0.90				02/26/17 14:25	1
Vinyl acetate	ND		5.0		ug/L			02/26/17 14:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/26/17 14:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		77 - 120			_		02/26/17 14:25	1

Made al. 04	004D V-L	-4! - 0	0	(00)
wetnoa: 80	UZ1B - VOI	atile Organic	Compounds	(GC)

Toluene-d8 (Surr)

4-Bromofluorobenzene (Surr)

Method: 8021B - Volatile Organic Con	npounds	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/26/17 00:04	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/26/17 00:04	1
Benzene	0.069	J	0.20	0.023	ug/L			02/26/17 00:04	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/26/17 00:04	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/26/17 00:04	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/26/17 00:04	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/26/17 00:04	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/26/17 00:04	1

80 - 120

73 - 120

100

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TestAmerica Buffalo

02/26/17 14:25

02/26/17 14:25

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3/7/2017

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

Lab Sample ID: 480-113916-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 02/24/17 12:30 Date Received: 02/24/17 13:50

Analyte

рН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			02/26/17 00:04	1
o-Xylene	ND		0.20	0.027	ug/L			02/26/17 00:04	1
p-Cymene	ND		0.20	0.030	ug/L			02/26/17 00:04	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/26/17 00:04	1
Toluene	ND		0.20	0.036	ug/L			02/26/17 00:04	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/26/17 00:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129					02/26/17 00:04	1
4-Bromofluorobenzene	92		64 - 128					02/26/17 00:04	1
- Method: 200.7 Rev 4.4 - Metal	s (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50.0	19.3	ug/L		02/27/17 09:40	02/27/17 17:22	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0050	mg/L		02/28/17 04:05	03/01/17 10:12	

RL

0.1

RL Unit

0.1 SU

D

Prepared

Analyzed

02/26/17 13:37

Dil Fac

Result Qualifier

7.6 HF

Client: New York State D.E.C.

Date Received: 02/24/17 13:50

Xylenes, Total

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

Lab Sample ID: 480-113916-2

02/28/17 14:55

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 02/24/17 12:45

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

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

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0.54 ug/L

Method: 200.7 Rev 4.4 - Metals	s (ICP)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	86400	500	100	ug/L		02/27/17 09:40	02/27/17 17:39	1
Iron	628	50.0	19.3	ug/L		02/27/17 09:40	02/27/17 17:39	1
Magnesium	34000	200	43.4	ug/L		02/27/17 09:40	02/27/17 17:39	1
Potassium	2480	500	100	ug/L		02/27/17 09:40	02/27/17 17:39	1
Sodium	42900	1000	324	ug/L		02/27/17 09:40	02/27/17 17:39	1

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

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3/7/2017

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

Lab Sample ID: 480-113916-3

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 02/24/17 12:35 Date Received: 02/24/17 13:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/28/17 13:51	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/28/17 13:51	1
Benzene	0.057	J	0.20	0.023	ug/L			02/28/17 13:51	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/28/17 13:51	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/28/17 13:51	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/28/17 13:51	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/28/17 13:51	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/28/17 13:51	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/28/17 13:51	1
o-Xylene	ND		0.20	0.027	ug/L			02/28/17 13:51	1
p-Cymene	ND		0.20	0.030	ug/L			02/28/17 13:51	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/28/17 13:51	1
Toluene	0.037	J	0.20	0.036	ug/L			02/28/17 13:51	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/28/17 13:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 129			-		02/28/17 13:51	1
4-Bromofluorobenzene	86		64 - 128					02/28/17 13:51	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

Lab Sample ID: 480-113916-4

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 02/24/17 12:40 Date Received: 02/24/17 13:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			02/28/17 14:23	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			02/28/17 14:23	1
Benzene	ND		0.20	0.023	ug/L			02/28/17 14:23	1
Ethylbenzene	ND		0.20	0.029	ug/L			02/28/17 14:23	1
Isopropylbenzene	ND		0.20	0.027	ug/L			02/28/17 14:23	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			02/28/17 14:23	1
m,p-Xylene	ND		0.40	0.054	ug/L			02/28/17 14:23	1
n-Butylbenzene	ND		0.20	0.031	ug/L			02/28/17 14:23	1
n-Propylbenzene	ND		0.20	0.13	ug/L			02/28/17 14:23	1
o-Xylene	ND		0.20	0.027	ug/L			02/28/17 14:23	1
p-Cymene	ND		0.20	0.030	ug/L			02/28/17 14:23	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/28/17 14:23	1
Toluene	ND		0.20	0.036	ug/L			02/28/17 14:23	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/28/17 14:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 129			-		02/28/17 14:23	1
4-Bromofluorobenzene	85		64 - 128					02/28/17 14:23	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

Lab Sample ID: 480-113916-5

Matrix: Water

Client Sample ID: OUTSIDE SUMP

Date Collected: 02/24/17 12:55 Date Received: 02/24/17 13:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			02/25/17 21:56	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			02/25/17 21:56	500
Benzene	2300		100	12	ug/L			02/25/17 21:56	500
Ethylbenzene	210		100	14	ug/L			02/25/17 21:56	500
Isopropylbenzene	ND		100	14	ug/L			02/25/17 21:56	500
Methyl tert-butyl ether	ND		200	22	ug/L			02/25/17 21:56	500
m,p-Xylene	85	J	200	27	ug/L			02/25/17 21:56	500
n-Butylbenzene	ND		100	15	ug/L			02/25/17 21:56	500
n-Propylbenzene	ND		100	65	ug/L			02/25/17 21:56	500
o-Xylene	ND		100	14	ug/L			02/25/17 21:56	500
p-Cymene	ND		100	15	ug/L			02/25/17 21:56	500
sec-Butylbenzene	ND		100	10	ug/L			02/25/17 21:56	500
Toluene	450		100	18	ug/L			02/25/17 21:56	500
Xylenes, Total	85	J	300	27	ug/L			02/25/17 21:56	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 129			-		02/25/17 21:56	500
4-Bromofluorobenzene	89		64 - 128					02/25/17 21:56	500

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-113916-1

Lab Sample ID: 480-113916-2

Lab Sample ID: 480-113916-3

Lab Sample ID: 480-113916-5

Matrix: Wastewater

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 02/24/17 12:30 Date Received: 02/24/17 13:50

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

Client Sample ID: Pre-Carbon

	: 02/24/17 12:4 : 02/24/17 13:5								Matrix: Wastewater
_	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	8021B		10	345483	02/28/17 14:55	JLS	TAL BUF	_
T		00015		=0	0.45500	00/04/47 45 00		TAL DILE	

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

Client Sample ID: Post-Carbon 2

Date Collected: 02/24/17 12:35

Date Received: 02/24/17 13:50

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

Date Received: 02/24/17 13:50

Client Sample ID: Post-Carbon 1	Lab Sample ID: 480-113916-4
Date Collected: 02/24/17 12:40	Matrix: Water

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

Client Sample ID: OUTSIDE SUMP

Date Collected: 02/24/17 12:55

Date Received: 02/24/17 13:50

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

TestAmerica Buffalo

Matrix: Water

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Laboratory References:

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

TestAmerica Job ID: 480-113916-1

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Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

uthority	Program		EPA Region	Certification ID	Expiration Date
lew York	NELAP		2	10026	03-31-17 *
The following analytes a	are included in this report, bu	t certification is not offere	ed by the governing a	uthority:	
Analysis Method	Prep Method	Matrix	Analyt	е	
8021B		Wastewater	m,p-X	ylene	
8021B		Wastewater	o-Xyle	ne	
8021B		Water	m,p-X	ylene	
8021B		Water	o-Xyle	ne	
8260C		Wastewater	1,2-Di	chloroethene, Total	
SM 4500 H+ B		Wastewater	рН		

TestAmerica Job ID: 480-113916-1

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 $[\]ensuremath{^{\star}}$ Certification renewal pending - certification considered valid.

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-113916-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amberst NV 14228

phone 716.504.9852 fax 716.691.7991																			TestAmerica Laboratories, Inc.
Client Contact	Project Manager: Glenn May (NYSDEC)						Site Contact: Thomas Palmer							2:	24.	17			COC No:
Groundwater & Environmental Services, Inc	Tel/Fax: (Lab Contact: O. Johnson							Carrier:						of COCs			
495 Aero Drive Suite 3		Time						8021									Job No.		
Cheektowaga, NY 14225	Calenda	r(C) or Wo	n (r	- _			2	- V									I		
(800) 287-7857 Phone	_	AT if different			l j	-		Mo	0										
(866) 902-2187 FAX	X			Į	etho		j	list									SDG No.		
Project Name: NYSDEC Gatown WWTP] \square	1	week			900	I M		131	ARS	Tal								2900
Site: 915171			ا ا	Loca	Į.	TC	ST	To I								13000 C			
P O # Callout 120597			l day			du N	(a)	alini	_	0	pinide	-							MAKE:
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Rittered Sample 300.0 28D (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron 8260B - (MOD) TCI list OI M04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total SM4500 H+-pH	1							480-113916 COC
Post-Carbon 3	2.2417		Grab	w	9	N			x x	x	x x								
Post-Carbon 2		1235	Grab	w	3	N				x									
Post-Carbon 1		1240	Grab	w	3	N				x									11.50
Pre-Carbon		1245	Grab	w	6	N X	x	x		·x					.				
Inside / Outside Sump	1	255	Grab	w	3	N				x									
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2770						П	T	П		\Box		П				T	П	\top	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaC	OH; 6= Other							П				\Box		\top	T	1			
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)														
Non-Hazard Flammable Skin Irritant	Poison B	ĘX	Inknown				\Box_F	Retur	п То (Client		\Box_D	ispos	al By	Lab		\Box_{A}	Archiv	re For Months
Special Instructions/QC Requirements & Comments:																			
Relinguished String	Company	£5	Date/Time: / 1550			Received by:						Company: TABA						Date/Time: 1350	
Relinquished by:	Company:	Date/Tin	Received by:							Company:						Date/Time:			
Į.					Received by:						Company:								
Relinquished by:	Company:			Date/Tin	ne.	Re	ceive	d by:		_			_	Com	many.		-	V	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: 480-113916-1

Login Number: 113916 List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

ordator. Commay, Gartio IX		
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	

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Invoice/Credit No.	48292883	Invoice Date	March 30, 2017
Terms	See Below	Federal Tax ID	23-2919996
Remit to	TestAmerica Laboratories, Inc. PO BOX 204290, Dallas, TX 75320-429		

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

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

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



Invoice/Credit No.	48292883		Invo	oice Date	March 30, 2017		
Terms	See Below			al Tax ID	23-2919996		
Remit to	TestAmerica	Laboratories, Inc. PO BOX 204290, Dallas, TX 75320-429	0				
Job No.	Item #	Job Description		Sample Date	Quantity	Unit Price	Amount
		Method/Test Descripti	on				
	WT-21-C	300.0 - Sulfate			1.00	15.00	15.00
	WT-68-C	335.4 - Cyanide, Total			1.00	30.00	30.00
						Subtotal	912.38
		NYS DEC 2012 3.16% C.P.I. PRICE ADJUSTMENT					941.21
		NYS DEC 2013 2.07% C.P.I. PRICE ADJUSTMENT					960.69
		NYS DEC 2014 1.46% C.P.I. PRICE ADJUSTMENT					974.72
		NYS DEC 2015 1.62% C.P.I. PRICE ADJUSTMENT					990.51
		NYS DEC 2016 0.12% C.P.I. PRICE ADJUSTMENT					991.70
		With TestAmerica DEC NYS Multiplier 32%					317.34
Project	t Number	Client Number		Project Manage	er	Subtotal	\$317.34
48002525		107596	Orlette John		i		
Latest Samp	le Receipt Date	Latest Report Date		Phone Number	r	Total	\$317.34
03/17/2017	•	03/30/2017	(484) 685-0	864			

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



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: 480-114759-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

New York State D.E.C. 270 Michigan Avenue Buffalo, New York 14203

Attn: Mr. Richard Dana

Joseph V. giacomagga

Authorized for release by: 3/30/2017 9:25:48 AM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864

orlette.johnson@testamericainc.com

.....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.

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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.

Joeph V. Gireonagger

Joe Giacomazza Project Management Assistant II 3/30/2017 9:25:48 AM Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-114759-1

Table of Contents

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Receipt Checklists	17

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
1	Describing lead the DI but acceptanthes as a small to the MDI and the acceptanting is a

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

Metals

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.

Eisted 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)

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Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

Job ID: 480-114759-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-114759-1

Receipt

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

GC/MS VOA

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

HPLC/IC

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

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-114759-2) and OUTSIDE SUMP (480-114759-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-114759-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-114759-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 03/17/17 09:30 Date Received: 03/17/17 10:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/20/17 11:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/20/17 11:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/20/17 11:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/20/17 11:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/20/17 11:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/20/17 11:47	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			03/20/17 11:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/20/17 11:47	1
2-Hexanone	ND		5.0	1.2	ug/L			03/20/17 11:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/20/17 11:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/20/17 11:47	1
Acetone	ND		10	3.0	ug/L			03/20/17 11:47	1
Benzene	ND		1.0	0.41	ug/L			03/20/17 11:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/20/17 11:47	1
Bromoform	ND		1.0	0.26	ug/L			03/20/17 11:47	1
Bromomethane	ND		1.0	0.69	ug/L			03/20/17 11:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/20/17 11:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/20/17 11:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/20/17 11:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/20/17 11:47	1
Chloroethane	ND		1.0	0.32	ug/L			03/20/17 11:47	1
Chloroform	ND		1.0	0.34	ug/L			03/20/17 11:47	1
Chloromethane	ND		1.0	0.35	ug/L			03/20/17 11:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/20/17 11:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/20/17 11:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/20/17 11:47	1
Styrene	ND		1.0	0.73	ug/L			03/20/17 11:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/20/17 11:47	1
Toluene	ND		1.0	0.51	ug/L			03/20/17 11:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/20/17 11:47	1
Trichloroethene	ND		1.0	0.46	ug/L			03/20/17 11:47	1
Vinyl chloride	ND		1.0		ug/L			03/20/17 11:47	1
Vinyl acetate	ND		5.0	0.85	ug/L			03/20/17 11:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/20/17 11:47	1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120	_		03/20/17 11:47	1
Toluene-d8 (Surr)	104		80 - 120			03/20/17 11:47	1
4-Bromofluorobenzene (Surr)	108		73 - 120			03/20/17 11:47	1

Method: 8021B - Volatile Organic Compounds (GC)

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	Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	1,2,4-Trimethylbenzene	ND	0.20	0.035	ug/L			03/22/17 13:26	1
	1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			03/22/17 13:26	1
	Benzene	ND	0.20	0.023	ug/L			03/22/17 13:26	1
	Ethylbenzene	ND	0.20	0.029	ug/L			03/22/17 13:26	1
	Isopropylbenzene	ND	0.20	0.027	ug/L			03/22/17 13:26	1
	Methyl tert-butyl ether	ND	0.40	0.044	ug/L			03/22/17 13:26	1
	m,p-Xylene	ND	0.40	0.054	ug/L			03/22/17 13:26	1
	n-Butylbenzene	ND	0.20	0.031	ug/L			03/22/17 13:26	1

TestAmerica Buffalo

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

Lab Sample ID: 480-114759-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 03/17/17 09:30 Date Received: 03/17/17 10:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			03/22/17 13:26	1
o-Xylene	ND		0.20	0.027	ug/L			03/22/17 13:26	1
p-Cymene	ND		0.20	0.030	ug/L			03/22/17 13:26	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/22/17 13:26	1
Toluene	ND		0.20	0.036	ug/L			03/22/17 13:26	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/22/17 13:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 129			-		03/22/17 13:26	1
4-Bromofluorobenzene	91		64 - 128					03/22/17 13:26	1
Method: 200.7 Rev 4.4 - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Iron		25.8	J	50.0	19.3	ug/L		03/20/17 09:29	03/21/17 03:38	1
Ger	neral Chemistry	Pocult	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Anai	yte	Result	Qualifier	KL	MDL	Unit		Prepared	Analyzed	DII Fac
Cya	nide, Total	0.031		0.010	0.0050	mg/L		03/21/17 13:20	03/22/17 10:28	1
Anal	yte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН		7.7	HF	0.1	0.1	SU			03/21/17 20:26	1
Tem	perature	21.0	HF	0.001	0.001	Degrees C			03/21/17 20:26	1

Client: New York State D.E.C.

Date Received: 03/17/17 10:50

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

Lab Sample ID: 480-114759-2

Matrix: Wastewater

Client Sample	D: Pre-Carbon
Date Collected:	03/17/17 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	6.7	J	10	1.7	ug/L			03/22/17 15:35	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			03/22/17 15:35	50
Benzene	2600		10	1.2	ug/L			03/22/17 15:35	50
Ethylbenzene	260		10	1.4	ug/L			03/22/17 15:35	50
Isopropylbenzene	ND		10	1.4	ug/L			03/22/17 15:35	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			03/22/17 15:35	50
m,p-Xylene	93		20	2.7	ug/L			03/22/17 15:35	50
n-Butylbenzene	ND		10	1.5	ug/L			03/22/17 15:35	50
n-Propylbenzene	ND		10	6.5	ug/L			03/22/17 15:35	50
o-Xylene	63		10	1.4	ug/L			03/22/17 15:35	50
p-Cymene	ND		10	1.5	ug/L			03/22/17 15:35	50
sec-Butylbenzene	ND		10	1.0	ug/L			03/22/17 15:35	50
Toluene	590		10	1.8	ug/L			03/22/17 15:35	50
Xylenes, Total	160		30	2.7	ug/L			03/22/17 15:35	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129			-		03/22/17 15:35	50
4-Bromofluorobenzene	102		64 - 128					03/22/17 15:35	50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	123000		500	100	ug/L		03/20/17 09:29	03/21/17 03:42	1
Iron	2390		50.0	19.3	ug/L		03/20/17 09:29	03/21/17 03:42	1
Magnesium	51400		200	43.4	ug/L		03/20/17 09:29	03/21/17 03:42	1
Potassium	3800		500	100	ug/L		03/20/17 09:29	03/21/17 03:42	1
Sodium	66500		1000	324	ug/L		03/20/17 09:29	03/21/17 03:42	1

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

Lab Sample ID: 480-114759-3

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 03/17/17 09:40 Date Received: 03/17/17 10:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/22/17 13:58	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/22/17 13:58	1
Benzene	ND		0.20	0.023	ug/L			03/22/17 13:58	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/22/17 13:58	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/22/17 13:58	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/22/17 13:58	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/22/17 13:58	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/22/17 13:58	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/22/17 13:58	1
o-Xylene	ND		0.20	0.027	ug/L			03/22/17 13:58	1
p-Cymene	ND		0.20	0.030	ug/L			03/22/17 13:58	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/22/17 13:58	1
Toluene	ND		0.20	0.036	ug/L			03/22/17 13:58	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/22/17 13:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	109		63 - 129			-		03/22/17 13:58	1
4-Bromofluorobenzene	98		64 - 128					03/22/17 13:58	1

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Client: New York State D.E.C.

Date Received: 03/17/17 10:50

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

Lab Sample ID: 480-114759-4

Matrix: Water

Client Sample ID: Post-Carbon 1 Date Collected: 03/17/17 09:50

Method: 8021B - Volatile Or	ganic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/22/17 14:30	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/22/17 14:30	1
Benzene	0.13	J	0.20	0.023	ug/L			03/22/17 14:30	1
Ethylbenzene	0.054	J	0.20	0.029	ug/L			03/22/17 14:30	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/22/17 14:30	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/22/17 14:30	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/22/17 14:30	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/22/17 14:30	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/22/17 14:30	1
o-Xylene	ND		0.20	0.027	ug/L			03/22/17 14:30	1
p-Cymene	ND		0.20	0.030	ug/L			03/22/17 14:30	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/22/17 14:30	1
Toluene	0.051	J	0.20	0.036	ug/L			03/22/17 14:30	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/22/17 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		63 - 129			-		03/22/17 14:30	1
4-Bromofluorobenzene	93		64 - 128					03/22/17 14:30	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

Lab Sample ID: 480-114759-5

Matrix: Water

Client Sample ID: OUTSIDE SUMP

Date Collected: 03/17/17 10:15 Date Received: 03/17/17 10:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	35	J	100	17	ug/L			03/22/17 15:02	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			03/22/17 15:02	500
Benzene	4600		100	12	ug/L			03/22/17 15:02	500
Ethylbenzene	380		100	14	ug/L			03/22/17 15:02	500
Isopropylbenzene	ND		100	14	ug/L			03/22/17 15:02	500
Methyl tert-butyl ether	ND		200	22	ug/L			03/22/17 15:02	500
m,p-Xylene	150	J	200	27	ug/L			03/22/17 15:02	500
n-Butylbenzene	ND		100	15	ug/L			03/22/17 15:02	500
n-Propylbenzene	ND		100	65	ug/L			03/22/17 15:02	500
o-Xylene	77	J	100	14	ug/L			03/22/17 15:02	500
p-Cymene	ND		100	15	ug/L			03/22/17 15:02	500
sec-Butylbenzene	ND		100	10	ug/L			03/22/17 15:02	500
Toluene	840		100	18	ug/L			03/22/17 15:02	500
Xylenes, Total	230	J	300	27	ug/L			03/22/17 15:02	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	114		63 - 129			-		03/22/17 15:02	500
4-Bromofluorobenzene	105		64 - 128					03/22/17 15:02	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-114759-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 03/17/17 09:30 Date Received: 03/17/17 10:50

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

Client Sample ID: Pre-Carbon

Date Collected: 03/17/17 10:00 Date Received: 03/17/17 10:50 Lab Sample ID: 480-114759-2

Matrix: Wastewater

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

Client Sample ID: Post-Carbon 2

Date Collected: 03/17/17 09:40 Date Received: 03/17/17 10:50

Lab	Sample	ID:	480-1	14759-3
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Matrix: Water

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

Client Sample ID: Post-Carbon 1

Date Collected: 03/17/17 09:50 Date Received: 03/17/17 10:50

Date Received: 03/17/17 10:50

Lab Sample ID: 480-114759-4

Matrix: Water

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

Client Sample ID: OUTSIDE SUMP

Date Collected: 03/17/17 10:15

Lab Sample ID: 480-114759-5

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B	_	500	348418	03/22/17 15:02	JLS	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-114759-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

thority	Program		EPA Region	Certification ID	Expiration Date
w York	NELAP		2	10026	03-31-17 *
The following analytes	are included in this report, but	t certification is not offere	ed by the governing a	authority:	
Analysis Method	Prep Method	Matrix	Analyt	te	
8021B		Wastewater	m,p-X	ylene	
8021B		Wastewater	o-Xyle	ene	
8021B		Water	m,p-X	ylene	
8021B		Water	o-Xyle	ene	
8260C		Wastewater	1,2-Di	chloroethene, Total	
SM 4500 H+ B		Wastewater	рН		
SM 4500 H+ B		Wastewater	Temp	erature	

 $^{^{\}star}$ Certification renewal pending - certification considered valid.

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-114759-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Amherst NY 14228

phone 716.504.9852 fax 716.691.7991															ŝ	ş				TestAmerica Laboratories, Inc.
Client Contact	Project M	anager: Gle	nn May (NY	(SDEC)		Site (Conta	ct: T	homa	s Pa	lmer		Da	ite:	3	17	7	_		COC No:
Groundwater & Environmental Services, Inc	Tel/Fax: (716) 851-72:	20			Lab	Conta	ect: C). Joh	nson	1		C	arrier	: '	•				of COCs
495 Aero Drive Suite 3		Analysis T	urnaround	Time						100	1700			Т			\top			Job No.
Cheektowaga, NY 14225	Calenda	r(C) or We	ork Days (W)					,	۲. ۱	<u>.</u>									
(800) 287-7857 Phone	T	AT if different	from Below			1				M 2	2									E 88952
(866) 902-2187 FAX		2	2 weeks			Š	t of													SDG
Project Name: NYSDEC Gatown WWTP	7 🗆	1	week			8				S S	<u> </u>									
Site: 915171] 🗆		2 days				Loca	ty			Le la	ᇤ								2000
P O # Callout 120597			1 day			Tal S		alini] <u>-</u>								480-114759 COC
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	200.7 - (MOD) Local Method	310.2 - Alkalinity	200,7 - Iron	8260B - (MOD) TCL list OLM04,2 8021B - (MOD) STAPS list - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+-pH								Sample Specific Notes:
Post-Carbon 3	317	9930	Grab	w	9	N			X :	X Z	x x	X								
Post-Carbon 2	1	0490	Grab	w	3	N				2	x									
Post-Carbon 1	Wilsonson	0950	Grab	w	3	N				2	X									
Pre-Carbon	Williams	1000	Grab	w	6	N 3	$\mathbf{x} \mid \mathbf{x}$	X		2	x									
Inside/ Outside Sump	and the second	1015	Grab	w	3	N				2	X									
	1																			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=Na(OH; 6= Othe	r																		
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison E		Inknown	K		S	ampl	e Di s Retui	s pos rn To	a i (A Clie	A fee nt	may Ø	be as Dis	sess posa	ed if I By L	sam ab	oles a	are re	e taine Archiv	ed longer than 1 month) re For Months
Special Instructions/QC Requirements & Comments:		***													_					
Relinquished by	Company:	\$5		Date/Tir	ne: 1050	R	eceive	ed by:	h	Ñ	2	عد			Com	pany:	T.	R		Date/Time: 3-17-/7 1050
Relinquished by:	Company:			Date/Tir	ne:	R	eceive	d by:					6		Com	oany:				Date/Time:
Relinquished by:	Company:			Date/Tir	ne:	R	eceive	ed by:	:						Com	oany:			-	Date/Time:
				*									z	//	r1		. \		F	Form No. CA-C-WI-002, dated 04/07/20

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Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-114759-1

Login Number: 114759 List Source: TestAmerica Buffalo

List Number: 1

Creator: Conway, Curtis R

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

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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: 480-116722-1

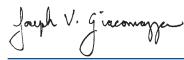
Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

New York State D.E.C. 270 Michigan Avenue Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by: 5/5/2017 10:32:52 AM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864 orlette.johnson@testamericainc.com

·····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.

Joe Giacomazza

Project Management Assistant II

5/5/2017 10:32:52 AM

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-116722-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

LCS or LCSD is outside acceptance limits.

GC VOA

Qualifier **Qualifier Description**

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

General Chemistry

Qualifier **Qualifier Description**

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

В 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

Duplicate error ratio (normalized absolute difference) DER

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

Not detected at the reporting limit (or MDL or EDL if shown) ND

Practical Quantitation Limit **PQL**

QC **Quality Control** RER Relative error ratio

RI Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

Job ID: 480-116722-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-116722-1

Receipt

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

Receipt Exceptions

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

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-355138 recovered above the upper control limit for Chlorodibromomethane and Bromoform. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-116722-1).

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

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-116722-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Outside Sump (480-116722-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-116722-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Date Collected: 04/21/17 11:00 Date Received: 04/21/17 12:25 Lab Sample ID: 480-116722-1

Matrix: Wastewater

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.82	ug/L			05/02/17 18:54	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			05/02/17 18:54	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			05/02/17 18:54	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			05/02/17 18:54	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			05/02/17 18:54	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			05/02/17 18:54	1
1,2-Dichloroethene, Total	ND	2.0	0.81	ug/L			05/02/17 18:54	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			05/02/17 18:54	1
2-Hexanone	ND	5.0	1.2	ug/L			05/02/17 18:54	1
2-Butanone (MEK)	ND	10	1.3	ug/L			05/02/17 18:54	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			05/02/17 18:54	1
Acetone	ND	10	3.0	ug/L			05/02/17 18:54	1
Benzene	ND	1.0	0.41	ug/L			05/02/17 18:54	1
Bromodichloromethane	ND	1.0	0.39	ug/L			05/02/17 18:54	1
Bromoform	ND *	1.0	0.26	ug/L			05/02/17 18:54	1
Bromomethane	ND	1.0	0.69	ug/L			05/02/17 18:54	1
Carbon disulfide	ND	1.0	0.19	ug/L			05/02/17 18:54	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			05/02/17 18:54	1
Chlorobenzene	ND	1.0	0.75	ug/L			05/02/17 18:54	1
Dibromochloromethane	ND *	1.0	0.32	ug/L			05/02/17 18:54	1
Chloroethane	ND	1.0	0.32	ug/L			05/02/17 18:54	1
Chloroform	ND	1.0	0.34	ug/L			05/02/17 18:54	1
Chloromethane	ND	1.0	0.35	ug/L			05/02/17 18:54	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			05/02/17 18:54	1
Ethylbenzene	ND	1.0	0.74	ug/L			05/02/17 18:54	1
Methylene Chloride	ND	1.0	0.44	ug/L			05/02/17 18:54	1
Styrene	ND	1.0	0.73	ug/L			05/02/17 18:54	1
Tetrachloroethene	ND	1.0	0.36	ug/L			05/02/17 18:54	1
Toluene	ND	1.0	0.51	ug/L			05/02/17 18:54	1
trans-1,3-Dichloropropene	ND	1.0	0.37	ug/L			05/02/17 18:54	1
Trichloroethene	ND	1.0	0.46	ug/L			05/02/17 18:54	1
Vinyl chloride	ND	1.0	0.90	ug/L			05/02/17 18:54	1
Vinyl acetate	ND	5.0	0.85	ug/L			05/02/17 18:54	1
Xylenes, Total	ND	2.0	0.66	ug/L			05/02/17 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		77 - 120		05/02/17 18:54	1
Toluene-d8 (Surr)	84		80 - 120		05/02/17 18:54	1
4-Bromofluorobenzene (Surr)	90		73 - 120		05/02/17 18:54	1

Method:	8021B ·	· Volatile	Organic	Compounds	(GC)

Michiga. 002 ID - Volatile Orga	ine compounds (,00,							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			04/25/17 14:16	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/25/17 14:16	1
Benzene	ND		0.20	0.023	ug/L			04/25/17 14:16	1
Ethylbenzene	ND		0.20	0.029	ug/L			04/25/17 14:16	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/25/17 14:16	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/25/17 14:16	1
m,p-Xylene	ND		0.40	0.054	ug/L			04/25/17 14:16	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/25/17 14:16	1
A contract of the contract of									

TestAmerica Buffalo

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5/5/2017

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

Client Sample ID: Post-Carbon 3

Date Collected: 04/21/17 11:00 Date Received: 04/21/17 12:25

Analyte

Temperature

рΗ

Lab Sample ID: 480-116722-1

Analyzed

04/27/17 21:44

04/27/17 21:44

Prepared

Dil Fac

Matrix: Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			04/25/17 14:16	1
o-Xylene	ND		0.20	0.027	ug/L			04/25/17 14:16	1
p-Cymene	ND		0.20	0.030	ug/L			04/25/17 14:16	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/25/17 14:16	1
Toluene	ND		0.20	0.036	ug/L			04/25/17 14:16	1
Xylenes, Total	ND		0.60	0.054	ug/L			04/25/17 14:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129					04/25/17 14:16	1
4-Bromofluorobenzene	92		64 - 128					04/25/17 14:16	1
Method: 200.7 Rev 4.4 - Met	als (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	58.2		50.0	19.3	ug/L		04/23/17 08:45	04/29/17 00:27	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.043		0.010	0.0050	mg/L		05/03/17 16:50	05/04/17 11:15	

RL

0.1

0.001

RL Unit

0.1 SU

0.001 Degrees C

Result Qualifier

7.5 HF

20.0 HF

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

Lab Sample ID: 480-116722-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 04/21/17 11:05 Date Received: 04/21/17 12:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			04/25/17 14:48	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/25/17 14:48	1
Benzene	0.34		0.20	0.023	ug/L			04/25/17 14:48	1
Ethylbenzene	ND		0.20	0.029	ug/L			04/25/17 14:48	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/25/17 14:48	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/25/17 14:48	1
m,p-Xylene	ND		0.40	0.054	ug/L			04/25/17 14:48	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/25/17 14:48	1
n-Propylbenzene	ND		0.20	0.13	ug/L			04/25/17 14:48	1
o-Xylene	ND		0.20	0.027	ug/L			04/25/17 14:48	1
p-Cymene	ND		0.20	0.030	ug/L			04/25/17 14:48	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/25/17 14:48	1
Toluene	0.066	J	0.20	0.036	ug/L			04/25/17 14:48	1
Xylenes, Total	ND		0.60	0.054	ug/L			04/25/17 14:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 129			-		04/25/17 14:48	1
4-Bromofluorobenzene	88		64 - 128					04/25/17 14:48	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

Lab Sample ID: 480-116722-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 04/21/17 11:10 Date Received: 04/21/17 12:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND		0.20	0.035	ug/L			04/25/17 15:21	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/25/17 15:21	1
Benzene	54		0.20	0.023	ug/L			04/25/17 15:21	1
Ethylbenzene	2.3		0.20	0.029	ug/L			04/25/17 15:21	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/25/17 15:21	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/25/17 15:21	1
m,p-Xylene	0.38	J	0.40	0.054	ug/L			04/25/17 15:21	1
n-Butylbenzene	0.23		0.20	0.031	ug/L			04/25/17 15:21	1
n-Propylbenzene	ND		0.20	0.13	ug/L			04/25/17 15:21	1
o-Xylene	0.57		0.20	0.027	ug/L			04/25/17 15:21	1
p-Cymene	ND		0.20	0.030	ug/L			04/25/17 15:21	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/25/17 15:21	1
Toluene	6.1		0.20	0.036	ug/L			04/25/17 15:21	1
Xylenes, Total	0.95		0.60	0.054	ug/L			04/25/17 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129			-		04/25/17 15:21	1
4-Bromofluorobenzene	91		64 - 128					04/25/17 15:21	1

5/5/2017

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Client: New York State D.E.C.

Date Received: 04/21/17 12:25

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

Lab Sample ID: 480-116722-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 04/21/17 11:15

Method: 200.7 Rev 4.4 - Metals	s (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		500	100	ug/L		04/23/17 08:45	04/29/17 00:31	1
Iron	6030		50.0	19.3	ug/L		04/23/17 08:45	04/29/17 00:31	1
Magnesium	44200		200	43.4	ug/L		04/23/17 08:45	04/29/17 00:31	1
Potassium	3980		500	100	ug/L		04/23/17 08:45	04/29/17 00:31	1
Sodium	56000		1000	324	ug/L		04/23/17 08:45	04/29/17 00:31	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	121		10.0	5.6	mg/L			05/04/17 10:02	20
Sulfate	129		40.0	7.0	mg/L			05/04/17 10:02	20
Alkalinity, Total	342	В	40.0	16.0	mg/L			05/01/17 12:00	4

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

Lab Sample ID: 480-116722-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 04/21/17 11:30 Date Received: 04/21/17 12:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			04/25/17 15:53	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			04/25/17 15:53	500
Benzene	1800		100	12	ug/L			04/25/17 15:53	500
Ethylbenzene	150		100	14	ug/L			04/25/17 15:53	500
Isopropylbenzene	ND		100	14	ug/L			04/25/17 15:53	500
Methyl tert-butyl ether	ND		200	22	ug/L			04/25/17 15:53	500
m,p-Xylene	55	J	200	27	ug/L			04/25/17 15:53	500
n-Butylbenzene	ND		100	15	ug/L			04/25/17 15:53	500
n-Propylbenzene	ND		100	65	ug/L			04/25/17 15:53	500
o-Xylene	ND		100	14	ug/L			04/25/17 15:53	500
p-Cymene	ND		100	15	ug/L			04/25/17 15:53	500
sec-Butylbenzene	ND		100	10	ug/L			04/25/17 15:53	500
Toluene	350		100	18	ug/L			04/25/17 15:53	500
Xylenes, Total	55	J	300	27	ug/L			04/25/17 15:53	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		63 - 129			-		04/25/17 15:53	500
4-Bromofluorobenzene	91		64 - 128					04/25/17 15:53	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-116722-1

Lab Sample ID: 480-116722-2

Lab Sample ID: 480-116722-3

Lab Sample ID: 480-116722-5

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 04/21/17 11:00 Date Received: 04/21/17 12:25

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

Client Sample ID: Post-Carbon 2

Date Collected: 04/21/17 11:05

Date Received: 04/21/17 12:25

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

Client Sample ID: Post-Carbon 1

Date Collected: 04/21/17 11:10

Date Received: 04/21/17 12:25

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

Client Sample ID: Pre-Carbon

Date Collected: 04/21/17 11:15

Date Received: 04/21/17 12:25

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

Client Sample ID: Outside Sump

Date Collected: 04/21/17 11:30

Date Received: 04/21/17 12:25

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

Laboratory References:

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

TestAmerica Buffalo

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Lab Sample ID: 480-116722-4

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-116722-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

uthority	Program		EPA Region	Identification Number	Expiration Date	
ew York	NELAP	NELAP		10026	03-31-18	
The following analytes	are included in this report, but	accreditation/certificatio	n is not offered by th	e governing authority:		
Analysis Method	Prep Method	Matrix	Analyt	е		
8021B		Wastewater	m,p-X	ylene		
8021B		Wastewater	o-Xyle	ne		
8021B		Water	m,p-X	ylene		
8021B		Water	o-Xyle	ne		
8260C		Wastewater	1,2-Di	chloroethene, Total		
SM 4500 H+ B		Wastewater	рН			
SM 4500 H+ B		Wastewater	Temne	erature		

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-116722-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



E LEADER IN ENVIRONMENTAL TESTING

Amherst, NY 14228 TestAmerica Laboratories, Inc. phone 716.504.9852 fax 716.691.7991 COC No: Project Manager: Glenn May (NYSDEC) Site Contact: Thomas Palmer Client Contact COCs Tel/Fax: (716) 851-7220 Lab Contact: O. Johnson Carrier: l of / Groundwater & Environmental Services, Inc Job No. **Analysis Turnaround Time** 495 Aero Drive Suite 3 8260B - (MOD) TCL list OLM04.2 8021B - (MOD) STARS list - VOA - 802 Calendar (C) or Work Days (W) Cheektowaga, NY 14225 (800) 287-7857 Phone TAT if different from Below 200.7 - (MOD) Local Method X SDG No. (866) 902-2187 FAX 2 weeks Project Name: NYSDEC Gatown WWTP 1 week Site: 915171 2 days P O # Callout 120597 1 day Sample Sample Sample Date Time Type Matrix Cont. Sample Identification 4/21 \mathbf{X} X Post-Carbon 3 Grab 1100 1105 Post-Carbon 2 W 3 Grab Post-Carbon 1 Grab W 3 X 1110 W $\mathbf{x} \mathbf{x} \mathbf{x}$ \mathbf{X} Pre-Carbon Grab 1130 Inside Outside Sump W 3 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) Unknown Disposal By Lab Archive For $\square_{Flammable}$ Return To Client Skin Irritant Special Instructions/QC Requirements & Comments: Received by: 225 4/21 1225 Date/Time: Relinquished by: Date/Time: Received by: Company: Company: Date/Time: Relinquished by:

5/5/2017

Page

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















Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-116722-1

Login Number: 116722 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

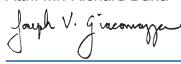
TestAmerica Job ID: 480-117157-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C. 270 Michigan Avenue Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by: 5/8/2017 1:52:35 PM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864

orlette.johnson@testamericainc.com

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.

Joseph V. giveonoge

Joe Giacomazza

Project Management Assistant II

5/8/2017 1:52:35 PM

Page 2 of 12

5/8/2017

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-117157-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-117157-1

3

Qualifiers

GC VOA

Qualifier Qualifier Descrip	otion
-----------------------------	-------

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.
¤	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

Not detected at the reporting limit (or MDL or EDL if shown) ND

PQL Practical Quantitation Limit

QC **Quality Control** Relative error ratio RER

RLReporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-117157-1

Job ID: 480-117157-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-117157-1

Receipt

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

GC/MS VOA

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

GC VOA

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

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

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Client: New York State D.E.C.

Date Received: 04/28/17 11:10

4-Bromofluorobenzene

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-117157-1

Lab Sample ID: 480-117157-1

05/03/17 22:54

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Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.1	J	10	1.7	ug/L			05/03/17 22:54	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			05/03/17 22:54	50
Benzene	2000		10	1.2	ug/L			05/03/17 22:54	50
Ethylbenzene	180		10	1.4	ug/L			05/03/17 22:54	50
Isopropylbenzene	ND		10	1.4	ug/L			05/03/17 22:54	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			05/03/17 22:54	50
m,p-Xylene	67		20	2.7	ug/L			05/03/17 22:54	50
n-Butylbenzene	ND		10	1.5	ug/L			05/03/17 22:54	50
n-Propylbenzene	ND		10	6.5	ug/L			05/03/17 22:54	50
o-Xylene	45		10	1.4	ug/L			05/03/17 22:54	50
p-Cymene	ND		10	1.5	ug/L			05/03/17 22:54	50
sec-Butylbenzene	ND		10	1.0	ug/L			05/03/17 22:54	50
Toluene	380		10	1.8	ug/L			05/03/17 22:54	50
Xylenes, Total	110		30	2.7	ug/L			05/03/17 22:54	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129					05/03/17 22:54	50

64 - 128

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Pre-Carbon

TestAmerica Job ID: 480-117157-1

Lab Sample ID: 480-117157-1

Matrix: Water

Date Collected: 04/28/17 11:00 Date Received: 04/28/17 11:10

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

Laboratory References:

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

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Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-117157-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Identification Number	Expiration Date			
New York	NELAP		2	10026	03-31-18			
The following analytes	:							
The following analytes	are included in this report, bu	t accreditation/certifica	tion is not offered by th	ne governing authority:				
Analysis Method	Prep Method	t accreditation/certifica Matrix	tion is not offered by th Analyt					
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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-117157-1

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

Protocol References:

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-117157-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991																1				TestAmerica Lah	norstories Inc	
Client Contact	Project Manager: Glenn May (NYSDEC)				Site Contact: Thomas Palmer Date:					Date: 4 28 17						TestAmerica Laboratories, Inc. COC No:						
Groundwater & Environmental Services, Inc		16) 851-722											Carrier:						of	COCs		
495 Aero Drive Suite 3		Analysis T	urnaround	Time		П	\top			2	171			П					П	Job No.		
Cheektowaga, NY 14225	Calenda	r(C) or Wo	ork Days (W)						2 2	9											
(800) 287-7857 Phone	TA	AT if different	from Below							VO.	2									p q	1005	
(866) 902-2187 FAX			weeks				thod			OI.	1							İ		SDG No		
Project Name: NYSDEC Gatown WWTP			week				Me Se			list P.S. I	2 -									201		
Site: 915171			2 days				loca oca	A		TCI	Tot									<u>Lida</u>	<u> </u>	
P O # Callout 120597			l day			mple		linit		8 8	nide,	+-bB								480-117	7157 COC	
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2 8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+-pH								Sample Sp	ecific Notes:	
Pre-Carbon	4/28	[100	Grab	w	3	N			П	2	X											
	110-0					\Box	+					H		\Box	+	++		-				
						\vdash	-		Н		+	H		\vdash	-	H	+		\vdash			
						Ш						Ш				Ш	\perp		Ш			
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					-	П	1			-					+	П			П			\neg
			<u> </u>			H	+			-	-	\vdash		\vdash	+	\vdash	_		Н			-
						Ш	4			_		\sqcup			_	\perp	\perp		Ш			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H; 6= Other					\neg														•		
Possible Hazard Identification						s	ampl	e Dis	spos	sal (A	A fee i	may	be/ass	esse	d if sa	mple	s are	retai	ned	longer than 1 mo	nth)	
Non-Hazard Flammable Skin Irritant	Poison B		Inknown				<u></u>	Retu	m To	o Cliei	nt	يما	Z Disp	osal i	3y Lal	<u> </u>		Arch	nive F	ForM	lonths	
Special Instructions/QC Requirements & Comments:																						
											2	,	,	To	2m	P	48	7 7	+			
Relinquished by 7	Company:	ES		Date/Tir	ne:	R	eceive	d by:	1	1		Y		1	ompa	ny:				Date/Time:	(((0	
Relinquished by:	Company:			Date/Tin	ne:	R	eceive	d by:	:			1/	-		ompa	ıy:				Date/Time:		\neg
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Form No. CA-C-WI-002, dated 04/07/2011



Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-117157-1

Login Number: 117157 List Source: TestAmerica Buffalo

List Number: 1 Creator: Kolb, Chris M

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

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-118651-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

New York State D.E.C. 270 Michigan Avenue Buffalo, New York 14203

Attn: Mr. Richard Dana



Authorized for release by: 6/12/2017 2:42:32 PM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864 orlette.johnson@testamericainc.com

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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.

Joseph V. gireonagger

Joe Giacomazza Project Management Assistant II 6/12/2017 2:42:32 PM Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-118651-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description

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

GC VOA

Qualifier Qualifier Description

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

Metals

B Compound was found in the blank and sample.

General Chemistry

 Qualifier
 Qualifier Description

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

B Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)
LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

Job ID: 480-118651-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-118651-1

Comments

No additional comments.

Receipt

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

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-360332 recovered outside acceptance criteria, low biased, for 2-Hexanone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-118651-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-118651-3), Pre-Carbon (480-118651-4) and Outside Pump (480-118651-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-118651-1).

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

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RL

MDL Unit

D

Prepared

Dil Fac

Lab Sample ID: 480-118651-1

Matrix: Wastewater

Analyzed

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

06/03/17 12:23

1,1,1-Trichloroethane	ND	1.0	0.82 ug/L	06/03/17 12:23	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21 ug/L	06/03/17 12:23	1
1,1,2-Trichloroethane	ND	1.0	0.23 ug/L	06/03/17 12:23	1
1,1-Dichloroethane	ND	1.0	0.38 ug/L	06/03/17 12:23	1
1,1-Dichloroethene	ND	1.0	0.29 ug/L	06/03/17 12:23	1
1,2-Dichloroethane	ND	1.0	0.21 ug/L	06/03/17 12:23	1
1,2-Dichloroethene, Total	ND	2.0	0.81 ug/L	06/03/17 12:23	1
1,2-Dichloropropane	ND	1.0	0.72 ug/L	06/03/17 12:23	1
2-Hexanone	ND	5.0	1.2 ug/L	06/03/17 12:23	1
2-Butanone (MEK)	ND	10	1.3 ug/L	06/03/17 12:23	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1 ug/L	06/03/17 12:23	1
Acetone	ND	10	3.0 ug/L	06/03/17 12:23	1
Benzene	ND	1.0	0.41 ug/L	06/03/17 12:23	1
Bromodichloromethane	ND	1.0	0.39 ug/L	06/03/17 12:23	1
Bromoform	ND	1.0	0.26 ug/L	06/03/17 12:23	1
Bromomethane	ND	1.0	0.69 ug/L	06/03/17 12:23	1
Carbon disulfide	ND	1.0	0.19 ug/L	06/03/17 12:23	1
Carbon tetrachloride	ND	1.0	0.27 ug/L	06/03/17 12:23	1
Chlorobenzene	ND	1.0	0.75 ug/L	06/03/17 12:23	1
Dibromochloromethane	ND	1.0	0.32 ug/L	06/03/17 12:23	1
Chloroethane	ND	1.0	0.32 ug/L	06/03/17 12:23	1
Chloroform	ND	1.0	0.34 ug/L	06/03/17 12:23	1
Chloromethane	0.80 J	1.0	0.35 ug/L	06/03/17 12:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		77 - 120		06/03/17 12:23	1
Toluene-d8 (Surr)	98		80 - 120		06/03/17 12:23	1
4-Bromofluorobenzene (Surr)	101		73 - 120		06/03/17 12:23	1

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

5.0

2.0

0.36 ug/L

0.74 ug/L

0.44 ug/L

0.73 ug/L

0.36 ug/L

0.51 ug/L

0.37 ug/L

0.46 ug/L

0.90 ug/L

0.85 ug/L

0.66 ug/L

Method: 8021B - Volatile	Organic Compounds	(GC)
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Client: New York State D.E.C.

Date Collected: 05/26/17 10:00

Date Received: 05/26/17 10:50

cis-1,3-Dichloropropene

Methylene Chloride

trans-1,3-Dichloropropene

Tetrachloroethene

Trichloroethene

Vinyl chloride

Vinyl acetate

Xylenes, Total

Ethylbenzene

Styrene

Analyte

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

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

Result Qualifier

ND

0.50 J

Method: 6021B - Volatile Orga	anic Compounds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			05/31/17 19:23	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/31/17 19:23	1
Benzene	ND		0.20	0.023	ug/L			05/31/17 19:23	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/31/17 19:23	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/31/17 19:23	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			05/31/17 19:23	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/31/17 19:23	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/31/17 19:23	1

TestAmerica Buffalo

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

Lab Sample ID: 480-118651-1

05/26/17 21:57

05/26/17 21:57

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 05/26/17 10:00 Date Received: 05/26/17 10:50

рΗ

Temperature

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			05/31/17 19:23	1
o-Xylene	ND		0.20	0.027	ug/L			05/31/17 19:23	1
p-Cymene	ND		0.20	0.030	ug/L			05/31/17 19:23	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/31/17 19:23	1
Toluene	ND		0.20	0.036	ug/L			05/31/17 19:23	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/31/17 19:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129					05/31/17 19:23	1
4-Bromofluorobenzene	92		64 - 128					05/31/17 19:23	1
- Method: 200.7 Rev 4.4 - Met	tals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	55.2	В	50.0	19.3	ug/L		05/30/17 09:35	06/09/17 16:43	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.11		0.010	0.0050	mg/L		06/06/17 03:15	06/06/17 12:29	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

0.1

0.001

7.6 HF

20.0 HF

0.1 SU

0.001 Degrees C

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

Lab Sample ID: 480-118651-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 05/26/17 10:05 Date Received: 05/26/17 10:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			05/31/17 19:55	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/31/17 19:55	1
Benzene	0.037	J	0.20	0.023	ug/L			05/31/17 19:55	1
Ethylbenzene	ND		0.20	0.029	ug/L			05/31/17 19:55	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/31/17 19:55	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			05/31/17 19:55	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/31/17 19:55	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/31/17 19:55	1
n-Propylbenzene	ND		0.20	0.13	ug/L			05/31/17 19:55	1
o-Xylene	ND		0.20	0.027	ug/L			05/31/17 19:55	1
p-Cymene	ND		0.20	0.030	ug/L			05/31/17 19:55	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/31/17 19:55	1
Toluene	ND		0.20	0.036	ug/L			05/31/17 19:55	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/31/17 19:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 129			-		05/31/17 19:55	1
4-Bromofluorobenzene	95		64 - 128					05/31/17 19:55	1

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Client: New York State D.E.C.

Date Received: 05/26/17 10:50

4-Bromofluorobenzene

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

Lab Sample ID: 480-118651-3

06/01/17 00:34

Matrix: Water

Client Sample ID: Post-Carbon 1
Date Collected: 05/26/17 10:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			06/01/17 00:34	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			06/01/17 00:34	50
Benzene	560		10	1.2	ug/L			06/01/17 00:34	50
Ethylbenzene	32		10	1.4	ug/L			06/01/17 00:34	50
Isopropylbenzene	ND		10	1.4	ug/L			06/01/17 00:34	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			06/01/17 00:34	50
m,p-Xylene	14	J	20	2.7	ug/L			06/01/17 00:34	50
n-Butylbenzene	ND		10	1.5	ug/L			06/01/17 00:34	50
n-Propylbenzene	ND		10	6.5	ug/L			06/01/17 00:34	50
o-Xylene	9.0	J	10	1.4	ug/L			06/01/17 00:34	50
p-Cymene	ND		10	1.5	ug/L			06/01/17 00:34	50
sec-Butylbenzene	ND		10	1.0	ug/L			06/01/17 00:34	50
Toluene	77		10	1.8	ug/L			06/01/17 00:34	50
Xylenes, Total	23	J	30	2.7	ug/L			06/01/17 00:34	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		63 - 129			-		06/01/17 00:34	50

64 - 128

92

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Client: New York State D.E.C.

Date Received: 05/26/17 10:50

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

Lab Sample ID: 480-118651-4

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 05/26/17 10:15

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

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

Method: 200.7 Rev 4.4 - Metal	s (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		500	100	ug/L		05/30/17 09:35	06/09/17 16:47	1
Iron	1240	В	50.0	19.3	ug/L		05/30/17 09:35	06/09/17 16:47	1
Magnesium	39600		200	43.4	ug/L		05/30/17 09:35	06/09/17 16:47	1
Potassium	3890	В	500	100	ug/L		05/30/17 09:35	06/09/17 16:47	1
Sodium	49100	В	1000	324	ug/L		05/30/17 09:35	06/09/17 16:47	1

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

Lab Sample ID: 480-118651-5

Matrix: Water

Client Sample ID: Outside Pump

Date Collected: 05/26/17 10:30 Date Received: 05/26/17 10:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	8.4	J	10	1.7	ug/L			06/01/17 01:38	50
1,3,5-Trimethylbenzene	48		10	7.5	ug/L			06/01/17 01:38	50
Benzene	2600		10	1.2	ug/L			06/01/17 01:38	50
Ethylbenzene	180		10	1.4	ug/L			06/01/17 01:38	50
Isopropylbenzene	ND		10	1.4	ug/L			06/01/17 01:38	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			06/01/17 01:38	50
m,p-Xylene	68		20	2.7	ug/L			06/01/17 01:38	50
n-Butylbenzene	ND		10	1.5	ug/L			06/01/17 01:38	50
n-Propylbenzene	ND		10	6.5	ug/L			06/01/17 01:38	50
o-Xylene	110		10	1.4	ug/L			06/01/17 01:38	50
p-Cymene	ND		10	1.5	ug/L			06/01/17 01:38	50
sec-Butylbenzene	ND		10	1.0	ug/L			06/01/17 01:38	50
Toluene	370		10	1.8	ug/L			06/01/17 01:38	50
Xylenes, Total	180		30	2.7	ug/L			06/01/17 01:38	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	106		63 - 129			-		06/01/17 01:38	50
4-Bromofluorobenzene	95		64 - 128					06/01/17 01:38	50

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-118651-1

Lab Sample ID: 480-118651-2

Lab Sample ID: 480-118651-3

Lab Sample ID: 480-118651-5

TAL BUF

Matrix: Wastewater

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 05/26/17 10:00 Date Received: 05/26/17 10:50

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

Client Sample ID: Post-Carbon 2

Date Collected: 05/26/17 10:05 Date Received: 05/26/17 10:50

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

Client Sample ID: Post-Carbon 1

Date Collected: 05/26/17 10:10

Date Received: 05/26/17 10:50

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

Client Sample ID: Pre-Carbon

Date Collected: 05/26/17 10:15

Date Received: 05/26/17 10:50

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

Client Sample ID: Outside Pump

Analysis

Date Collected: 05/26/17 10:30

Date Received: 0	05/20/17 10:5	U							
_									
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	

Laboratory References:

Total/NA

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

8021B

TestAmerica Buffalo

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359825 06/01/17 01:38 JLS

Matrix: Water

Matrix: Water

Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-118651-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

ority	Program		EPA Region	Identification Number	Expiration Date			
v York	NELAP		2	10026	03-31-18			
The following analytes	are included in this report, but	are not accredited/certifie	ed under this accred	ditation/certification:				
Analysis Method	Prep Method	Matrix	Analyt	е				
335.4	Distill/CN	Wastewater	Cyanic	de, Total				
Analysis Method	Prep Method	Matrix	Analyt					
The following analytes	are included in this report, but	accreditation/certification	is not offered by th	e governing authority:				
8021B		Wastewater						
8021B 8021B		Wastewater	m,p-X	ylene				
8021B 8021B 8021B		Wastewater Wastewater Water		ylene ne				
8021B		Wastewater	m,p-Xy	ylene ne ylene				
8021B 8021B		Wastewater Water	m,p-X; o-Xyle m,p-X; o-Xyle	ylene ne ylene				
8021B 8021B 8021B	·	Wastewater Water Water	m,p-X; o-Xyle m,p-X; o-Xyle	ylene ne ylene ne				

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-118651-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228

							_			_					- 1				TestAmerica Laboratories, Inc.
Client Contact	Project Ma			YSDEC)		Site C	Conta	ct: T	homas	s Pa	lmer		Date	: 4	5/25	117			COC No:
Groundwater & Environmental Services, Inc		16) 851-722				Lab (Conta	ct: O	. John	nson	1		Carr	ier:	15	Mr.			of COCs
495 Aero Drive Suite 3		Analysis T	urnaround	Time						1,508	2021								Job No.
Cheektowaga, NY 14225	Calendar	(C) or Wo	ork Days (W)		11_			2		4		- 1 1		1 1				1
(800) 287-7857 Phone	The second secon	T if different f	rom Below _			tho	P	Ш	2	W 2	?	П		1	1 1		11		89013
(866) 902-2187 FAX	IX)	2	weeks			Ĭ	etho	Ш	5	5 3	ISI				11				SDG No
Project Name: NYSDEC Gatown WWTP		1	week			2003	I M		1	Lis	Total				1 1				R2-20
Site: 915171		- 2	2 days			l la	Loc	à	1	2 2	To To	=	- 1 1		1 1				1
P O # Callout 120597		1	day			Ig N	â	alin	_ 5		unid d	Ē.	11		1 1		1		480-118651 COC
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) TCI list OI M04.7	8021B (MOD)	335.4 - Cyanide, Total	SM4500_H+-pH							Sample Specific Notes:
Post-Carbon 3	5/26	1000	Grab	w	9	N			x y	x y	x x	x							
Post-Carbon 2	5/20	1005	Grab	W	3	N				,	x								
Post-Carbon 1	5/26	1010	Grab	w	3	N				,	x								
Pre-Carbon	5/26	1015	Grab	W	6	N X	X	x		,	x								
Inside Outside Sump	5/20	1030	Grab	W	3	N				,	x								
						П		П											
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=Na0	OH; 6= Other					4		\Box	+	+	+			+	\Box		+	+	
Possible Hazard Identification				1								may	be asse	ssed	if sar	nples	are ret	tained	d longer than 1 month)
Non-Hazard Flammable Skin Irritant	Poison B		Inknown	X			\Box_{ℓ}	Retur	п То	Clie	ent		$\beth_{\it Dispo}$	sal B	y Lab		\square_{Ar}	chive	For Months
Special Instructions/QC Requirements & Comments:																			
												1							
Relinquished by:	Company:	ES		Date/Tir	ne:	Ro	eceive	d by:	1	1	N	1		Co	mpan	y:	_		Date/Timer 5/76/17 /05
Relinquished by:	Company:			Date/Ti			edeive	d by:			(1		Co	mpan	y:			Date/Time:
											V								









Login Sample Receipt Checklist

Job Number: 480-118651-1

Login Number: 118651 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Client: New York State D.E.C.

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	

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Chlorine Residual checked.

N/A



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: 480-119708-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C. 270 Michigan Avenue Buffalo, New York 14203

Attn: Mr. Richard Dana

Authorized for release by: 6/30/2017 9:43:44 AM

Sally Hoffman, Project Management Assistant I

(716)504-9839

sally.hoffman@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864

orlette.johnson@testamericainc.com



Review your project results through

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Have a Question?



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

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

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

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

Sally Hoffman

Project Management Assistant I

Sally of Hoffman

6/30/2017 9:43:44 AM

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-119708-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

Qualifiers

GC/MS VOA

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 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 Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

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Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

Job ID: 480-119708-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-119708-1

Comments

No additional comments.

Receipt

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

GC/MS VOA

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

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-363601 recovered outside control limits for the following analytes: Carbon tetrachloride. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-119708-1)

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-119708-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-119708-3), Pre-Carbon (480-119708-4) and Outside Sump (480-119708-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-119708-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

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

Date Collected: 06/16/17 11:00 Date Received: 06/16/17 12:10 Lab Sample ID: 480-119708-1

. Matrix: Water

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Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 1.0 1,1,1-Trichloroethane ND 0.82 ug/L 06/23/17 13:38 ND 1.1.2.2-Tetrachloroethane 1.0 0.21 ug/L 06/23/17 13:38 1,1,2-Trichloroethane ND 1.0 0.23 ug/L 06/23/17 13:38 ND 1,1-Dichloroethane 1.0 0.38 ug/L 06/23/17 13:38 1,1-Dichloroethene ND 1.0 0.29 ug/L 06/23/17 13:38 0.21 ug/L 06/23/17 13:38 1.2-Dichloroethane ND 1.0 1,2-Dichloroethene, Total ND 2.0 0.81 ug/L 06/23/17 13:38 1,2-Dichloropropane ND 1.0 06/23/17 13:38 0.72 ug/L 2-Hexanone ND 5.0 1.2 ug/L 06/23/17 13:38 1.3 ug/L 2-Butanone (MEK) ND 10 06/23/17 13:38 4-Methyl-2-pentanone (MIBK) ND 5.0 2.1 ug/L 06/23/17 13:38 Acetone ND 10 3.0 ug/L 06/23/17 13:38 Benzene ND 1.0 0.41 ug/L 06/23/17 13:38 Bromodichloromethane ND 1.0 0.39 ug/L 06/23/17 13:38 ug/L Bromoform ND 1.0 0.26 06/23/17 13:38 ND 1.0 06/23/17 13:38 Bromomethane 0.69 ug/L Carbon disulfide NΠ 1.0 0.19 ug/L 06/23/17 13:38 Carbon tetrachloride ND 1.0 0.27 ug/L 06/23/17 13:38 Chlorobenzene ND 1.0 0.75 ug/L 06/23/17 13:38 Dibromochloromethane ND 1.0 0.32 ug/L 06/23/17 13:38 0.32 ug/L Chloroethane ND 06/23/17 13:38 1.0 Chloroform ND 1.0 0.34 ug/L 06/23/17 13:38 0.35 ug/L Chloromethane ND 1.0 06/23/17 13:38 cis-1,3-Dichloropropene ND 1.0 0.36 ug/L 06/23/17 13:38 Ethylbenzene ND 1.0 0.74 ug/L 06/23/17 13:38 Methylene Chloride ND 1.0 0.44 ug/L 06/23/17 13:38 Styrene ND 1.0 0.73 ug/L 06/23/17 13:38 Tetrachloroethene ND 1.0 0.36 ug/L 06/23/17 13:38 ND 1.0 0.51 ug/L 06/23/17 13:38

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		06/23/17 13:38	1
Toluene-d8 (Surr)	93		80 - 120		06/23/17 13:38	1
4-Bromofluorobenzene (Surr)	113		73 - 120		06/23/17 13:38	1

1.0

1.0

1.0

5.0

2.0

0.37 ug/L

0.46 ug/L

0.90 ug/L

0.85 ug/L

0.66 ug/L

Method: 8021B - Volatile Organic Compounds (GC)

trans-1,3-Dichloropropene

Trichloroethene

Vinyl chloride

Vinyl acetate

Xylenes, Total

ND

ND

ND

ND

ND

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			06/21/17 19:17	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			06/21/17 19:17	1
Benzene	ND		0.20	0.023	ug/L			06/21/17 19:17	1
Ethylbenzene	ND		0.20	0.029	ug/L			06/21/17 19:17	1
Isopropylbenzene	ND		0.20	0.027	ug/L			06/21/17 19:17	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			06/21/17 19:17	1
m,p-Xylene	ND		0.40	0.054	ug/L			06/21/17 19:17	1
n-Butylbenzene	ND		0.20	0.031	ug/L			06/21/17 19:17	1

TestAmerica Buffalo

06/23/17 13:38

06/23/17 13:38

06/23/17 13:38

06/23/17 13:38

06/23/17 13:38

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

Lab Sample ID: 480-119708-1

06/19/17 18:11

06/19/17 18:11

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 06/16/17 11:00 Date Received: 06/16/17 12:10

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Temperature

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			06/21/17 19:17	1
o-Xylene	ND		0.20	0.027	ug/L			06/21/17 19:17	1
p-Cymene	ND		0.20	0.030	ug/L			06/21/17 19:17	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			06/21/17 19:17	1
Toluene	ND		0.20	0.036	ug/L			06/21/17 19:17	1
Xylenes, Total	ND		0.60	0.054	ug/L			06/21/17 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 129					06/21/17 19:17	1
4-Bromofluorobenzene	82		64 - 128					06/21/17 19:17	1
- Method: 200.7 Rev 4.4 - Met	tals (ICP)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	97.0		50.0	19.3	ug/L		06/19/17 08:50	06/23/17 22:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.17		0.010	0.0050	mg/L		06/28/17 04:15	06/28/17 12:46	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

0.1

0.001

7.7 HF

20.5 HF

0.1 SU

0.001 Degrees C

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

Lab Sample ID: 480-119708-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 06/16/17 11:05 Date Received: 06/16/17 12:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			06/21/17 19:49	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			06/21/17 19:49	1
Benzene	0.074	J	0.20	0.023	ug/L			06/21/17 19:49	1
Ethylbenzene	ND		0.20	0.029	ug/L			06/21/17 19:49	1
Isopropylbenzene	ND		0.20	0.027	ug/L			06/21/17 19:49	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			06/21/17 19:49	1
m,p-Xylene	ND		0.40	0.054	ug/L			06/21/17 19:49	1
n-Butylbenzene	ND		0.20	0.031	ug/L			06/21/17 19:49	1
n-Propylbenzene	ND		0.20	0.13	ug/L			06/21/17 19:49	1
o-Xylene	ND		0.20	0.027	ug/L			06/21/17 19:49	1
p-Cymene	ND		0.20	0.030	ug/L			06/21/17 19:49	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			06/21/17 19:49	1
Toluene	0.036	J	0.20	0.036	ug/L			06/21/17 19:49	1
Xylenes, Total	ND		0.60	0.054	ug/L			06/21/17 19:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 129			-		06/21/17 19:49	1
4-Bromofluorobenzene	84		64 - 128					06/21/17 19:49	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

Lab Sample ID: 480-119708-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 06/16/17 11:10 Date Received: 06/16/17 12:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	4.4	J	10	1.7	ug/L			06/21/17 21:26	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			06/21/17 21:26	50
Benzene	940		10	1.2	ug/L			06/21/17 21:26	50
Ethylbenzene	51		10	1.4	ug/L			06/21/17 21:26	50
Isopropylbenzene	ND		10	1.4	ug/L			06/21/17 21:26	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			06/21/17 21:26	50
m,p-Xylene	23		20	2.7	ug/L			06/21/17 21:26	50
n-Butylbenzene	ND		10	1.5	ug/L			06/21/17 21:26	50
n-Propylbenzene	ND		10	6.5	ug/L			06/21/17 21:26	50
o-Xylene	14		10	1.4	ug/L			06/21/17 21:26	50
p-Cymene	ND		10	1.5	ug/L			06/21/17 21:26	50
sec-Butylbenzene	ND		10	1.0	ug/L			06/21/17 21:26	50
Toluene	160		10	1.8	ug/L			06/21/17 21:26	50
Xylenes, Total	37		30	2.7	ug/L			06/21/17 21:26	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129			-		06/21/17 21:26	50
4-Bromofluorobenzene	86		64 - 128					06/21/17 21:26	50

Client: New York State D.E.C.

Date Received: 06/16/17 12:10

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

Lab Sample ID: 480-119708-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 06/16/17 11:15

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

a,a,a-Trifluorotoluene	98		63 - 129					06/22/17 13:19	100
4-Bromofluorobenzene	87		64 - 128					06/22/17 13:19	100
Method: 200.7 Rev 4.4 - Metals (ICP	²)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	103000		500	100	ug/L		06/19/17 08:50	06/23/17 22:30	1

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

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

Lab Sample ID: 480-119708-5

Matrix: Water

Client Sample ID: Outside Sump Date Collected: 06/16/17 11:30

Date Received: 06/16/17 12:10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	37	J	100	17	ug/L			06/22/17 13:51	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			06/22/17 13:51	500
Benzene	4900		100	12	ug/L			06/22/17 13:51	500
Ethylbenzene	370		100	14	ug/L			06/22/17 13:51	500
Isopropylbenzene	ND		100	14	ug/L			06/22/17 13:51	500
Methyl tert-butyl ether	ND		200	22	ug/L			06/22/17 13:51	500
m,p-Xylene	160	J	200	27	ug/L			06/22/17 13:51	500
n-Butylbenzene	ND		100	15	ug/L			06/22/17 13:51	500
n-Propylbenzene	ND		100	65	ug/L			06/22/17 13:51	500
o-Xylene	ND		100	14	ug/L			06/22/17 13:51	500
p-Cymene	ND		100	15	ug/L			06/22/17 13:51	500
sec-Butylbenzene	ND		100	10	ug/L			06/22/17 13:51	500
Toluene	910		100	18	ug/L			06/22/17 13:51	500
Xylenes, Total	160	J	300	27	ug/L			06/22/17 13:51	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		63 - 129			-		06/22/17 13:51	500
4-Bromofluorobenzene	86		64 - 128					06/22/17 13:51	500

6/30/2017

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-119708-1

Lab Sample ID: 480-119708-2

Lab Sample ID: 480-119708-3

Lab Sample ID: 480-119708-4

Lab Sample ID: 480-119708-5

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 06/16/17 11:00 Date Received: 06/16/17 12:10

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

Client Sample ID: Post-Carbon 2

Date Collected: 06/16/17 11:05

Date Received: 06/16/17 12:10

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

Client Sample ID: Post-Carbon 1

Date Collected: 06/16/17 11:10

Date Received: 06/16/17 12:10

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

Client Sample ID: Pre-Carbon

Date Collected: 06/16/17 11:15

Date Received: 06/16/17 12:10

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

Client Sample ID: Outside Sump

Date Collected: 06/16/17 11:30

Date Received: 06/16/17 12:10

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

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

Laboratory: TestAmerica Buffalo

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

thority	Program		EPA Region	Identification Number	O3-31-18	
w York	NELAP		2	10026		
The following analytes	are included in this report, bu	it are not accredited/cer	tified under this accred	litation/certification:		
Analysis Method	Prep Method	Matrix	Analyt	е		
335.4	Distill/CN	Water	Cyanic	le, Total		
The following analytes	are included in this report, bu	ut accreditation/certificati	ion is not offered by th	e governing authority:		
The following analytes a	are included in this report, bu Prep Method	ut accreditation/certificati Matrix	ion is not offered by th Analyt			
	•		•	e ,		
Analysis Method	•	Matrix	Analyt	e vlene		
Analysis Method 8021B	•	Matrix Water	Analyti m,p-Xy o-Xyle	e vlene		
Analysis Method 8021B 8021B	•	Matrix Water Water	Analyti m,p-Xy o-Xyle	e /lene ne		

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-119708-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228 phone 716.504.9852 fax 716.691.7991																	1	1				TestAmerica Laboratories, Inc.
Client Contact	Project	Manager:	Glenn May (N	YSDEC)		Site	e Con	itact	: Th	oma	s Pal	lmer		r	ate:	(.	16	17				COC No:
Groundwater & Environmental Services, Inc	Tel/Fax	: (716) 851	-7220			Lal	b Cor	ntac	t: O.	Joh	nson	i.		(Carri		1	1				of COCs
495 Aero Drive Suite 3		Analys	is Turnaround	Time			П	Т	Т		021			П	T	T	П	П		Т	T	Job No.
Cheektowaga, NY 14225	Caler	ndar (C) o	r Work Days (W	V)				- 1	1	1	2 A											
(800) 287-7857 Phone	10	TAT if diffe	erent from Below				poq				VO V							1				69633
(866) 902-2187 FAX		X	2 weeks			П	Me	thod		1	OL.											SDG
Project Name: NYSDEC Gatown WWTP			1 week			Ш	oca	ž	1		RS	- E										10000
Site: 915171			2 days				1 (d	Coca	2		2 2	Tol										
P O # Callout 120597			1 day			mple	(MO	<u>ē</u>		_ 8	<u> </u>	nide	+-pF									480-119708 COC
Sample Identification	Samp Date			Matrix	# of Cont.	Filtered Sa	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 - 802	335.4 - Cyanide, Total	SM4500_H+-pH									Sample Specific Notes:
Post-Carbon 3	6/16	110	Grab	W	9	N				x	X X	x x	x									
Post-Carbon 2		110	5 Grab	W	3	N					>	x										
Post-Carbon 1		1/10	Grab	W	3	N					>	X										
Pre-Carbon		10	Grab	W	6	N	x	x	x		>	x										
Inside Outside Sump		113	Grab	W	3	N					>	x										
	1																					
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=N	aOH; 6= O	ther								П				П		Т	Т					
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poiso	on B □	□ Unknown	M							al (A		may	be a	isse Dispo	ssed sal B	if sa y La	i mpl	es ai	re re □ _A	taine rchive	ed longer than 1 month) e For Months
Special Instructions/QC Requirements & Comments:																						
Relinquished by:	Compa	E G		Date/T	121	0	Rede	eived	by:) /	1	K				C	ompa	ny:	8	2		Date/Time: ()/6/17/12/0
Relinquished by:	Compa	ny:		Date/T	ime:		Rece	eived	by:)						C	ompa	ny:				Date/Time:
Relinquished by:	Compa	ny:		Date/T	ime:		Rece	eived	l by:						1879	C	ompa	ny:				Date/Time:
							_	-	+	1	1		7	T	2		_	_			F	Form No. CA-C-WI-002, dated 04/07/201

















Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-119708-1

Login Number: 119708 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

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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: 480-121124-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C. 625 Broadway 11th Floor Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal

Authorized for release by: 7/31/2017 1:00:48 PM

Orlette Johnson, Senior Project Manager (484)685-0864

orlette.johnson@testamericainc.com

LINKS

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Have a Question?



Visit us at: 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.

Orlette Johnson

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

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.

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-121124-1

Table of Contents

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

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

GC VOA

J

Qualifier **Qualifier Description**

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**

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**

Compound was found in the blank and sample.

General Chemistry

Qualifier Description Qualifier

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

В 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**

Detection Limit (DoD/DOE) DL

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

FDI Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry) MDC

Method Detection Limit MDL ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

TestAmerica Buffalo

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Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

Job ID: 480-121124-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-121124-1

Receipt

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

GC/MS VOA

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

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

GC/MS Semi VOA

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-121124-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon-2 (480-121124-2), Post-Carbon-1 (480-121124-3), Pre-Carbon (480-121124-4) and Outside Sump (480-121124-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon-3 (480-121124-1).

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

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-367627.

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

Client: New York State D.E.C.

Project/Site: Castown WWTD:

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-121124-1

Matrix: Water

Client Sample ID: Post-Carbon-3

Date Collected: 07/14/17 14:00 Date Received: 07/14/17 14:55

Method: 8260C - Volatile O Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/25/17 16:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/25/17 16:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/25/17 16:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/25/17 16:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/25/17 16:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/25/17 16:56	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			07/25/17 16:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/25/17 16:56	1
2-Hexanone	ND		5.0	1.2	ug/L			07/25/17 16:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/25/17 16:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/25/17 16:56	1
Acetone	ND		10	3.0	ug/L			07/25/17 16:56	1
Benzene	ND		1.0	0.41	ug/L			07/25/17 16:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/25/17 16:56	1
Bromoform	ND		1.0	0.26	ug/L			07/25/17 16:56	1
Bromomethane	ND		1.0	0.69	ug/L			07/25/17 16:56	1
Carbon disulfide	ND		1.0		ug/L			07/25/17 16:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/25/17 16:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/25/17 16:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/25/17 16:56	1
Chloroethane	ND		1.0	0.32	ug/L			07/25/17 16:56	1
Chloroform	ND		1.0	0.34	ug/L			07/25/17 16:56	1
Chloromethane	ND		1.0	0.35	ug/L			07/25/17 16:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/25/17 16:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/25/17 16:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/25/17 16:56	1
Styrene	ND		1.0	0.73	ug/L			07/25/17 16:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/25/17 16:56	1
Toluene	ND		1.0	0.51	ug/L			07/25/17 16:56	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/25/17 16:56	1
Trichloroethene	ND		1.0	0.46	ug/L			07/25/17 16:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/25/17 16:56	1
Vinyl acetate	ND		5.0	0.85	ug/L			07/25/17 16:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/25/17 16:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		77 - 120			-		07/25/17 16:56	1
Toluene-d8 (Surr)	108		80 - 120					07/25/17 16:56	1

Method: 8270D	 Semivolatile Organic Compounds (GC/MS) 	١

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4-Bromofluorobenzene (Surr)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND Qualifornia	5.0	0.65				07/20/17 01:03	1
2-Methylnaphthalene	ND	5.0	0.60	ug/L		07/18/17 07:19	07/20/17 01:03	1
Acenaphthene	ND	5.0	0.41	ug/L		07/18/17 07:19	07/20/17 01:03	1
Acenaphthylene	ND	5.0	0.38	ug/L		07/18/17 07:19	07/20/17 01:03	1
Anthracene	ND	5.0	0.28	ug/L		07/18/17 07:19	07/20/17 01:03	1
Benzo[a]anthracene	ND	5.0	0.36	ug/L		07/18/17 07:19	07/20/17 01:03	1
Benzo[a]pyrene	ND	5.0	0.47	ug/L		07/18/17 07:19	07/20/17 01:03	1
Benzo[b]fluoranthene	ND	5.0	0.34	ug/L		07/18/17 07:19	07/20/17 01:03	1

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TestAmerica Buffalo

07/25/17 16:56

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-121124-1

Metric Metric

TestAmerica Job ID: 480-121124-1

Matrix: Water

Client Sample ID: Post-Carbon-3

Date Collected: 07/14/17 14:00 Date Received: 07/14/17 14:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		07/18/17 07:19	07/20/17 01:03	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		07/18/17 07:19	07/20/17 01:03	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/18/17 07:19	07/20/17 01:03	1
Carbazole	ND		5.0	0.30	ug/L		07/18/17 07:19	07/20/17 01:03	1
Chrysene	ND		5.0	0.33	ug/L		07/18/17 07:19	07/20/17 01:03	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/18/17 07:19	07/20/17 01:03	1
Dibenzofuran	ND		10	0.51	ug/L		07/18/17 07:19	07/20/17 01:03	1
Fluoranthene	ND		5.0	0.40	ug/L		07/18/17 07:19	07/20/17 01:03	1
Fluorene	ND		5.0	0.36	ug/L		07/18/17 07:19	07/20/17 01:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		07/18/17 07:19	07/20/17 01:03	1
Naphthalene	ND		5.0	0.76	ug/L		07/18/17 07:19	07/20/17 01:03	1
Pentachlorophenol	ND		10	2.2	ug/L		07/18/17 07:19	07/20/17 01:03	1
Phenanthrene	ND		5.0	0.44	ug/L		07/18/17 07:19	07/20/17 01:03	1
Phenol	ND		5.0	0.39	ug/L		07/18/17 07:19	07/20/17 01:03	1
Pyrene	ND		5.0	0.34	ug/L		07/18/17 07:19	07/20/17 01:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	100		46 - 120				07/18/17 07:19	07/20/17 01:03	1
2-Fluorobiphenyl	92		48 - 120				07/18/17 07:19	07/20/17 01:03	1
p-Terphenyl-d14	101		59 - 136				07/18/17 07:19	07/20/17 01:03	1
Phenol-d5	56		22 - 120				07/18/17 07:19	07/20/17 01:03	1
2-Fluorophenol	76		35 - 120				07/18/17 07:19	07/20/17 01:03	1
2,4,6-Tribromophenol	78		41 - 120				07/18/17 07:19	07/20/17 01:03	1
Method: 8021B - Volatile Orga	nic Compo	unds (GC)							
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L		- -	07/18/17 12:24	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/18/17 12:24	1
Benzene	ND		0.20	0.023	ug/L			07/18/17 12:24	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/18/17 12:24	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/18/17 12:24	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/18/17 12:24	1
m p-Xvlene	ND		0.40	0.054	ua/l			07/18/17 12:24	1

Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND -		0.20	0.035	ug/L			07/18/17 12:24	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/18/17 12:24	1
Benzene	ND		0.20	0.023	ug/L			07/18/17 12:24	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/18/17 12:24	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/18/17 12:24	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/18/17 12:24	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/18/17 12:24	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/18/17 12:24	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/18/17 12:24	1
o-Xylene	ND		0.20	0.027	ug/L			07/18/17 12:24	1
p-Cymene	ND		0.20	0.030	ug/L			07/18/17 12:24	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/18/17 12:24	1
Toluene	ND		0.20	0.036	ug/L			07/18/17 12:24	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/18/17 12:24	1
Summa mata	9/ Daggy (2011)	Ovelifier	Limita				Dramarad	Analyzad	Dil Foo

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

	Method: 608 - Organochlorine	Pesticides in Water
1		

method: 000 - Organicomornic	i collolaco	III Water							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.050	0.0081	ug/L		07/19/17 07:19	07/20/17 10:54	1
alpha-BHC	0.011	J	0.050	0.0077	ug/L		07/19/17 07:19	07/20/17 10:54	1
beta-BHC	ND		0.050	0.025	ug/L		07/19/17 07:19	07/20/17 10:54	1

TestAmerica Buffalo

Client: New York State D.E.C.

Date Received: 07/14/17 14:55

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

Lab Sample ID: 480-121124-1

Client Sample ID: Post-Carbon-3 Date Collected: 07/14/17 14:00

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.050	0.010	ug/L		07/19/17 07:19	07/20/17 10:54	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		07/19/17 07:19	07/20/17 10:54	1
Chlordane (technical)	ND		0.50	0.29	ug/L		07/19/17 07:19	07/20/17 10:54	1
4,4'-DDD	ND		0.050	0.0092	ug/L		07/19/17 07:19	07/20/17 10:54	1
4,4'-DDE	ND		0.050	0.012	ug/L		07/19/17 07:19	07/20/17 10:54	1
4,4'-DDT	ND		0.050	0.011	ug/L		07/19/17 07:19	07/20/17 10:54	1
Dieldrin	ND		0.050	0.0098	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endosulfan I	ND		0.050	0.011	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endosulfan II	ND		0.050	0.012	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endrin	ND		0.050	0.014	ug/L		07/19/17 07:19	07/20/17 10:54	1
Endrin aldehyde	ND		0.050	0.016	ug/L		07/19/17 07:19	07/20/17 10:54	1
Heptachlor	ND		0.050	0.0085	ug/L		07/19/17 07:19	07/20/17 10:54	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		07/19/17 07:19	07/20/17 10:54	1
Toxaphene	ND		0.50	0.12	ug/L		07/19/17 07:19	07/20/17 10:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	78		23 - 120				07/19/17 07:19	07/20/17 10:54	1
Tetrachloro-m-xylene	80		44 - 120				07/19/17 07:19	07/20/17 10:54	1
Method: 200.7 Rev 4.4 - Me	tals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	163		50.0	19.3	ug/L		07/19/17 09:05	07/20/17 12:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.2		mg/L		07/19/17 11:38	07/19/17 11:38	1
Cyanide, Total	0.37		0.010	0.0050	mg/L		07/28/17 13:30	07/28/17 17:13	1
Phenolics, Total Recoverable	ND		0.010	0.0050	mg/L		07/17/17 20:00	07/18/17 02:16	1
Total Dissolved Solids	585		10.0	4.0	mg/L			07/19/17 10:59	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			07/15/17 15:01	1
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			07/19/17 10:46	1
рН	7.4	HF	0.1	0.1	SU			07/17/17 17:21	1
Temperature	21.1	HE	0.001	0.001	Degrees C			07/17/17 17:21	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

Lab Sample ID: 480-121124-2

Matrix: Water

Client Sample ID: Post-Carbon-2

Date Collected: 07/14/17 14:05 Date Received: 07/14/17 14:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			07/18/17 15:04	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/18/17 15:04	1
Benzene	0.090	J	0.20	0.023	ug/L			07/18/17 15:04	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/18/17 15:04	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/18/17 15:04	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/18/17 15:04	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/18/17 15:04	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/18/17 15:04	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/18/17 15:04	1
o-Xylene	ND		0.20	0.027	ug/L			07/18/17 15:04	1
p-Cymene	ND		0.20	0.030	ug/L			07/18/17 15:04	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/18/17 15:04	1
Toluene	ND		0.20	0.036	ug/L			07/18/17 15:04	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/18/17 15:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129					07/18/17 15:04	1
4-Bromofluorobenzene	89		64 - 128					07/18/17 15:04	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

Lab Sample ID: 480-121124-3

Matrix: Water

Client Sample ID: Post-Carbon-1

Date Collected: 07/14/17 14:10 Date Received: 07/14/17 14:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			07/18/17 13:29	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			07/18/17 13:29	50
Benzene	290		10	1.2	ug/L			07/18/17 13:29	50
Ethylbenzene	4.1	J	10	1.4	ug/L			07/18/17 13:29	50
Isopropylbenzene	ND		10	1.4	ug/L			07/18/17 13:29	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			07/18/17 13:29	50
m,p-Xylene	5.7	J	20	2.7	ug/L			07/18/17 13:29	50
n-Butylbenzene	ND		10	1.5	ug/L			07/18/17 13:29	50
n-Propylbenzene	ND		10	6.5	ug/L			07/18/17 13:29	50
o-Xylene	4.8	J	10	1.4	ug/L			07/18/17 13:29	50
p-Cymene	ND		10	1.5	ug/L			07/18/17 13:29	50
sec-Butylbenzene	ND		10	1.0	ug/L			07/18/17 13:29	50
Toluene	32		10	1.8	ug/L			07/18/17 13:29	50
Xylenes, Total	11	J	30	2.7	ug/L			07/18/17 13:29	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129					07/18/17 13:29	50
4-Bromofluorobenzene	91		64 - 128					07/18/17 13:29	50

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

Date Received: 07/14/17 14:55

Lab Sample ID: 480-121124-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 07/14/17 14:15

Method: 8260C - Volatile Organic Compounds by GC/MS RL Dil Fac Result Qualifier MDL Unit D Analyzed Analyte Prepared 1,1,1-Trichloroethane $\overline{\mathsf{ND}}$ 1.0 0.82 ug/L 07/26/17 15:43 ND 07/26/17 15:43 1.1.2.2-Tetrachloroethane 1.0 0.21 ug/L 1,1,2-Trichloroethane ND 1.0 0.23 ug/L 07/26/17 15:43 ND 1.0 0.38 ug/L 07/26/17 15:43 1.1-Dichloroethane 1,1-Dichloroethene ND 1.0 0.29 ug/L 07/26/17 15:43 1.2-Dichloroethane ND 1.0 0.21 ug/L 07/26/17 15:43 1,2-Dichloroethene, Total ND 2.0 0.81 ug/L 07/26/17 15:43 1,2-Dichloropropane ND 1.0 0.72 ug/L 07/26/17 15:43 ND 2-Hexanone 5.0 1.2 ug/L 07/26/17 15:43 2-Butanone (MEK) ND 10 1.3 ug/L 07/26/17 15:43 2.1 ug/L 4-Methyl-2-pentanone (MIBK) ND 5.0 07/26/17 15:43 3.0 Acetone ND 10 ug/L 07/26/17 15:43 53 1.0 0.41 ug/L **Benzene** 07/26/17 15:43 0.39 Bromodichloromethane ND 1.0 ug/L 07/26/17 15:43 Bromoform ND 1.0 0.26 ug/L 07/26/17 15:43 Bromomethane ND 1.0 0.69 ug/L 07/26/17 15:43 Carbon disulfide ND 10 0.19 ug/L 07/26/17 15:43 Carbon tetrachloride ND 1.0 0.27 ug/L 07/26/17 15:43 Chlorobenzene ND 0.75 ug/L 1.0 07/26/17 15:43 Dibromochloromethane ND 1.0 0.32 ug/L 07/26/17 15:43 Chloroethane ND 1.0 0.32 ug/L 07/26/17 15:43 0.34 ug/L Chloroform 0.47 1.0 07/26/17 15:43 Chloromethane ND 1.0 0.35 ug/L 07/26/17 15:43 cis-1,3-Dichloropropene ND 1.0 0.36 ug/L 07/26/17 15:43 Ethylbenzene 0.93 J 1.0 0.74 ug/L 07/26/17 15:43 **Methylene Chloride** 0.64 J 1.0 0.44 ug/L 07/26/17 15:43 Styrene ND 1.0 0.73 ug/L 07/26/17 15:43 Tetrachloroethene 0.36 ug/L ND 1.0 07/26/17 15:43 1.0 0.51 ug/L 07/26/17 15:43 **Toluene** 6.0 ND trans-1,3-Dichloropropene 1.0 0.37 ug/L 07/26/17 15:43 Trichloroethene ND 1.0 0.46 ug/L 07/26/17 15:43 Vinyl chloride ND 1.0 0.90 ug/L 07/26/17 15:43 Vinyl acetate ND 5.0 0.85 ug/L 07/26/17 15:43 **Xylenes, Total** 6.7 2.0 0.66 ug/L 07/26/17 15:43 Surrogate Qualifier Limits Prepared Dil Fac %Recovery Analyzed 1,2-Dichloroethane-d4 (Surr) 113 77 - 120 07/26/17 15:43

Method: 8021B - Vo	olatile Organic	Compounds	(GC)
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106

85

Toluene-d8 (Surr)

4-Bromofluorobenzene (Surr)

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

80 - 120

73 - 120

TestAmerica Buffalo

07/26/17 15:43

07/26/17 15:43

Client: New York State D.E.C.

Date Received: 07/14/17 14:55

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

Lab Sample ID: 480-121124-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 07/14/17 14:15

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

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

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

Lab Sample ID: 480-121124-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 07/14/17 14:30 Date Received: 07/14/17 14:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			07/18/17 14:33	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			07/18/17 14:33	500
Benzene	2500		100	12	ug/L			07/18/17 14:33	500
Ethylbenzene	180		100	14	ug/L			07/18/17 14:33	500
Isopropylbenzene	ND		100	14	ug/L			07/18/17 14:33	500
Methyl tert-butyl ether	ND		200	22	ug/L			07/18/17 14:33	500
m,p-Xylene	65	J	200	27	ug/L			07/18/17 14:33	500
n-Butylbenzene	ND		100	15	ug/L			07/18/17 14:33	500
n-Propylbenzene	ND		100	65	ug/L			07/18/17 14:33	500
o-Xylene	ND		100	14	ug/L			07/18/17 14:33	500
p-Cymene	ND		100	15	ug/L			07/18/17 14:33	500
sec-Butylbenzene	ND		100	10	ug/L			07/18/17 14:33	500
Toluene	380		100	18	ug/L			07/18/17 14:33	500
Xylenes, Total	65	J	300	27	ug/L			07/18/17 14:33	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 129			•		07/18/17 14:33	500
4-Bromofluorobenzene	91		64 - 128					07/18/17 14:33	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-121124-1 **Client Sample ID: Post-Carbon-3** Date Collected: 07/14/17 14:00

Matrix: Water

Date Received: 07/14/17 14:55

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

Client Sample ID: Post-Carbon-2

Date Collected: 07/14/17 14:05

Date Received: 07/14/17 14:55

Lab	Sampl	le ID:	480-121124-2	
			Matrice Water	

Lab Sample ID: 480-121124-4

Matrix: Water

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

Client Sample ID: Post-Carbon-1

Date Collected: 07/14/17 14:10

Date Received: 07/14/17 14:55

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

Client Sample ID: Pre-Carbon

Date Collected: 07/14/17 14:15

Date Received: 07/14/17 14:55

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

TestAmerica Buffalo

Lab Sample ID: 480-121124-3

Matrix: Water

Matrix: Water

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Pre-Carbon

TestAmerica Job ID: 480-121124-1

Lab Sample ID: 480-121124-4

Matrix: Water

Date Collected: 07/14/17 14:15 Date Received: 07/14/17 14:55

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

Client Sample ID: Outside Sump Lab Sample ID: 480-121124-5

Date Collected: 07/14/17 14:30 **Matrix: Water**

Date Received: 07/14/17 14:55

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

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-121124-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

hority	Program		EPA Region	Identification Number	Expiration Date
/ York	NELAP	NELAP		10026	03-31-18
The following analyte	es are included in this repo	rt, but are not accre	dited/certified under t	his accreditation/certificatio	n:
Analysis Method	Prep Method	Matrix	Analyt	е	
1664A	1664A	Water	Oil & C	Grease	
335.4	Distill/CN	Water	Cyanide, Total		
			,	•	ority.
			certification is not off	ered by the governing author	ority:
Γhe following analyte	es are included in this repo	rt, but accreditation/	,	ered by the governing authore	ority:
The following analyte Analysis Method	es are included in this repo	rt, but accreditation/	certification is not off	ered by the governing authore e ylene	ority:
The following analyte Analysis Method 3021B	es are included in this repo	rt, but accreditation/ Matrix Water	certification is not offormula of the certification is not offormula o	ered by the governing authore e ylene	ority:
The following analyte Analysis Method 8021B 8021B	es are included in this repo	rt, but accreditation/ Matrix Water Water	certification is not offormula of the certification is not offormula o	ered by the governing authore e ylene ne	ority:

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
3270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
3021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
808	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
664A	HEM and SGT-HEM	1664A	TAL BUF
800.0	Anions, Ion Chromatography	MCAWW	TAL BUF
10.2	Alkalinity	MCAWW	TAL BUF
35.4	Cyanide, Total	MCAWW	TAL BUF
20.1	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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-121124-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228

phone	716	504	0852	for 7	16 601	7001
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phone 716.504.9852 fax 716.691.7991																		,	125				The state of the s
Client Contact	Project M	anager: Gl	lenn May (N	YSDEC)		Tsit	e Cor	ntact	r: Th	homas	s Pal	lmer	_		Date	21	1	11	5				TestAmerica Laboratories, Inc. COC No:
Groundwater & Environmental Services, Inc		(716) 851-72				_				. Johr			_	\rightarrow	-	rier:	4	7/1				\dashv	
495 Aero Drive Suite 3		Analysis 7	Turnaround	Time		1		\Box	T	T		_					1		\top	_			of COCs Job No.
Cheektowaga, NY 14225			ork Days (W			11					. 8	0.0			<u>e</u>	ides	pur	۽ ا	18	14.4			300 NO.
(800) 287-7857 Phone		ΓAT if different					hod			An4	VOV	5			erab	estic	Jems	Sali	N M	Trian			KODE:5
(866) 902-2187 FAX		1	2 weeks				Met	poq		E	it	1		38	ecov	ant E	gen I	Solid	Neu Y	3			SDG ——
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P O # Callout 120597			1 day			nple	MO	E .	linit	Ē		ide,	뛰	Ö	olics,	riori	hemi	Sus					⁴⁸⁰ -121124 COC
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 82608 - (MOD) TCI, list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total	SM4500_H+-pH	1664A_Calc.	420.4 - Phenolics, Total Recoverable	608_Pest - Priority Pollutant Pesticides	5210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids 2540C Calcd - Total Disolved Solids	2340C_Cated - Lotal Disolved Solids				Sample Specific Notes:
Post-Carbon 3	7/14	HW	Grab	w	19	N				x x	x x	XX	x	x	x	X	x :	x x	x x	x T			
Post-Carbon 2	7/14	1405	Grab	w	3	N			1	+	x	_			\forall	1	+				\forall	+	
Post-Carbon 1	7 14	1410	Grab	w	3	N					X				7	\top	\top	+	+	+	\vdash	\dashv	
Pre-Carbon	7/14	14,5	Grab	w	9	N	x	X :	x	X	x x	7			\dashv	\top	+	+	+	+	+	+	
Inside Outside Sump	3/14	1430	Grab	w	3	N		+	+	+	X	+				+	+	+	+	+	$\vdash \vdash$	\dashv	
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				-		H	+	+	+	+	+	+	\vdash	\dashv	4	+	\perp	\bot	\perp	\perp	\sqcup	\perp	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOl	Tt. 6- Othor				_	4	+	+	+	+	\perp	$\perp \perp$	\square	\perp	4	4	\perp			_	Ш		
Possible Hazard Identification	d; 0= Other			-		-			بل			لـلِـ											
Non-Hazard Flammable Skin Irritant	Poison B		Unknown			l	Samı	pie L	Jisp	osai	I (A	fee r	nay	be a	sse	ssec	d if s	amp	les	are r	etain	ed I	longer than 1 month)
Special Instructions/QC Requirements & Comments:	1 010011 2		Minown				_	Ke	tum	To C	Clien	it	1	D.	ispo	sal E	Зу Lе	эb		<u> </u>	Archi	ve F	or Months
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Form No. CA-C-WI-002, dated 04/07/2011

















Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-121124-1

Login Number: 121124 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Answer	Comment
True	
True	GES
True	
True	
N/A	
	True True True True True True True True

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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: 480-122949-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C. 625 Broadway 11th Floor Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal

Authorized for release by: 8/29/2017 8:11:37 AM

Orlette Johnson, Senior Project Manager (484)685-0864

orlette.johnson@testamericainc.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: 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

8/29/2017 8:11:37 AM

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-122949-1

Table of Contents

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

Qualifiers

GC/MS VOA

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

GC VOA

Qualifier Qualifier Description

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

Metals

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

B Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
-----------	-----------------------

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

F1 MS and/or MSD Recovery is outside acceptance limits.

B Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly	used abbreviations may	y or may not be	present in this report.
--------------	----------------	------------------------	-----------------	-------------------------

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

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Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

Job ID: 480-122949-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-122949-1

Receipt

The samples were received on 8/18/2017 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

GC/MS VOA

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-122949-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-122949-3), Pre-Carbon (480-122949-4) and Outside Sump (480-122949-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-122949-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-122949-1

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 08/18/17 13:00 Date Received: 08/18/17 14:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/28/17 17:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/28/17 17:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/28/17 17:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/28/17 17:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/28/17 17:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/28/17 17:03	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			08/28/17 17:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/28/17 17:03	1
2-Hexanone	ND		5.0	1.2	ug/L			08/28/17 17:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/28/17 17:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/28/17 17:03	1
Acetone	4.2	J	10	3.0	ug/L			08/28/17 17:03	1
Benzene	ND		1.0	0.41	ug/L			08/28/17 17:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/28/17 17:03	1
Bromoform	ND		1.0	0.26	ug/L			08/28/17 17:03	1
Bromomethane	ND		1.0	0.69	ug/L			08/28/17 17:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/28/17 17:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/28/17 17:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/28/17 17:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/28/17 17:03	1
Chloroethane	ND		1.0	0.32	ug/L			08/28/17 17:03	1
Chloroform	ND		1.0	0.34	ug/L			08/28/17 17:03	1
Chloromethane	ND		1.0	0.35	ug/L			08/28/17 17:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/28/17 17:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/28/17 17:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/28/17 17:03	1
Styrene	ND		1.0	0.73	ug/L			08/28/17 17:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/28/17 17:03	1
Toluene	ND		1.0	0.51	ug/L			08/28/17 17:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/28/17 17:03	1
Trichloroethene	ND		1.0	0.46	ug/L			08/28/17 17:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/28/17 17:03	1
Vinyl acetate	ND		5.0	0.85	ug/L			08/28/17 17:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/28/17 17:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120			-		08/28/17 17:03	1
Toluene-d8 (Surr)	98		80 - 120					08/28/17 17:03	1
4-Bromofluorobenzene (Surr)	96		73 - 120					08/28/17 17:03	1

Method: 8021R - 1	Volatile Organic	Compounds (GC)
welliou, ouz ib -	voiatile Ordanic	Combounds (GC)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			08/22/17 14:33	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			08/22/17 14:33	1
Benzene	ND	0.20	0.023	ug/L			08/22/17 14:33	1
Ethylbenzene	ND	0.20	0.029	ug/L			08/22/17 14:33	1
Isopropylbenzene	ND	0.20	0.027	ug/L			08/22/17 14:33	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			08/22/17 14:33	1
m,p-Xylene	ND	0.40	0.054	ug/L			08/22/17 14:33	1
n-Butylbenzene	ND	0.20	0.031	ug/L			08/22/17 14:33	1
				- 3				

TestAmerica Buffalo

Page 6 of 17

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8/29/2017

Client: New York State D.E.C.

Date Received: 08/18/17 14:40

Analyte

Temperature

рН

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

Lab Sample ID: 480-122949-1

Prepared

Analyzed

08/21/17 19:52

08/21/17 19:52

Client Sample ID: Post-Carbon 3 Date Collected: 08/18/17 13:00

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			08/22/17 14:33	1
o-Xylene	ND		0.20	0.027	ug/L			08/22/17 14:33	1
p-Cymene	ND		0.20	0.030	ug/L			08/22/17 14:33	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/22/17 14:33	1
Toluene	ND		0.20	0.036	ug/L			08/22/17 14:33	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/22/17 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		63 - 129					08/22/17 14:33	1
4-Bromofluorobenzene	81		64 - 128					08/22/17 14:33	1
Method: 200.7 Rev 4.4 -	Metals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	45.9	J	50.0	19.3	ug/L		08/21/17 10:00	08/21/17 21:16	1
General Chemistry									
General Chemistry						_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

RL

0.1

0.001

RL Unit

0.001 Degrees C

0.1 SU

Result Qualifier

7.8 HF

24.1 HF

Dil Fac

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

Lab Sample ID: 480-122949-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 08/18/17 13:05 Date Received: 08/18/17 14:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/22/17 15:06	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/22/17 15:06	1
Benzene	0.045	J	0.20	0.023	ug/L			08/22/17 15:06	1
Ethylbenzene	ND		0.20	0.029	ug/L			08/22/17 15:06	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/22/17 15:06	1
Methyl tert-butyl ether	0.23	J	0.40	0.044	ug/L			08/22/17 15:06	1
m,p-Xylene	ND		0.40	0.054	ug/L			08/22/17 15:06	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/22/17 15:06	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/22/17 15:06	1
o-Xylene	ND		0.20	0.027	ug/L			08/22/17 15:06	1
p-Cymene	ND		0.20	0.030	ug/L			08/22/17 15:06	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/22/17 15:06	1
Toluene	ND		0.20	0.036	ug/L			08/22/17 15:06	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/22/17 15:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 129					08/22/17 15:06	1
4-Bromofluorobenzene	81		64 - 128					08/22/17 15:06	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

Lab Sample ID: 480-122949-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 08/18/17 13:10 Date Received: 08/18/17 14:40

Method: 8021B - Volatile (Analyte	Result Q		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.2		5.0	0.87	ug/L			08/22/17 19:27	25
1,3,5-Trimethylbenzene	17		5.0	3.8	ug/L			08/22/17 19:27	25
Benzene	940		5.0	0.58	ug/L			08/22/17 19:27	25
Ethylbenzene	64		5.0	0.72	ug/L			08/22/17 19:27	25
Isopropylbenzene	ND		5.0	0.68	ug/L			08/22/17 19:27	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			08/22/17 19:27	25
m,p-Xylene	44		10	1.4	ug/L			08/22/17 19:27	25
n-Butylbenzene	ND		5.0	0.77	ug/L			08/22/17 19:27	25
n-Propylbenzene	ND		5.0	3.3	ug/L			08/22/17 19:27	25
o-Xylene	27		5.0	0.68	ug/L			08/22/17 19:27	25
p-Cymene	ND		5.0	0.74	ug/L			08/22/17 19:27	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			08/22/17 19:27	25
Toluene	180		5.0	0.89	ug/L			08/22/17 19:27	25
Xylenes, Total	71		15	1.4	ug/L			08/22/17 19:27	25
Surrogate	%Recovery Q	ualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 129			•		08/22/17 19:27	25
4-Bromofluorobenzene	82		64 - 128					08/22/17 19:27	25

8/29/2017

Client: New York State D.E.C.

Date Received: 08/18/17 14:40

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

Lab Sample ID: 480-122949-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 08/18/17 13:15

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

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

Method: 200.7 Rev 4.4 - Metals (ICP)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	106000		500	100	ug/L		08/21/17 10:00	08/21/17 21:19	1	
Iron	589		50.0	19.3	ug/L		08/21/17 10:00	08/21/17 21:19	1	
Magnesium	37000		200	43.4	ug/L		08/21/17 10:00	08/21/17 21:19	1	
Potassium	3910	В	500	100	ug/L		08/21/17 10:00	08/21/17 21:19	1	
Sodium	49200	В	1000	324	ug/L		08/21/17 10:00	08/21/17 21:19	1	

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

Lab Sample ID: 480-122949-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 08/18/17 13:30 Date Received: 08/18/17 14:40

Method: 8021B - Volatile Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			08/22/17 18:23	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			08/22/17 18:23	500
Benzene	3300		100	12	ug/L			08/22/17 18:23	500
Ethylbenzene	240		100	14	ug/L			08/22/17 18:23	500
Isopropylbenzene	ND		100	14	ug/L			08/22/17 18:23	500
Methyl tert-butyl ether	ND		200	22	ug/L			08/22/17 18:23	500
m,p-Xylene	110	J	200	27	ug/L			08/22/17 18:23	500
n-Butylbenzene	ND		100	15	ug/L			08/22/17 18:23	500
n-Propylbenzene	ND		100	65	ug/L			08/22/17 18:23	500
o-Xylene	50	J	100	14	ug/L			08/22/17 18:23	500
p-Cymene	ND		100	15	ug/L			08/22/17 18:23	500
sec-Butylbenzene	ND		100	10	ug/L			08/22/17 18:23	500
Toluene	560		100	18	ug/L			08/22/17 18:23	500
Xylenes, Total	160	J	300	27	ug/L			08/22/17 18:23	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	93		63 - 129			•		08/22/17 18:23	500
4-Bromofluorobenzene	80		64 - 128					08/22/17 18:23	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-122949-1

Matrix: Water

Date Collected: 08/18/17 13:00 Date Received: 08/18/17 14:40

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

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-122949-2 Date Collected: 08/18/17 13:05

Matrix: Water

Date Received: 08/18/17 14:40

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

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-122949-3 Date Collected: 08/18/17 13:10 **Matrix: Water**

Date Received: 08/18/17 14:40

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

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-122949-4 Date Collected: 08/18/17 13:15

Date Received: 08/18/17 14:40

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

Client Sample ID: Outside Sump

Date Collected: 08/18/17 13:30 **Matrix: Water**

Date Received: 08/18/17 14:40

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

Laboratory References:

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

TestAmerica Buffalo

Matrix: Water

Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-122949-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

thority	Program		EPA Region	Identification Number	Expiration Date		
w York	NELAP		2	10026	03-31-18		
The following analytes	s are included in this repo	rt, but are not accre	dited/certified under t	his accreditation/certificatio	on:		
Analysis Method	Prep Method	Matrix	Analyt	е			
335.4	Distill/CN	Water	Cyanic	le, Total			
The following analytes	s are included in this repo	rt, but accreditation/	certification is not offe	ered by the governing author	ority:		
The following analytes Analysis Method	s are included in this repo Prep Method	rt, but accreditation/ Matrix	certification is not offe Analyt	, , ,	ority:		
0 ,		,		е	ority:		
Analysis Method		Matrix	Analyt	e /lene	ority:		
Analysis Method 8021B		Matrix Water	Analyt m,p-Xy o-Xyle	e /lene	ority:		
Analysis Method 8021B 8021B		Matrix Water Water	Analyt m,p-Xy o-Xyle	e /lene ne	ority:		

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

TestAmerica Buffalo

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-122949-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228 phone 716.504.9852 fax 716.691.7991																,	1				TestAmerica	Laboratori	ios Inc
Client Contact	Project Ma	nager: Gle	nn May (NY	(SDFC)		Site	Con	tact	The	mas P	alma	r		Date:	-	115	11	7	_		COC No:	Laboratori	es, me.
Groundwater & Environmental Services, Inc		16) 851-722		SDEC)		+-				Johnso			-	Carri	01101					of	COCs		
495 Aero Drive Suite 3			urnaround	Time		T	T	Т	T	-			\Box			П	Т	T	T	П	Job No.		
Cheektowaga, NY 14225			ork Days (W			11					-80						1						
(800) 287-7857 Phone		AT if different i		/			poq			104.	VOA	1											
(866) 902-2187 FAX			weeks				Met	poq		OLN	- ist	1			1			1			SDG I		
Project Name: NYSDEC Gatown WWTP	1 🗆		week				ocal	Met		list	RS I	_			1							24.2	
Site: 915171	1 =		2 days				0 F	ocal		CL	STA	Tota	1 1								T.		
P O # Callout 120597			day			nple	MO		1) (QC	a :	ide,									480-1	22949 COC	
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sar	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										e Specific N	otes:
Post-Carbon 3	8/18	1300	Grab	W	9	N			,	xx	x	x x											
Post-Carbon 2		1305	Grab	w	3	N			T		X			T									
Post-Carbon 1		1310	Grab	W	3	N					X												
Pre-Carbon		1315	Grab	W	6	N	x	x	X		X					П							
Inside / Outside Sump		1330	Grab	W	3	N					x												
	1					Π												T					
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						П		T															
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						T		1					П										
						П																	
						П																	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=Nac	OH: 6= Other	r				\neg		T	1		\Box								\top				
Possible Hazard Identification				-			San	ple	Disp	osal	(A fe	ee ma	y be	asse	ssed	if sa	mple	s are	reta	inea	longer than 1	month)	
Non-Hazard Flammable Skin Irritant	Poison E		Unknown	R				\Box_{Re}	eturn	To C	lient		₩.	Dispo	sal B	/ Lab			Arc	hive	For	Months	
Special Instructions/QC Requirements & Comments:																							
1							_																
Relinquished by:	Company:	SES		Date/Ti	me:	10	Race	ved	by:	5)	1	<			Co	mpan	is: B	5 4	?		Date/Time:	7 (-	440
Relinquished by:	Company:			Date/Ti	me:	Received by:						Company:					Date/Time:						
Relinquished by:	Company:			Date/Ti	ime:		Rece	eived	by:						Co	mpar	ıy:				Date/Time:		

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-122949-1

Login Number: 122949 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Creator. Roll, Clins W		
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	

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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: 480-124274-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C. 625 Broadway 11th Floor Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal

Senise L'Aiglia

Authorized for release by: 9/26/2017 3:17:50 PM
Denise Giglia, Project Management Assistant II denise.giglia@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864 orlette.johnson@testamericainc.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: 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.

Denise Giglia

Denist L'Arglia

9/26/2017 3:17:50 PM

Project Management Assistant II

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.

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-124274-1

Table of Contents

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Receipt Checklists	21

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
-----------	-----------------------

F1 MS and/or MSD Recovery is outside acceptance limits.

F2 MS/MSD RPD exceeds control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
Qualifier	Qualifier Description

LCS or LCSD is outside acceptance limits.

Χ Surrogate is outside control limits

GC VOA

Qualifier **Qualifier Description**

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

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

В Compound was found in the blank and sample.

Glossary

¤ Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

Estimated Detection Limit (Dioxin) **EDL** Limit of Detection (DoD/DOE) LOD Limit of Quantitation (DoD/DOE) LOQ

MDA Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry) MDC

MDI 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**

Relative Error Ratio (Radiochemistry) **RER**

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TFF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

TestAmerica Buffalo

Page 4 of 21 9/26/2017

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Job ID: 480-124274-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-124274-1

Receipt

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

GC/MS VOA

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

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

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

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

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-377807 recovered outside acceptance criteria, low biased, for Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: Post-Carbon 3 (480-124274-1). These results have been reported and qualified.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-377807 recovered above the upper control limit for Carbazole. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-124274-1).

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

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

HPLC/IC

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

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-124274-3), Pre-Carbon (480-124274-4) and OUTSIDE SUMP (480-124274-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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

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Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Job ID: 480-124274-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Metals

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

General Chemistry

Method(s) SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-124274-1).

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

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-377801.

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-124274-1

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 09/15/17 12:15 Date Received: 09/15/17 13:05

Method: 8260C - Volatile O Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/23/17 15:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/23/17 15:09	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/23/17 15:09	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/23/17 15:09	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/23/17 15:09	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/23/17 15:09	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			09/23/17 15:09	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/23/17 15:09	1
2-Hexanone	ND		5.0	1.2	ug/L			09/23/17 15:09	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/23/17 15:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/23/17 15:09	1
Acetone	ND		10	3.0	ug/L			09/23/17 15:09	1
Benzene	ND		1.0	0.41	ug/L			09/23/17 15:09	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/23/17 15:09	1
Bromoform	ND		1.0	0.26	ug/L			09/23/17 15:09	1
Bromomethane	ND		1.0	0.69	ug/L			09/23/17 15:09	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/23/17 15:09	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/23/17 15:09	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/23/17 15:09	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/23/17 15:09	1
Chloroethane	ND		1.0	0.32	ug/L			09/23/17 15:09	1
Chloroform	ND		1.0	0.34	ug/L			09/23/17 15:09	1
Chloromethane	ND		1.0	0.35	ug/L			09/23/17 15:09	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/23/17 15:09	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/23/17 15:09	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/23/17 15:09	1
Styrene	ND		1.0	0.73	ug/L			09/23/17 15:09	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/23/17 15:09	1
Toluene	ND		1.0	0.51	ug/L			09/23/17 15:09	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/23/17 15:09	1
Trichloroethene	ND		1.0	0.46	ug/L			09/23/17 15:09	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/23/17 15:09	1
Vinyl acetate	ND		5.0		ug/L			09/23/17 15:09	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/23/17 15:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		77 - 120			-		09/23/17 15:09	1
Toluene-d8 (Surr)	98		80 - 120					09/23/17 15:09	1

Method: 8270D	- Semivolatile Orga	nic Compounds (GC/MS)	
Method, 62700	- Selliivolalile Olua		

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4-Bromofluorobenzene (Surr)

Method: 82/0D - Semivolat	ille Organic Compounds (G	C/IVIS)						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND —	5.0	0.65	ug/L		09/18/17 14:24	09/21/17 12:49	1
2-Methylnaphthalene	ND	5.0	0.60	ug/L		09/18/17 14:24	09/21/17 12:49	1
Acenaphthene	ND	5.0	0.41	ug/L		09/18/17 14:24	09/21/17 12:49	1
Acenaphthylene	ND	5.0	0.38	ug/L		09/18/17 14:24	09/21/17 12:49	1
Anthracene	ND	5.0	0.28	ug/L		09/18/17 14:24	09/21/17 12:49	1
Benzo[a]anthracene	ND	5.0	0.36	ug/L		09/18/17 14:24	09/21/17 12:49	1
Benzo[a]pyrene	ND	5.0	0.47	ug/L		09/18/17 14:24	09/21/17 12:49	1
Benzo[b]fluoranthene	ND	5.0	0.34	ug/L		09/18/17 14:24	09/21/17 12:49	1

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TestAmerica Buffalo

09/23/17 15:09

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-124274-1

09/18/17 14:24 09/21/17 12:49

09/18/17 14:24 09/21/17 12:49

09/18/17 14:24 09/21/17 12:49

Matrix: Water

Client Sample ID: Post-Carbon 3
Date Collected: 09/15/17 12:15

Date Received: 09/15/17 13:05

Phenol-d5

2-Fluorophenol

2,4,6-Tribromophenol

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/18/17 14:24	09/21/17 12:49	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/18/17 14:24	09/21/17 12:49	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/18/17 14:24	09/21/17 12:49	1
Carbazole	ND	*	5.0	0.30	ug/L		09/18/17 14:24	09/21/17 12:49	1
Chrysene	ND		5.0	0.33	ug/L		09/18/17 14:24	09/21/17 12:49	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/18/17 14:24	09/21/17 12:49	1
Dibenzofuran	ND		10	0.51	ug/L		09/18/17 14:24	09/21/17 12:49	1
Fluoranthene	ND		5.0	0.40	ug/L		09/18/17 14:24	09/21/17 12:49	1
Fluorene	ND		5.0	0.36	ug/L		09/18/17 14:24	09/21/17 12:49	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/18/17 14:24	09/21/17 12:49	1
Naphthalene	ND		5.0	0.76	ug/L		09/18/17 14:24	09/21/17 12:49	1
Pentachlorophenol	ND		10	2.2	ug/L		09/18/17 14:24	09/21/17 12:49	1
Phenanthrene	ND		5.0	0.44	ug/L		09/18/17 14:24	09/21/17 12:49	1
Phenol	ND		5.0	0.39	ug/L		09/18/17 14:24	09/21/17 12:49	1
Pyrene	ND		5.0	0.34	ug/L		09/18/17 14:24	09/21/17 12:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	123	X	46 - 120				09/18/17 14:24	09/21/17 12:49	1
2-Fluorobiphenyl	115		48 - 120				09/18/17 14:24	09/21/17 12:49	1
p-Terphenyl-d14	119		59 - 136				09/18/17 14:24	09/21/17 12:49	1

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35 - 120

41 - 120

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			09/18/17 18:02	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/18/17 18:02	1
Benzene	ND		0.20	0.023	ug/L			09/18/17 18:02	1
Ethylbenzene	ND		0.20	0.029	ug/L			09/18/17 18:02	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/18/17 18:02	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/18/17 18:02	1
m,p-Xylene	ND		0.40	0.054	ug/L			09/18/17 18:02	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/18/17 18:02	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/18/17 18:02	1
o-Xylene	ND		0.20	0.027	ug/L			09/18/17 18:02	1
p-Cymene	ND		0.20	0.030	ug/L			09/18/17 18:02	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/18/17 18:02	1
Toluene	ND		0.20	0.036	ug/L			09/18/17 18:02	1
Xylenes, Total	ND		0.60	0.054	ug/L			09/18/17 18:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		63 - 129					09/18/17 18:02	1
4-Bromofluorobenzene	85		64 - 128					09/18/17 18:02	1

Method: 608 - Organochlorii	ne Pesticides in Water							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	0.051	0.0083	ug/L		09/20/17 11:32	09/20/17 21:35	1
alpha-BHC	ND	0.051	0.0079	ug/L		09/20/17 11:32	09/20/17 21:35	1
beta-BHC	ND	0.051	0.025	ug/L		09/20/17 11:32	09/20/17 21:35	1

TestAmerica Buffalo

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Client: New York State D.E.C.

Date Received: 09/15/17 13:05

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Lab Sample ID: 480-124274-1

Client Sample ID: Post-Carbon 3 Date Collected: 09/15/17 12:15

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.051	0.010	ug/L		09/20/17 11:32	09/20/17 21:35	1
gamma-BHC (Lindane)	ND		0.051	0.0082	ug/L		09/20/17 11:32	09/20/17 21:35	1
Chlordane (technical)	ND		0.51	0.30	ug/L		09/20/17 11:32	09/20/17 21:35	1
4,4'-DDD	ND		0.051	0.0094	ug/L		09/20/17 11:32	09/20/17 21:35	1
4,4'-DDE	ND		0.051	0.012	ug/L		09/20/17 11:32	09/20/17 21:35	1
4,4'-DDT	ND		0.051	0.011	ug/L		09/20/17 11:32	09/20/17 21:35	1
Dieldrin	ND		0.051	0.010	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endosulfan I	ND		0.051	0.011	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endosulfan II	ND		0.051	0.012	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endosulfan sulfate	ND		0.051	0.016	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endrin	ND		0.051	0.014	ug/L		09/20/17 11:32	09/20/17 21:35	1
Endrin aldehyde	ND		0.051	0.017	ug/L		09/20/17 11:32	09/20/17 21:35	1
Heptachlor	ND		0.051	0.0087	ug/L		09/20/17 11:32	09/20/17 21:35	1
Heptachlor epoxide	ND		0.051	0.0076	-		09/20/17 11:32	09/20/17 21:35	1
Toxaphene	ND		0.51	0.12	ug/L		09/20/17 11:32	09/20/17 21:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	93		23 - 120				09/20/17 11:32	09/20/17 21:35	1
Tetrachloro-m-xylene	100		44 - 120				09/20/17 11:32	09/20/17 21:35	1
Method: 200.7 Rev 4.4 - Meta	als (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	75.6		50.0	19.3	ug/L		09/19/17 09:20	09/19/17 21:31	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.2	1.5	mg/L		09/19/17 12:13	09/19/17 12:13	1
Cyanide, Total	0.20		0.010	0.0050	mg/L		09/22/17 01:20	09/22/17 14:02	1
Phenolics, Total Recoverable	0.0085	J	0.010	0.0050	mg/L		09/18/17 00:49	09/19/17 02:45	1
Total Dissolved Solids	739		10.0	4.0	mg/L			09/19/17 01:29	1
Biochemical Oxygen Demand	ND		2.0	2.0	mg/L			09/16/17 16:15	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			09/18/17 09:32	1
рН	7.4	HF	0.1		SU			09/18/17 14:04	1
Temperature		HE	0.001	0.004	Degrees C			09/18/17 14:04	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Lab Sample ID: 480-124274-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 09/15/17 12:20 Date Received: 09/15/17 13:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			09/18/17 18:35	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/18/17 18:35	1
Benzene	9.6		0.20	0.023	ug/L			09/18/17 18:35	1
Ethylbenzene	0.80		0.20	0.029	ug/L			09/18/17 18:35	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/18/17 18:35	1
Methyl tert-butyl ether	0.25	J	0.40	0.044	ug/L			09/18/17 18:35	1
m,p-Xylene	0.28	J	0.40	0.054	ug/L			09/18/17 18:35	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/18/17 18:35	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/18/17 18:35	1
o-Xylene	0.20		0.20	0.027	ug/L			09/18/17 18:35	1
p-Cymene	ND		0.20	0.030	ug/L			09/18/17 18:35	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/18/17 18:35	1
Toluene	1.5		0.20	0.036	ug/L			09/18/17 18:35	1
Xylenes, Total	0.48	J	0.60	0.054	ug/L			09/18/17 18:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		63 - 129			-		09/18/17 18:35	1
4-Bromofluorobenzene	85		64 - 128					09/18/17 18:35	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Lab Sample ID: 480-124274-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 09/15/17 12:25 Date Received: 09/15/17 13:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene		J	20	3.5	ug/L			09/19/17 12:35	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			09/19/17 12:35	100
Benzene	4800		20	2.3	ug/L			09/19/17 12:35	100
Ethylbenzene	360		20	2.9	ug/L			09/19/17 12:35	100
Isopropylbenzene	ND		20	2.7	ug/L			09/19/17 12:35	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			09/19/17 12:35	100
m,p-Xylene	130		40	5.4	ug/L			09/19/17 12:35	100
n-Butylbenzene	ND		20	3.1	ug/L			09/19/17 12:35	100
n-Propylbenzene	ND		20	13	ug/L			09/19/17 12:35	100
o-Xylene	90		20	2.7	ug/L			09/19/17 12:35	100
p-Cymene	ND		20	3.0	ug/L			09/19/17 12:35	100
sec-Butylbenzene	ND		20	2.0	ug/L			09/19/17 12:35	100
Toluene	820		20	3.6	ug/L			09/19/17 12:35	100
Xylenes, Total	220		60	5.4	ug/L			09/19/17 12:35	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	89		63 - 129					09/19/17 12:35	100
4-Bromofluorobenzene	82		64 - 128					09/19/17 12:35	100

9/26/2017

TestAmerica Job ID: 480-124274-1

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

Lab Sample ID: 480-124274-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 09/15/17 12:30

Date Received: 09/15/17 13:05

Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		25	21	ug/L			09/23/17 18:53	25
1,1,2,2-Tetrachloroethane	ND		25	5.3	ug/L			09/23/17 18:53	25
1,1,2-Trichloroethane	ND		25	5.8	ug/L			09/23/17 18:53	25
1,1-Dichloroethane	ND	F1	25	9.5	ug/L			09/23/17 18:53	25
1,1-Dichloroethene	ND		25	7.3	ug/L			09/23/17 18:53	25
1,2-Dichloroethane	140		25	5.3	ug/L			09/23/17 18:53	25
1,2-Dichloroethene, Total	ND		50	20	ug/L			09/23/17 18:53	25
1,2-Dichloropropane	ND		25	18	ug/L			09/23/17 18:53	25
2-Hexanone	ND	F1	130	31	ug/L			09/23/17 18:53	25
2-Butanone (MEK)	ND		250	33	ug/L			09/23/17 18:53	25
4-Methyl-2-pentanone (MIBK)	ND	F1	130	53	ug/L			09/23/17 18:53	25
Acetone	ND		250	75	ug/L			09/23/17 18:53	25
Bromodichloromethane	ND	F1	25	9.8	ug/L			09/23/17 18:53	25
Bromoform	ND		25	6.5	ug/L			09/23/17 18:53	25
Bromomethane	ND		25	17	ug/L			09/23/17 18:53	25
Carbon disulfide	ND	F2	25	4.8	ug/L			09/23/17 18:53	25
Carbon tetrachloride	ND		25	6.8	ug/L			09/23/17 18:53	25
Chlorobenzene	ND		25	19	ug/L			09/23/17 18:53	25
Dibromochloromethane	ND		25	8.0	ug/L			09/23/17 18:53	25
Chloroethane	ND		25	8.0	ug/L			09/23/17 18:53	25
Chloroform	60		25	8.5	ug/L			09/23/17 18:53	25
Chloromethane	ND	F1	25	8.8	ug/L			09/23/17 18:53	25
cis-1,3-Dichloropropene	ND		25	9.0	ug/L			09/23/17 18:53	25
Ethylbenzene	400		25	19	ug/L			09/23/17 18:53	25
Methylene Chloride	ND		25	11	ug/L			09/23/17 18:53	25
Styrene	ND		25	18	ug/L			09/23/17 18:53	25
Tetrachloroethene	ND		25	9.0	ug/L			09/23/17 18:53	25
Toluene	960		25	13	ug/L			09/23/17 18:53	25
trans-1,3-Dichloropropene	ND		25	9.3	ug/L			09/23/17 18:53	25
Trichloroethene	ND		25	12	ug/L			09/23/17 18:53	25
Vinyl chloride	ND	F2	25	23	ug/L			09/23/17 18:53	25
Vinyl acetate	ND	F1	130	21	ug/L			09/23/17 18:53	25
Xylenes, Total	180		50	17	ug/L			09/23/17 18:53	25
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	91		77 - 120					09/23/17 18:53	25
Toluene-d8 (Surr)	88		80 - 120					09/23/17 18:53	25
4-Bromofluorobenzene (Surr)	98		73 - 120					09/23/17 18:53	25

Method: 8260C - Volatile C Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5700		200	82	ug/L			09/25/17 11:43	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90	-	77 - 120			-		09/25/17 11:43	200
Toluene-d8 (Surr)	93		80 - 120					09/25/17 11:43	200

TestAmerica Buffalo

Client: New York State D.E.C.

Calcium Iron

Magnesium

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Lab Sample ID: 480-124274-4

09/19/17 09:20 09/19/17 21:35

09/19/17 09:20 09/19/17 21:35

09/19/17 09:20 09/19/17 21:35

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 09/15/17 12:30 Date Received: 09/15/17 13:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	4.0	J	20	3.5	ug/L			09/19/17 13:07	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			09/19/17 13:07	100
Benzene	4800		20	2.3	ug/L			09/19/17 13:07	100
Ethylbenzene	360		20	2.9	ug/L			09/19/17 13:07	100
Isopropylbenzene	ND		20	2.7	ug/L			09/19/17 13:07	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			09/19/17 13:07	100
m,p-Xylene	110		40	5.4	ug/L			09/19/17 13:07	100
n-Butylbenzene	ND		20	3.1	ug/L			09/19/17 13:07	100
n-Propylbenzene	ND		20	13	ug/L			09/19/17 13:07	100
o-Xylene	91		20	2.7	ug/L			09/19/17 13:07	100
p-Cymene	ND		20	3.0	ug/L			09/19/17 13:07	100
sec-Butylbenzene	ND		20	2.0	ug/L			09/19/17 13:07	100
Toluene	810		20	3.6	ug/L			09/19/17 13:07	100
Xylenes, Total	200		60	5.4	ug/L			09/19/17 13:07	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		63 - 129			-		09/19/17 13:07	100
4-Bromofluorobenzene	83		64 - 128					09/19/17 13:07	100
Method: 200.7 Rev 4.4 - M	letals (ICP)								
Analyte	, ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

P	otassium	4060		500	100	ug/L		09/19/17 09:20	09/19/17 21:35	1
S	odium	55800		1000	324	ug/L		09/19/17 09:20	09/19/17 21:35	1
	General Chemistry									
A	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	nalyte hloride		Qualifier	10.0 —		Unit mg/L	D	Prepared	Analyzed 09/23/17 19:22	Dil Fac
C	<u> </u>		Qualifier		5.6		D	Prepared		

500

50.0

200

119000

52600

161

100 ug/L

19.3 ug/L

43.4 ug/L

9/26/2017

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Lab Sample ID: 480-124274-5

Matrix: Water

Client Sample ID: OUTSIDE SUMP

Date Collected: 09/15/17 12:45 Date Received: 09/15/17 13:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	17	J	100	17	ug/L			09/19/17 13:39	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			09/19/17 13:39	500
Benzene	6000		100	12	ug/L			09/19/17 13:39	500
Ethylbenzene	490		100	14	ug/L			09/19/17 13:39	500
Isopropylbenzene	ND		100	14	ug/L			09/19/17 13:39	500
Methyl tert-butyl ether	ND		200	22	ug/L			09/19/17 13:39	500
m,p-Xylene	190	J	200	27	ug/L			09/19/17 13:39	500
n-Butylbenzene	ND		100	15	ug/L			09/19/17 13:39	500
n-Propylbenzene	ND		100	65	ug/L			09/19/17 13:39	500
o-Xylene	ND		100	14	ug/L			09/19/17 13:39	500
p-Cymene	ND		100	15	ug/L			09/19/17 13:39	500
sec-Butylbenzene	ND		100	10	ug/L			09/19/17 13:39	500
Toluene	950		100	18	ug/L			09/19/17 13:39	500
Xylenes, Total	190	J	300	27	ug/L			09/19/17 13:39	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	89		63 - 129					09/19/17 13:39	500
4-Bromofluorobenzene	83		64 - 128					09/19/17 13:39	500

9/26/2017

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3 Lab Sample ID: 480-124274-1

Date Collected: 09/15/17 12:15 **Matrix: Water** Date Received: 09/15/17 13:05

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

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-124274-2 Date Collected: 09/15/17 12:20 **Matrix: Water**

Date Received: 09/15/17 13:05

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

Client Sample ID: Post-Carbon 1 Lab Sample ID: 480-124274-3

Date Collected: 09/15/17 12:25 Date Received: 09/15/17 13:05

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

Client Sample ID: Pre-Carbon Lab Sample ID: 480-124274-4

Date Collected: 09/15/17 12:30 Date Received: 09/15/17 13:05

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

TestAmerica Buffalo

9/26/2017

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Matrix: Water

Matrix: Water

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

Lab Sample ID: 480-124274-4

Client Sample ID: Pre-Carbon Date Collected: 09/15/17 12:30 **Matrix: Water**

Date Received: 09/15/17 13:05

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

Lab Sample ID: 480-124274-5 **Client Sample ID: OUTSIDE SUMP**

Date Collected: 09/15/17 12:45 **Matrix: Water**

Date Received: 09/15/17 13:05

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

Laboratory References:

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

Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-124274-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

thority	Program		EPA Region	Identification Number	Expiration Date
w York	NELAP		2	10026	03-31-18
The following analytes	s are included in this repo	rt, but are not accre	dited/certified under t	his accreditation/certificatio	n:
Analysis Method	Prep Method	Matrix	Analyt	е	
335.4	Distill/CN	Water	Cyanic	de, Total	
The following analytes	s are included in this repo	rt, but accreditation/	certification is not offe	ered by the governing author	ority:
0 ,		,		, , ,	ority:
Analysis Method	s are included in this repo Prep Method	Matrix	Analyt	e e	ority:
0 ,		,		e ylene	ority:
Analysis Method 8021B		Matrix Water	Analyt m,p-X o-Xyle	e ylene	ority:
Analysis Method 8021B 8021B		Matrix Water Water	Analyt m,p-X o-Xyle	e ylene ne	ority:

9/26/2017

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

/lethod	Method Description	Protocol	Laboratory
3260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
08	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
00.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
664B	HEM and SGT-HEM	1664B	TAL BUF
0.00	Anions, Ion Chromatography	MCAWW	TAL BUF
10.2	Alkalinity	MCAWW	TAL BUF
35.4	Cyanide, Total	MCAWW	TAL BUF
20.1	Phenolics, Total Recoverable	MCAWW	TAL BUF
M 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
M 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
M 4500 H+ B	pH	SM	TAL BUF
M 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

1664B = 1664B

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

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

TestAmerica Buffalo

9/26/2017

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-124274-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228 phone 716.504.9852 fax 716.691.7991 TestAmerica Laboratories, Inc. COC No: Client Contact Project Manager: Glenn May (NYSDEC) Site Contact: Thomas Palmer Date: Groundwater & Environmental Services, Inc. Tel/Fax: (716) 851-7220 Lab Contact: O. Johnson COCs Carrier: of [495 Aero Drive Suite 3 Job No. **Analysis Turnaround Time** 8021B - (MOD) STARS list - VOA - 8021 8270C-(MOD) TCL SVOA - OLM04.2 Cheektowaga, NY 14225 Calendar (C) or Work Days (W) 420.4 - Phenolics, Total Recoverable 8260B - (MOD) TCL list OLM04.2 300.0_28D (MOD) Local Method 2540D - Total Suspended Solids (800) 287-7857 Phone TAT if different from Below 200.7 - (MOD) Local Method SDG No. X 1664A_Calc - Oil & Grease (866) 902-2187 FAX 2 weeks Project Name: NYSDEC Gatown WWTP I week 480-124274 COC Site: 915171 2 days P O # Callout 120597 1 day Sample Sample Sample Date Sample Identification Time Type Matrix Cont. Sample Specific Notes: X X Post-Carbon 3 Grab W 19 X X X X Post-Carbon 2 W 3 X Grab 1220 Post-Carbon 1 Grab W 3 X X Pre-Carbon W X XX X 1230 Grab 9 Inside / Outside Sump 1245 Grab W 3 X Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For ______ Month Possible Hazard Identification Flammable Unknown Non-Hazard Skin Irritant Poison B Months Special Instructions/QC Requirements & Comments: Relinquished by Date/Time: 9 15 1305 Relinquished by Date/Time: Company Received by Cómpany 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: 480-124274-1

Login Number: 124274 List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Creator. Williams, Christopher 3			
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		

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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: 480-126061-1

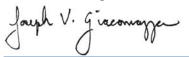
Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

New York State D.E.C. 625 Broadway 11th Floor Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by: 10/31/2017 4:55:05 PM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864 orlette.johnson@testamericainc.com

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.



2

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.

4

Joseph V. Gireomonger

2

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

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Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-126061-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

Qualifiers

GC/MS VOA

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

GC VOA

Qualifier **Qualifier Description**

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

Minimum Detectable Activity (Radiochemistry) MDA Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit Minimum Level (Dioxin) ML NC

Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PΩI Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

Job ID: 480-126061-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-126061-1

Comments

No additional comments.

Receipt

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

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-384755 recovered above the upper control limit for Carbon tetrachloride and Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-126061-1).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-126061-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 2 (480-126061-2), Post-Carbon 1 (480-126061-3), Pre-Carbon (480-126061-4) and Outside Sump (480-126061-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-126061-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-126061-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 10/18/17 12:30 Date Received: 10/18/17 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/31/17 12:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/31/17 12:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/31/17 12:11	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/31/17 12:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/31/17 12:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/31/17 12:11	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			10/31/17 12:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/31/17 12:11	1
2-Hexanone	ND		5.0	1.2	ug/L			10/31/17 12:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/31/17 12:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/31/17 12:11	1
Acetone	3.7	J	10	3.0	ug/L			10/31/17 12:11	1
Benzene	ND		1.0	0.41	ug/L			10/31/17 12:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/31/17 12:11	1
Bromoform	ND		1.0	0.26	ug/L			10/31/17 12:11	1
Bromomethane	ND		1.0	0.69	ug/L			10/31/17 12:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/31/17 12:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/31/17 12:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/31/17 12:11	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/31/17 12:11	1
Chloroethane	ND		1.0	0.32	ug/L			10/31/17 12:11	1
Chloroform	ND		1.0	0.34	ug/L			10/31/17 12:11	1
Chloromethane	ND		1.0	0.35	ug/L			10/31/17 12:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/31/17 12:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/31/17 12:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/31/17 12:11	1
Styrene	ND		1.0	0.73	ug/L			10/31/17 12:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/31/17 12:11	1
Toluene	ND		1.0	0.51	ug/L			10/31/17 12:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/31/17 12:11	1
Trichloroethene	ND		1.0	0.46	ug/L			10/31/17 12:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/31/17 12:11	1
Vinyl acetate	ND		5.0	0.85	ug/L			10/31/17 12:11	1
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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		10/31/17 12:11	1
Toluene-d8 (Surr)	102		80 - 120		10/31/17 12:11	1
4-Bromofluorobenzene (Surr)	98		73 - 120		10/31/17 12:11	1

Method: 8021B - Volatile Organic	Compounds	(GC)
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			10/22/17 15:25	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/22/17 15:25	1
Benzene	ND		0.20	0.023	ug/L			10/22/17 15:25	1
Ethylbenzene	ND		0.20	0.029	ug/L			10/22/17 15:25	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/22/17 15:25	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/22/17 15:25	1
m,p-Xylene	ND		0.40	0.054	ug/L			10/22/17 15:25	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/22/17 15:25	1

TestAmerica Buffalo

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10/31/2017

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

Lab Sample ID: 480-126061-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 10/18/17 12:30 Date Received: 10/18/17 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			10/22/17 15:25	1
o-Xylene	ND		0.20	0.027	ug/L			10/22/17 15:25	1
p-Cymene	ND		0.20	0.030	ug/L			10/22/17 15:25	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/22/17 15:25	1
Toluene	ND		0.20	0.036	ug/L			10/22/17 15:25	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/22/17 15:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129					10/22/17 15:25	1
4-Bromofluorobenzene	77		64 - 128					10/22/17 15:25	1
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Method: 200.7 Rev 4.4 - Met	tals (ICP)								
	, ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	, ,	Qualifier	RL 50.0		Unit ug/L	D	Prepared 10/24/17 08:33	Analyzed 10/24/17 18:01	Dil Fac
Method: 200.7 Rev 4.4 - Met Analyte Iron General Chemistry	Result	Qualifier				D_			Dil Fac
Analyte Iron General Chemistry	Result 72.6	Qualifier Qualifier		19.3		D D			Dil Fac
Analyte Iron General Chemistry Analyte	Result 72.6	Qualifier	50.0	19.3	ug/L Unit		10/24/17 08:33	10/24/17 18:01	1
Analyte Iron	Result 72.6 Result 0.086	Qualifier	50.0	19.3 MDL 0.0050	ug/L Unit		10/24/17 08:33 Prepared	10/24/17 18:01 Analyzed	1
Analyte Iron General Chemistry Analyte Cyanide, Total	Result 0.086 Result	Qualifier F1	50.0 RL 0.010	19.3 MDL 0.0050	ug/L Unit mg/L	D	10/24/17 08:33 Prepared 10/20/17 03:40	10/24/17 18:01 Analyzed 10/20/17 13:23	Dil Fac

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

Lab Sample ID: 480-126061-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 10/18/17 12:35 Date Received: 10/18/17 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.17	ug/L			10/22/17 15:57	5
1,3,5-Trimethylbenzene	ND		1.0	0.75	ug/L			10/22/17 15:57	5
Benzene	13		1.0	0.12	ug/L			10/22/17 15:57	5
Ethylbenzene	0.76	J	1.0	0.14	ug/L			10/22/17 15:57	5
Isopropylbenzene	ND		1.0	0.14	ug/L			10/22/17 15:57	5
Methyl tert-butyl ether	ND		2.0	0.22	ug/L			10/22/17 15:57	5
m,p-Xylene	0.45	J	2.0	0.27	ug/L			10/22/17 15:57	5
n-Butylbenzene	ND		1.0	0.15	ug/L			10/22/17 15:57	5
n-Propylbenzene	ND		1.0	0.65	ug/L			10/22/17 15:57	5
o-Xylene	0.53	J	1.0	0.14	ug/L			10/22/17 15:57	5
p-Cymene	ND		1.0	0.15	ug/L			10/22/17 15:57	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			10/22/17 15:57	5
Toluene	2.3		1.0	0.18	ug/L			10/22/17 15:57	5
Xylenes, Total	0.98	J	3.0	0.27	ug/L			10/22/17 15:57	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		63 - 129			-		10/22/17 15:57	5
4-Bromofluorobenzene	76		64 - 128					10/22/17 15:57	5

10/31/2017

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

Lab Sample ID: 480-126061-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 10/18/17 12:40 Date Received: 10/18/17 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		20	3.5	ug/L			10/22/17 16:29	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			10/22/17 16:29	100
Benzene	2500		20	2.3	ug/L			10/22/17 16:29	100
Ethylbenzene	120		20	2.9	ug/L			10/22/17 16:29	100
Isopropylbenzene	ND		20	2.7	ug/L			10/22/17 16:29	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			10/22/17 16:29	100
m,p-Xylene	ND		40	5.4	ug/L			10/22/17 16:29	100
n-Butylbenzene	3.3	J	20	3.1	ug/L			10/22/17 16:29	100
n-Propylbenzene	ND		20	13	ug/L			10/22/17 16:29	100
o-Xylene	5.4	J	20	2.7	ug/L			10/22/17 16:29	100
p-Cymene	ND		20	3.0	ug/L			10/22/17 16:29	100
sec-Butylbenzene	ND		20	2.0	ug/L			10/22/17 16:29	100
Toluene	330		20	3.6	ug/L			10/22/17 16:29	100
Xylenes, Total	5.4	J	60	5.4	ug/L			10/22/17 16:29	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129			-		10/22/17 16:29	100
4-Bromofluorobenzene	78		64 - 128					10/22/17 16:29	100

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Client: New York State D.E.C.

Date Received: 10/18/17 13:35

Potassium

Sodium

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

Lab Sample ID: 480-126061-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 10/18/17 12:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	15	J		3.5	ug/L			10/22/17 17:01	100
1,3,5-Trimethylbenzene	94		20	15	ug/L			10/22/17 17:01	100
Benzene	3200		20	2.3	ug/L			10/22/17 17:01	100
Ethylbenzene	230		20	2.9	ug/L			10/22/17 17:01	100
Isopropylbenzene	ND		20	2.7	ug/L			10/22/17 17:01	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			10/22/17 17:01	100
m,p-Xylene	140		40	5.4	ug/L			10/22/17 17:01	100
n-Butylbenzene	ND		20	3.1	ug/L			10/22/17 17:01	100
n-Propylbenzene	ND		20	13	ug/L			10/22/17 17:01	100
o-Xylene	180		20	2.7	ug/L			10/22/17 17:01	100
p-Cymene	ND		20	3.0	ug/L			10/22/17 17:01	100
sec-Butylbenzene	ND		20	2.0	ug/L			10/22/17 17:01	100
Toluene	690		20	3.6	ug/L			10/22/17 17:01	100
Xylenes, Total	320		60	5.4	ug/L			10/22/17 17:01	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		63 - 129					10/22/17 17:01	100
4-Bromofluorobenzene	77		64 - 128					10/22/17 17:01	100
Method: 200.7 Rev 4.4 - Met	tals (ICP)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	123000		500	100	ug/L		10/24/17 08:33	10/24/17 18:05	1
Iron	254		50.0	19.3	ug/L		10/24/17 08:33	10/24/17 18:05	1
Magnesium	49000		200	43.4	ug/L		10/24/17 08:33	10/24/17 18:05	1

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

500

1000

100 ug/L

324 ug/L

10/24/17 08:33

10/24/17 08:33

10/24/17 18:05

10/24/17 18:05

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TestAmerica Buffalo

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

Lab Sample ID: 480-126061-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 10/18/17 13:00 Date Received: 10/18/17 13:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			10/22/17 17:33	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			10/22/17 17:33	500
Benzene	4700		100	12	ug/L			10/22/17 17:33	500
Ethylbenzene	350		100	14	ug/L			10/22/17 17:33	500
Isopropylbenzene	ND		100	14	ug/L			10/22/17 17:33	500
Methyl tert-butyl ether	ND		200	22	ug/L			10/22/17 17:33	500
m,p-Xylene	140	J	200	27	ug/L			10/22/17 17:33	500
n-Butylbenzene	ND		100	15	ug/L			10/22/17 17:33	500
n-Propylbenzene	ND		100	65	ug/L			10/22/17 17:33	500
o-Xylene	260		100	14	ug/L			10/22/17 17:33	500
p-Cymene	ND		100	15	ug/L			10/22/17 17:33	500
sec-Butylbenzene	ND		100	10	ug/L			10/22/17 17:33	500
Toluene	860		100	18	ug/L			10/22/17 17:33	500
Xylenes, Total	400		300	27	ug/L			10/22/17 17:33	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129			-		10/22/17 17:33	500
4-Bromofluorobenzene	76		64 - 128					10/22/17 17:33	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-126061-1

Lab Sample ID: 480-126061-2

Lab Sample ID: 480-126061-3

Lab Sample ID: 480-126061-4

Matrix: Wastewater

Matrix: Water

Matrix: Water

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 10/18/17 12:30 Date Received: 10/18/17 13:35

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

Client Sample ID: Post-Carbon 2

Date Collected: 10/18/17 12:35 Date Received: 10/18/17 13:35

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

Client Sample ID: Post-Carbon 1

Date Collected: 10/18/17 12:40

Date Received: 10/18/17 13:35

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

Client Sample ID: Pre-Carbon

Date	Received:	10/18/17	13:35
_			
Date	Collected:	10/18/17	12:45

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

Client Sample ID: Outside Sump	Lab Sample ID: 480-126061-5
Date Collected: 10/18/17 13:00	Matrix: Water
Date Received: 10/18/17 13:35	

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

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-126061-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

ority	Program		EPA Region	Identification Number	Expiration Date
York	NELAP		2	10026	03-31-18
The following analytes	are included in this report, bu	t are not accredited/certifie	d under this accred	ditation/certification:	
Analysis Method	Prep Method	Matrix	Analyt	e	
335.4	Distill/CN	Wastewater	Cyanio	de, Total	
9 ,	are included in this report, bu		-		
ha fallowing analyton	are included in this report bu	t approditation/partification	is not offered by th	a acyarning outhority:	
The following analytes analysis Method 8021B	are included in this report, bu Prep Method	t accreditation/certification Matrix Wastewater	is not offered by the $\frac{\text{Analyt}}{\text{m,p-X}}$	e	
Analysis Method	•	Matrix	Analyt	e ylene	
Analysis Method 3021B	•	Matrix Wastewater	Analyt	ylene	
Analysis Method 3021B 3021B	•	Matrix Wastewater Wastewater	Analyt m,p-X o-Xyle	e ylene ene ylene	
Analysis Method 8021B 8021B	•	Matrix Wastewater Wastewater Water	Analyt m,p-X o-Xyle m,p-X o-Xyle	e ylene ene ylene	
Analysis Method 8021B 8021B 8021B 8021B	•	Matrix Wastewater Wastewater Water Water	Analyt m,p-X o-Xyle m,p-X o-Xyle	ylene ene ylene	

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-126061-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991															1	1			TestAmerica	Laborator	ies, Inc.
Client Contact	Project Ma	nager: Gler	nn May (N)	(SDEC)		Site	Conta	ct: T	hom	as Pal	mer		Dat	e: /∂	0/18	lin		_	COC No:		,
Groundwater & Environmental Services, Inc	_	16) 851-722	-			Lab	Conta	ect: C). Jo	hnson			Car	rier:	1	1			of	COCs	
495 Aero Drive Suite 3		Analysis To	urnaround	Time						021			\neg		\top		ТТ	\neg	Job No.		
Cheektowaga, NY 14225	Calenda	(C) or Wo	ork Days (W)						4-8							11				
(800) 287-7857 Phone		AT if different f				1 13			1	VO.					11		1 1		1		
(866) 902-2187 FAX		2	weeks				thod			OL.							11		SDG No.		
Project Name: NYSDEC Gatown WWTP		1	week				Me			Ist RS	=						11				
Site: 915171			2 days				Loca	2		TCI	, Tol	_					1.1		l		
P O # Callout 120597		1	day			laple 3		alini	_	000	nide	+ p					11				
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	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							Samp	e Specific N	otes:
Post-Carbon 3	10/8	1230	Grab	w	9	N			x	x x	x	x									
Post-Carbon 2		1235	Grab	w	3	N				X	(his	···
Post-Carbon 1		1240	Grab	w	3	N				X	(3
Pre-Carbon		1245	Grab	w	6	N	x x	x		N	4									iso	<i>*</i>
Inside Outside Sump		1300	Grab	w	3	N				X	(26061	20c
	1																				
						П															
						П															
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=N	OH: 6= Othe			-		4	+	T		\vdash	+	\vdash		\vdash	+	\vdash	\top				
Possible Hazard Identification	ion, v ome			. /		-	Samp	le Di	ispo	sal (A	A fee	may	be as:	essec	if sa	mples	are re	etaine	d longer than	month)	
Non-Hazard Flammable Skin Irritant	Poison I		Unknown	X						o Clie			→ Disp					Archive		Months	
Special Instructions/QC Requirements & Comments:												- 10									
										۸.			,								
Relinquished by:	Company	555		Date/Ti		35	Receiv	ed by	y:	M	m	K	011	1	'ompar	iy:	A		Date/Time:	1171	335
Relinquished by:	Company:			Date/Ti		I	Receiv	ed by	y:					C	ompar	ny:			Date/Time:		
Relinquished by:	Company:			Date/Ti	me:	I	Receiv	ed by	y:					C	Compar	ny:			Date/Time:		

Form No. CA-C-WI-002, dated 04/07/201







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Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-126061-1

Login Number: 126061 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Creator. Jamish, Carr W		
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	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-127763-1

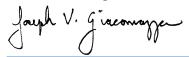
Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

New York State D.E.C. 625 Broadway 11th Floor Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by: 11/30/2017 1:04:15 PM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864

orlette.johnson@testamericainc.com

·····LINKS ······

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

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

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

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

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

Joeph V. Gireomagger

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

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-127763-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

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

GC VOA

J

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.
В	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

Minimum Detectable Activity (Radiochemistry) MDA Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit Minimum Level (Dioxin) ML

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

Job ID: 480-127763-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-127763-1

Comments

No additional comments.

Receipt

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

GC/MS VOA

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

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-127763-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-127763-3), Pre-Carbon (480-127763-4) and Outside Sump (480-127763-5). Elevated reporting limits (RLs) are provided.

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

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-127763-1).

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-127763-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 11/17/17 12:30 Date Received: 11/17/17 14:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			11/24/17 11:34	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			11/24/17 11:34	100
1,1,2-Trichloroethane	ND		100	23	ug/L			11/24/17 11:34	100
1,1-Dichloroethane	ND		100	38	ug/L			11/24/17 11:34	100
1,1-Dichloroethene	ND		100	29	ug/L			11/24/17 11:34	100
1,2-Dichloroethane	ND		100	21	ug/L			11/24/17 11:34	100
1,2-Dichloroethene, Total	ND		200	81	ug/L			11/24/17 11:34	100
1,2-Dichloropropane	ND		100	72	ug/L			11/24/17 11:34	100
2-Hexanone	ND		500	120	ug/L			11/24/17 11:34	100
2-Butanone (MEK)	ND		1000	130	ug/L			11/24/17 11:34	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			11/24/17 11:34	100
Acetone	ND		1000	300	ug/L			11/24/17 11:34	100
Benzene	ND		100	41	ug/L			11/24/17 11:34	100
Bromodichloromethane	ND		100	39	ug/L			11/24/17 11:34	100
Bromoform	ND		100	26	ug/L			11/24/17 11:34	100
Bromomethane	ND		100	69	ug/L			11/24/17 11:34	100
Carbon disulfide	ND		100	19	ug/L			11/24/17 11:34	100
Carbon tetrachloride	ND		100	27	ug/L			11/24/17 11:34	100
Chlorobenzene	ND		100	75	ug/L			11/24/17 11:34	100
Dibromochloromethane	ND		100	32	ug/L			11/24/17 11:34	100
Chloroethane	ND		100	32	ug/L			11/24/17 11:34	100
Chloroform	ND		100	34	ug/L			11/24/17 11:34	100
Chloromethane	ND		100	35	ug/L			11/24/17 11:34	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			11/24/17 11:34	100
Ethylbenzene	ND		100	74	ug/L			11/24/17 11:34	100
Methylene Chloride	52	J	100	44	ug/L			11/24/17 11:34	100
Styrene	ND		100	73	ug/L			11/24/17 11:34	100
Tetrachloroethene	ND		100	36	ug/L			11/24/17 11:34	100
Toluene	ND		100	51	ug/L			11/24/17 11:34	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			11/24/17 11:34	100
Trichloroethene	ND		100	46	ug/L			11/24/17 11:34	100
Vinyl chloride	ND		100	90	ug/L			11/24/17 11:34	100
Vinyl acetate	ND		500	85	ug/L			11/24/17 11:34	100
Xylenes, Total	ND		200	66	ug/L			11/24/17 11:34	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		77 - 120			-		11/24/17 11:34	100
Toluene-d8 (Surr)	100		80 - 120					11/24/17 11:34	100
4-Bromofluorobenzene (Surr)	97		73 - 120					11/24/17 11:34	100

Made at 0004D	V-1-4! - O!-	O(OO)
Wetnoa: 8021B - 1	volatile Organic	Compounds (GC)

Method: 8021B - Volatile Organic Com	pounds	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			11/20/17 16:35	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/20/17 16:35	1
Benzene	ND		0.20	0.023	ug/L			11/20/17 16:35	1
Ethylbenzene	ND		0.20	0.029	ug/L			11/20/17 16:35	1
Isopropylbenzene	ND		0.20	0.027	ug/L			11/20/17 16:35	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			11/20/17 16:35	1
m,p-Xylene	ND		0.40	0.054	ug/L			11/20/17 16:35	1
n-Butylbenzene	ND		0.20	0.031	ug/L			11/20/17 16:35	1

TestAmerica Buffalo

Page 6 of 17

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

Client Sample ID: Post-Carbon 3

Date Collected: 11/17/17 12:30 Date Received: 11/17/17 14:40

Cyanide, Total

Temperature

Analyte

рН

Lab Sample ID: 480-127763-1

11/28/17 01:05

Prepared

D

11/28/17 13:00

Analyzed

11/19/17 16:05

11/19/17 16:05

Matrix: Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			11/20/17 16:35	1
o-Xylene	ND		0.20	0.027	ug/L			11/20/17 16:35	1
p-Cymene	ND		0.20	0.030	ug/L			11/20/17 16:35	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/20/17 16:35	1
Toluene	ND		0.20	0.036	ug/L			11/20/17 16:35	1
Xylenes, Total	ND		0.60	0.054	ug/L			11/20/17 16:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	82		63 - 129					11/20/17 16:35	1
4-Bromofluorobenzene	109		64 - 128					11/20/17 16:35	1
- Method: 200.7 Rev 4.4 - Meta	als (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	109		50.0	19.3	ug/L		11/21/17 08:25	11/25/17 14:47	1
General Chemistry									
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac

0.010

RL

0.1

0.001

0.14

Result Qualifier

7.6 HF

20.3 HF

0.0050 mg/L

RL Unit

0.1 SU

0.001 Degrees C

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Dil Fac

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

Lab Sample ID: 480-127763-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 11/17/17 12:35 Date Received: 11/17/17 14:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			11/20/17 17:06	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/20/17 17:06	1
Benzene	14		0.20	0.023	ug/L			11/20/17 17:06	1
Ethylbenzene	0.095	J	0.20	0.029	ug/L			11/20/17 17:06	1
Isopropylbenzene	ND		0.20	0.027	ug/L			11/20/17 17:06	1
Methyl tert-butyl ether	0.31	J	0.40	0.044	ug/L			11/20/17 17:06	1
m,p-Xylene	0.055	J	0.40	0.054	ug/L			11/20/17 17:06	1
n-Butylbenzene	ND		0.20	0.031	ug/L			11/20/17 17:06	1
n-Propylbenzene	ND		0.20	0.13	ug/L			11/20/17 17:06	1
o-Xylene	ND		0.20	0.027	ug/L			11/20/17 17:06	1
p-Cymene	ND		0.20	0.030	ug/L			11/20/17 17:06	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/20/17 17:06	1
Toluene	0.26		0.20	0.036	ug/L			11/20/17 17:06	1
Xylenes, Total	0.055	J	0.60	0.054	ug/L			11/20/17 17:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129			-		11/20/17 17:06	1
4-Bromofluorobenzene	111		64 - 128					11/20/17 17:06	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

Lab Sample ID: 480-127763-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 11/17/17 12:40 Date Received: 11/17/17 14:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	12	J	20	3.5	ug/L			11/20/17 14:58	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			11/20/17 14:58	100
Benzene	2800		20	2.3	ug/L			11/20/17 14:58	100
Ethylbenzene	200		20	2.9	ug/L			11/20/17 14:58	100
Isopropylbenzene	ND		20	2.7	ug/L			11/20/17 14:58	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			11/20/17 14:58	100
m,p-Xylene	120		40	5.4	ug/L			11/20/17 14:58	100
n-Butylbenzene	ND		20	3.1	ug/L			11/20/17 14:58	100
n-Propylbenzene	ND		20	13	ug/L			11/20/17 14:58	100
o-Xylene	150		20	2.7	ug/L			11/20/17 14:58	100
p-Cymene	ND		20	3.0	ug/L			11/20/17 14:58	100
sec-Butylbenzene	ND		20	2.0	ug/L			11/20/17 14:58	100
Toluene	510		20	3.6	ug/L			11/20/17 14:58	100
Xylenes, Total	270		60	5.4	ug/L			11/20/17 14:58	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		63 - 129			-		11/20/17 14:58	100
4-Bromofluorobenzene	111		64 - 128					11/20/17 14:58	100

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Client: New York State D.E.C.

Date Received: 11/17/17 14:40

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

Lab Sample ID: 480-127763-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 11/17/17 12:45

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

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

Method: 200.7 Rev 4.4 - Metals	s (ICP)							
Analyte	Result Qualifier	r RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	126000	500	100	ug/L		11/21/17 08:25	11/25/17 14:51	1
Iron	1040	50.0	19.3	ug/L		11/21/17 08:25	11/25/17 14:51	1
Magnesium	44800	200	43.4	ug/L		11/21/17 08:25	11/25/17 14:51	1
Potassium	3810	500	100	ug/L		11/21/17 08:25	11/25/17 14:51	1
Sodium	56800	1000	324	ug/L		11/21/17 08:25	11/25/17 14:51	1

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

Lab Sample ID: 480-127763-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 11/17/17 13:00 Date Received: 11/17/17 14:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			11/20/17 16:02	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			11/20/17 16:02	500
Benzene	4100		100	12	ug/L			11/20/17 16:02	500
Ethylbenzene	330		100	14	ug/L			11/20/17 16:02	500
Isopropylbenzene	ND		100	14	ug/L			11/20/17 16:02	500
Methyl tert-butyl ether	ND		200	22	ug/L			11/20/17 16:02	500
m,p-Xylene	140	J	200	27	ug/L			11/20/17 16:02	500
n-Butylbenzene	ND		100	15	ug/L			11/20/17 16:02	500
n-Propylbenzene	ND		100	65	ug/L			11/20/17 16:02	500
o-Xylene	220		100	14	ug/L			11/20/17 16:02	500
p-Cymene	ND		100	15	ug/L			11/20/17 16:02	500
sec-Butylbenzene	ND		100	10	ug/L			11/20/17 16:02	500
Toluene	680		100	18	ug/L			11/20/17 16:02	500
Xylenes, Total	360		300	27	ug/L			11/20/17 16:02	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	81		63 - 129			-		11/20/17 16:02	500
4-Bromofluorobenzene	107		64 - 128					11/20/17 16:02	500

11/30/2017

2

Client: New York State D.E.C.

Date Received: 11/17/17 14:40

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-127763-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3
Date Collected: 11/17/17 12:30

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

Client Sample ID: Post-Carbon 2

Date Collected: 11/17/17 12:35 Date Received: 11/17/17 14:40 Lab Sample ID: 480-127763-2 Matrix: Wastewater

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

Client Sample ID: Post-Carbon 1

Date Collected: 11/17/17 12:40 Date Received: 11/17/17 14:40 Lab Sample ID: 480-127763-3

Matrix: Water

Matrix: Water

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

Client Sample ID: Pre-Carbon

Date Collected: 11/17/17 12:45

Date Received: 11/17/17 14:40

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

Client Sample ID: Outside Sump

Date Collected: 11/17/17 13:00 Date Received: 11/17/17 14:40 Lab Sample ID: 480-127763-5

Matrix: Water

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

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-127763-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

ority	Program		EPA Region	Identification Number	Expiration Date			
/ York	NELAP		2 10026		03-31-18			
The following analytes	are included in this report, bu	it are not accredited/certific	ed under this accre	ditation/certification:				
Analysis Method	Prep Method	Matrix	Analyt	te				
335.4	Distill/CN	Wastewater	Cyani	de, Total				
	are included in this report, bu		,					
Analysis Method 8021B	Prep Method	Matrix Wastewater	Analyti m,p-X	te ,				
Analysis Method	•	Matrix	Analyt	de ylene				
Analysis Method 8021B	•	Matrix Wastewater	Analyt	ele ylene ene				
Analysis Method 8021B 8021B	•	Matrix Wastewater Wastewater	Analyi m,p-X o-Xyle	ge ylene ene ylene				
Analysis Method 8021B 8021B 8021B	•	Matrix Wastewater Wastewater Water	Analyl m,p-X o-Xyle m,p-X o-Xyle	ge ylene ene ylene				
Analysis Method 8021B 8021B 8021B 8021B	•	Matrix Wastewater Wastewater Water Water	Analyl m,p-X o-Xyle m,p-X o-Xyle	de ylene ene ylene ene				

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-127763-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



phone 716.504.9852 fax 716.691.7991														. 1	1			TestAmerica Laboratories, Inc.
Client Contact	Project Ma	nager: Glei	nn May (NY	YSDEC)		Site C	Conta	ct: Th	omas	Palme	er	D	ate:	1117	117		(COC No:
Groundwater & Environmental Services, Inc	Tel/Fax: (7	16) 851-722	20			Lab (Conta	ct: O.	Johns	son		C	arrier	.)	1			of COCs
195 Aero Drive Suite 3		Analysis T	urnaround	Time						3021							1	Job No.
Cheektowaga, NY 14225	Calenda	r(C) or Wo	ork Days (W)		11_			27	8- V							11	
800) 287-7857 Phone	T	AT if different f	from Below			tho	-		M0	0.							1 L	
866) 902-2187 FAX	X	2	weeks			Ž	etho		10L	list.		1 1			1 1			SDG No.
Project Name: NYSDEC Gatown WWTP		1	week			2003	M		L lis	ARS	Ta l					$\{ \ \}$		
Site: 915171			2 days				Loca	Į.)TC	ST	H H						11	
O # Callout 120597		1	l day			Id N	(a)	alin	_ O	O	t-p	1 1	1		1 1			
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample 300.0 28D (MOD) Local Method	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron 8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 8021	335.4 - Cyanide, Total SM4500_H+-pH							Sample Specific Notes:
Post-Carbon 3	11/17	1230	Grab	W	9	N			x x	x	x x							
Post-Carbon 2		1235	Grab	w	3	N				X								
Post-Carbon 1		1240	Grab	W	3	N				x								
Pre-Carbon		1245	Grab	W	6	N X	X	x		X								
Inside / Outside Sump		1300	Grab	W	3	N				x								
						П												480-127763 COC
																		- 103 COC -
						П											\Box	
						T						Ħ				T	\top	
						Ħ	1				T	Ħ	T			\top		
	1			1		††	+	\Box	\top			$\dagger \dagger$	+	1	H	+	\forall	
						H	T	П	+			\forall		\vdash	\forall	++	\forall	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=Nao	OH; 6= Othe	r				1						\Box						
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison I	, 🗆	Unknown	×					n To (ed if s I By La		are ret		longer than 1 month) For Months
Special Instructions/QC Requirements & Comments:																		
																	•	
Relinquished by:	Company:	3E5	,	Date/Ti	ime:	10 Ry	eceive	ed by:	V	5				Comp	ang A	F.		Date/Time:
Relinquished by:	Company:			Date/T	_		eceive	ed by:						Comp				Date/Time:
Relinquished by:	Company:			Date/T	ima	D	eceive	11	_					Comp			-	Date/Time:











Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-127763-1

Login Number: 127763 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

uestion	Answer	Comment
adioactivity either was not measured or, if measured, is at or below ackground	True	
ne cooler's custody seal, if present, is intact.	True	
ne cooler or samples do not appear to have been compromised or mpered with.	True	
amples were received on ice.	True	
poler Temperature is acceptable.	True	
poler Temperature is recorded.	True	
OC is present.	True	
OC is filled out in ink and legible.	True	
OC is filled out with all pertinent information.	True	
the Field Sampler's name present on COC?	True	
nere are no discrepancies between the sample IDs on the containers and e COC.	True	
amples are received within Holding Time (Excluding tests with immediate Ts)	True	
ample containers have legible labels.	True	
ontainers are not broken or leaking.	True	
ample collection date/times are provided.	True	
propriate sample containers are used.	True	
ample bottles are completely filled.	True	
ample Preservation Verified	True	
nere is sufficient vol. for all requested analyses, incl. any requested S/MSDs	True	
DA sample vials do not have headspace or bubble is <6mm (1/4") in ameter.	True	
necessary, staff have been informed of any short hold time or quick TAT geds	True	
ultiphasic samples are not present.	True	
amples do not require splitting or compositing.	True	
ampling Company provided.	True	GES
amples received within 48 hours of sampling.	True	
amples requiring field filtration have been filtered in the field.	N/A	
nlorine Residual checked.	N/A	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

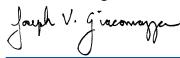
TestAmerica Job ID: 480-129554-1

Client Project/Site: Gastown WWTP #915171

For:

New York State D.E.C. 625 Broadway 11th Floor Albany, New York 12233-3256

Attn: Mr. Doug K MacNeal



Authorized for release by: 1/10/2018 9:31:21 AM

Joe Giacomazza, Project Management Assistant II joe.giacomazza@testamericainc.com

Designee for

Orlette Johnson, Senior Project Manager (484)685-0864

orlette.johnson@testamericainc.com

·····LINKS ·······

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www.testamericainc.com

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

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

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

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

Joseph V. Gisconoger

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

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-129554-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

Qualifiers

GC/MS VOA

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.
В	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

Minimum Detectable Activity (Radiochemistry) MDA Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit Minimum Level (Dioxin) ML

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

Job ID: 480-129554-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-129554-1

Comments

No additional comments.

Receipt

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

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-394147 recovered above the upper control limit for Carbon tetrachloride and Tetrachloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: Post-Carbon 3 (480-129554-1) and Pre-Carbon (480-129554-4).

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

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

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

GC/MS Semi VOA

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

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-129554-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 2 (480-129554-2), Post-Carbon 1 (480-129554-3), Pre-Carbon (480-129554-4) and OUTSIDE SUMP (480-129554-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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

Metals

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

General Chemistry

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

TestAmerica Buffalo 1/10/2018

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

Job ID: 480-129554-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-129554-1).

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

Organic Prep

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-129554-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/29/17 11:00 Date Received: 12/29/17 12:08

Analyte	Result Qua	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.82	ug/L			12/29/17 23:23	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			12/29/17 23:23	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			12/29/17 23:23	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			12/29/17 23:23	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			12/29/17 23:23	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			12/29/17 23:23	1
1,2-Dichloroethene, Total	ND	2.0	0.81	ug/L			12/29/17 23:23	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			12/29/17 23:23	1
2-Hexanone	ND	5.0	1.2	ug/L			12/29/17 23:23	1
2-Butanone (MEK)	ND	10	1.3	ug/L			12/29/17 23:23	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			12/29/17 23:23	1
Acetone	ND	10	3.0	ug/L			12/29/17 23:23	1
Benzene	ND	1.0	0.41	ug/L			12/29/17 23:23	1
Bromodichloromethane	ND	1.0	0.39	ug/L			12/29/17 23:23	1
Bromoform	ND	1.0	0.26	ug/L			12/29/17 23:23	1
Bromomethane	ND	1.0	0.69	ug/L			12/29/17 23:23	1
Carbon disulfide	ND	1.0	0.19	ug/L			12/29/17 23:23	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			12/29/17 23:23	1
Chlorobenzene	ND	1.0	0.75	ug/L			12/29/17 23:23	1
Dibromochloromethane	ND	1.0	0.32	ug/L			12/29/17 23:23	1
Chloroethane	ND	1.0	0.32	ug/L			12/29/17 23:23	1
Chloroform	ND	1.0	0.34	ug/L			12/29/17 23:23	1
Chloromethane	ND	1.0	0.35	ug/L			12/29/17 23:23	1
cis-1,3-Dichloropropene	ND	1.0		ug/L			12/29/17 23:23	1
Ethylbenzene	ND	1.0	0.74	ug/L			12/29/17 23:23	1
Methylene Chloride	ND	1.0	0.44	ug/L			12/29/17 23:23	1
Styrene	ND	1.0		ug/L			12/29/17 23:23	1
Tetrachloroethene	ND	1.0	0.36	ug/L			12/29/17 23:23	1
Toluene	ND	1.0		ug/L			12/29/17 23:23	1
trans-1,3-Dichloropropene	ND	1.0	0.37	ug/L			12/29/17 23:23	1
Trichloroethene	ND	1.0	0.46	ug/L			12/29/17 23:23	1
Vinyl chloride	ND	1.0		ug/L			12/29/17 23:23	1
Vinyl acetate	ND	5.0		ug/L			12/29/17 23:23	1
Xylenes, Total	ND	2.0		ug/L			12/29/17 23:23	1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120	_		12/29/17 23:23	1
Toluene-d8 (Surr)	98		80 - 120			12/29/17 23:23	1
4-Bromofluorobenzene (Surr)	113		73 - 120			12/29/17 23:23	1

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

Analyte	Result Qualit	•	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND ND	5.0	0.65	ug/L		12/29/17 17:13	01/03/18 15:03	1
2-Methylnaphthalene	ND	5.0	0.60	ug/L		12/29/17 17:13	01/03/18 15:03	1
Acenaphthene	ND	5.0	0.41	ug/L		12/29/17 17:13	01/03/18 15:03	1
Acenaphthylene	ND	5.0	0.38	ug/L		12/29/17 17:13	01/03/18 15:03	1
Anthracene	ND	5.0	0.28	ug/L		12/29/17 17:13	01/03/18 15:03	1
Benzo[a]anthracene	ND	5.0	0.36	ug/L		12/29/17 17:13	01/03/18 15:03	1
Benzo[a]pyrene	ND	5.0	0.47	ug/L		12/29/17 17:13	01/03/18 15:03	1
Benzo[b]fluoranthene	ND	5.0	0.34	ug/L		12/29/17 17:13	01/03/18 15:03	1

TestAmerica Buffalo

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Date Collected: 12/29/17 11:00 Date Received: 12/29/17 12:08

Phenol-d5

2-Fluorophenol

2,4,6-Tribromophenol

a,a,a-Trifluorotoluene

4-Bromofluorobenzene

Lab Sample ID: 480-129554-1

12/29/17 17:13

12/29/17 17:13

12/29/17 17:13

01/03/18 15:03

01/03/18 15:03

01/03/18 15:03

Matrix: Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		12/29/17 17:13	01/03/18 15:03	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		12/29/17 17:13	01/03/18 15:03	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/29/17 17:13	01/03/18 15:03	1
Carbazole	ND		5.0	0.30	ug/L		12/29/17 17:13	01/03/18 15:03	1
Chrysene	ND		5.0	0.33	ug/L		12/29/17 17:13	01/03/18 15:03	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/29/17 17:13	01/03/18 15:03	1
Dibenzofuran	ND		10	0.51	ug/L		12/29/17 17:13	01/03/18 15:03	1
Fluoranthene	ND		5.0	0.40	ug/L		12/29/17 17:13	01/03/18 15:03	1
Fluorene	ND		5.0	0.36	ug/L		12/29/17 17:13	01/03/18 15:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		12/29/17 17:13	01/03/18 15:03	1
Naphthalene	ND		5.0	0.76	ug/L		12/29/17 17:13	01/03/18 15:03	1
Pentachlorophenol	ND		10	2.2	ug/L		12/29/17 17:13	01/03/18 15:03	1
Phenanthrene	ND		5.0	0.44	ug/L		12/29/17 17:13	01/03/18 15:03	1
Phenol	ND		5.0	0.39	ug/L		12/29/17 17:13	01/03/18 15:03	1
Pyrene	ND		5.0	0.34	ug/L		12/29/17 17:13	01/03/18 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		46 - 120				12/29/17 17:13	01/03/18 15:03	1
2-Fluorobiphenyl	96		48 - 120				12/29/17 17:13	01/03/18 15:03	1
p-Terphenyl-d14	87		59 ₋ 136				12/29/17 17:13	01/03/18 15:03	1

22 - 120

35 - 120

41 - 120

48

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128

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			01/04/18 10:58	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			01/04/18 10:58	1
Benzene	ND		0.20	0.023	ug/L			01/04/18 10:58	1
Ethylbenzene	ND		0.20	0.029	ug/L			01/04/18 10:58	1
Isopropylbenzene	ND		0.20	0.027	ug/L			01/04/18 10:58	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			01/04/18 10:58	1
m,p-Xylene	ND		0.40	0.054	ug/L			01/04/18 10:58	1
n-Butylbenzene	ND		0.20	0.031	ug/L			01/04/18 10:58	1
n-Propylbenzene	ND		0.20	0.13	ug/L			01/04/18 10:58	1
o-Xylene	ND		0.20	0.027	ug/L			01/04/18 10:58	1
p-Cymene	ND		0.20	0.030	ug/L			01/04/18 10:58	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			01/04/18 10:58	1
Toluene	ND		0.20	0.036	ug/L			01/04/18 10:58	1
Xylenes, Total	ND		0.60	0.054	ug/L			01/04/18 10:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Method: 608 - Organochlorine Pesticides in Water										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Aldrin	ND		0.050	0.0081	ug/L		12/29/17 18:06	01/02/18 11:54	1
	alpha-BHC	ND		0.050	0.0077	ug/L		12/29/17 18:06	01/02/18 11:54	1
	beta-BHC	ND		0.050	0.025	ug/L		12/29/17 18:06	01/02/18 11:54	1

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01/04/18 10:58

01/04/18 10:58

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Client: New York State D.E.C.

Date Collected: 12/29/17 11:00

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

TestAmerica Job ID: 480-129554-1

Lab Sample ID: 480-129554-1

Matrix: Wastewater

Date Received: 12/29/17 12:08	
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.050	0.010	ug/L		12/29/17 18:06	01/02/18 11:54	1
gamma-BHC (Lindane)	ND		0.050	0.0080	ug/L		12/29/17 18:06	01/02/18 11:54	1
Chlordane (technical)	ND		0.50	0.29	ug/L		12/29/17 18:06	01/02/18 11:54	1
4,4'-DDD	ND		0.050	0.0092	ug/L		12/29/17 18:06	01/02/18 11:54	1
4,4'-DDE	ND		0.050	0.012	ug/L		12/29/17 18:06	01/02/18 11:54	1
4,4'-DDT	ND		0.050	0.011	ug/L		12/29/17 18:06	01/02/18 11:54	1
Dieldrin	ND		0.050	0.0098	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endosulfan I	ND		0.050	0.011	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endosulfan II	ND		0.050	0.012	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endosulfan sulfate	ND		0.050	0.016	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endrin	ND		0.050	0.014	ug/L		12/29/17 18:06	01/02/18 11:54	1
Endrin aldehyde	ND		0.050	0.016	ug/L		12/29/17 18:06	01/02/18 11:54	1
Heptachlor	ND		0.050	0.0085	ug/L		12/29/17 18:06	01/02/18 11:54	1
Heptachlor epoxide	ND		0.050	0.0074	ug/L		12/29/17 18:06	01/02/18 11:54	1
Toxaphene	ND		0.50	0.12	ug/L		12/29/17 18:06	01/02/18 11:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	73		23 - 120				12/29/17 18:06	01/02/18 11:54	1

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

Method: 200.	7 Rev 4.4 -	Metals (ICP)
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	60.7		50.0	19.3	ug/L		01/02/18 07:50	01/02/18 22:05	1

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

Lab Sample ID: 480-129554-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 12/29/17 11:05 Date Received: 12/29/17 12:08

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			01/04/18 11:31	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			01/04/18 11:31	50
Benzene	420		10	1.2	ug/L			01/04/18 11:31	50
Ethylbenzene	9.0	J	10	1.4	ug/L			01/04/18 11:31	50
Isopropylbenzene	ND		10	1.4	ug/L			01/04/18 11:31	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			01/04/18 11:31	50
m,p-Xylene	6.2	J	20	2.7	ug/L			01/04/18 11:31	50
n-Butylbenzene	ND		10	1.5	ug/L			01/04/18 11:31	50
n-Propylbenzene	ND		10	6.5	ug/L			01/04/18 11:31	50
o-Xylene	3.2	J	10	1.4	ug/L			01/04/18 11:31	50
p-Cymene	ND		10	1.5	ug/L			01/04/18 11:31	50
sec-Butylbenzene	ND		10	1.0	ug/L			01/04/18 11:31	50
Toluene	35		10	1.8	ug/L			01/04/18 11:31	50
Xylenes, Total	9.4	J	30	2.7	ug/L			01/04/18 11:31	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	122		63 - 129			-		01/04/18 11:31	50
4-Bromofluorobenzene	120		64 - 128					01/04/18 11:31	50

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

Lab Sample ID: 480-129554-3

Matrix: Wastewater

Client Sample ID: Post-Carbon 1

Date Collected: 12/29/17 11:10 Date Received: 12/29/17 12:08

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	9.0	J	20	3.5	ug/L			01/04/18 12:03	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			01/04/18 12:03	100
Benzene	4100		20	2.3	ug/L			01/04/18 12:03	100
Ethylbenzene	180		20	2.9	ug/L			01/04/18 12:03	100
Isopropylbenzene	ND		20	2.7	ug/L			01/04/18 12:03	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			01/04/18 12:03	100
m,p-Xylene	110		40	5.4	ug/L			01/04/18 12:03	100
n-Butylbenzene	ND		20	3.1	ug/L			01/04/18 12:03	100
n-Propylbenzene	ND		20	13	ug/L			01/04/18 12:03	100
o-Xylene	77		20	2.7	ug/L			01/04/18 12:03	100
p-Cymene	ND		20	3.0	ug/L			01/04/18 12:03	100
sec-Butylbenzene	ND		20	2.0	ug/L			01/04/18 12:03	100
Toluene	690		20	3.6	ug/L			01/04/18 12:03	100
Xylenes, Total	190		60	5.4	ug/L			01/04/18 12:03	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	118		63 - 129			-		01/04/18 12:03	100
4-Bromofluorobenzene	116		64 - 128					01/04/18 12:03	100

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

Lab Sample ID: 480-129554-4

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 12/29/17 11:15

Date Received: 12/29/17 12:08										
Method: 8260C - Volatile Organic Compounds by GC/MS										
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
1,1,1-Trichloroethane	ND	100	82	ug/L			12/29/17 22:34	100		
1,1,2,2-Tetrachloroethane	ND	100	21	ug/L			12/29/17 22:34	100		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	100	31	ug/L			12/29/17 22:34	100		
1,1,2-Trichloroethane	ND	100	23	ug/L			12/29/17 22:34	100		
1,1-Dichloroethane	ND	100	38	ug/L			12/29/17 22:34	100		
1,1-Dichloroethene	ND	100	29	ug/L			12/29/17 22:34	100		
1,2,4-Trichlorobenzene	ND	100	41	ug/L			12/29/17 22:34	100		
1,2,4-Trimethylbenzene	ND	100	75	ug/L			12/29/17 22:34	100		

1,1,1 111011101001110110	110	100	0_	ug/ L	12/20/11 22.01	100
1,1,2,2-Tetrachloroethane	ND	100	21	ug/L	12/29/17 22:34	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	100	31	ug/L	12/29/17 22:34	100
1,1,2-Trichloroethane	ND	100	23	ug/L	12/29/17 22:34	100
1,1-Dichloroethane	ND	100	38	ug/L	12/29/17 22:34	100
1,1-Dichloroethene	ND	100	29	ug/L	12/29/17 22:34	100
1,2,4-Trichlorobenzene	ND	100	41	ug/L	12/29/17 22:34	100
1,2,4-Trimethylbenzene	ND	100	75	ug/L	12/29/17 22:34	100
1,2-Dibromo-3-Chloropropane	ND	100	39	ug/L	12/29/17 22:34	100
1,2-Dibromoethane	ND	100	73	ug/L	12/29/17 22:34	100
1,2-Dichlorobenzene	ND	100	79	ug/L	12/29/17 22:34	100
1,2-Dichloroethane	ND	100	21	ug/L	12/29/17 22:34	100
1,2-Dichloropropane	ND	100	72	ug/L	12/29/17 22:34	100
1,3,5-Trimethylbenzene	ND	100	77	ug/L	12/29/17 22:34	100
1,3-Dichlorobenzene	ND	100		ug/L	12/29/17 22:34	100
1,4-Dichlorobenzene	ND	100	84	ug/L	12/29/17 22:34	100
2-Butanone (MEK)	ND	1000		ug/L	12/29/17 22:34	100
2-Hexanone	ND	500		ug/L	12/29/17 22:34	100
4-Isopropyltoluene	ND	100		ug/L	12/29/17 22:34	100
4-Methyl-2-pentanone (MIBK)	ND	500		ug/L	12/29/17 22:34	100
Acetone	ND	1000		ug/L	12/29/17 22:34	100
Benzene	4700	100		ug/L	12/29/17 22:34	100
Bromodichloromethane	ND	100		ug/L	12/29/17 22:34	100
Bromoform	ND	100		ug/L	12/29/17 22:34	100
Bromomethane	ND	100		ug/L	12/29/17 22:34	100
Carbon disulfide	ND	100		ug/L	12/29/17 22:34	100
Carbon tetrachloride	ND	100		ug/L	12/29/17 22:34	100
Chlorobenzene	ND	100		ug/L	12/29/17 22:34	100
Chloroethane	ND	100		ug/L	12/29/17 22:34	100
Chloroform	ND	100		ug/L	12/29/17 22:34	100
Chloromethane	ND	100		ug/L	12/29/17 22:34	100
cis-1,2-Dichloroethene	ND	100		ug/L	12/29/17 22:34	100
	ND	100			12/29/17 22:34	100
cis-1,3-Dichloropropene Cyclohexane	ND	100		ug/L	12/29/17 22:34	100
Dibromochloromethane	ND ND	100		ug/L	12/29/17 22:34	100
				ug/L		
Dichlorodifluoromethane	ND	100		ug/L	12/29/17 22:34	100
Ethylbenzene	190	100		ug/L	12/29/17 22:34	100
Isopropylbenzene	ND	100		ug/L	12/29/17 22:34	100
m,p-Xylene	140 J	200		ug/L	12/29/17 22:34	100
Methyl acetate	ND	250		ug/L	12/29/17 22:34	100
Methyl tert-butyl ether	ND	100		ug/L	12/29/17 22:34	100
Methylcyclohexane	ND	100		ug/L	12/29/17 22:34	100
Methylene Chloride	ND	100		ug/L	12/29/17 22:34	100
Naphthalene	340	100		ug/L	12/29/17 22:34	100
n-Butylbenzene	ND	100		ug/L	12/29/17 22:34	100
N-Propylbenzene	ND	100		ug/L	12/29/17 22:34	100
o-Xylene	89 J	100		ug/L	12/29/17 22:34	100
sec-Butylbenzene	ND	100		ug/L	12/29/17 22:34	100
Styrene	ND	100	73	ug/L	12/29/17 22:34	100

TestAmerica Buffalo

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-129554-4

Matrix: Wastewater

Client Sample ID: Pre-Carbon

Date Collected: 12/29/17 11:15 Date Received: 12/29/17 12:08

Alkalinity, Total

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		100	81	ug/L			12/29/17 22:34	10
Tetrachloroethene	ND		100	36	ug/L			12/29/17 22:34	100
Toluene	780		100	51	ug/L			12/29/17 22:34	100
trans-1,2-Dichloroethene	ND		100	90	ug/L			12/29/17 22:34	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			12/29/17 22:34	100
Trichloroethene	ND		100	46	ug/L			12/29/17 22:34	100
Trichlorofluoromethane	ND		100	88	ug/L			12/29/17 22:34	100
Vinyl chloride	ND		100	90	ug/L			12/29/17 22:34	100
Xylenes, Total	230		200	66	ug/L			12/29/17 22:34	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					12/29/17 22:34	100
4-Bromofluorobenzene (Surr)	108		73 - 120					12/29/17 22:34	100
Toluene-d8 (Surr)	96		80 - 120					12/29/17 22:34	100
Method: 8021B - Volatile Orga	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	11	J	20		ug/L			01/04/18 12:35	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			01/04/18 12:35	100
Benzene	4000		20	2.3	ug/L			01/04/18 12:35	100
Ethylbenzene	180		20	2.9	ug/L			01/04/18 12:35	100
Isopropylbenzene	ND		20	2.7	ug/L			01/04/18 12:35	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			01/04/18 12:35	100
m,p-Xylene	120		40	5.4	ug/L			01/04/18 12:35	100
n-Butylbenzene	ND		20	3.1	ug/L			01/04/18 12:35	100
n-Propylbenzene	ND		20	13	ug/L			01/04/18 12:35	100
o-Xylene	74		20	2.7	ug/L			01/04/18 12:35	100
p-Cymene	ND		20	3.0	ug/L			01/04/18 12:35	100
sec-Butylbenzene	ND		20	2.0	ug/L			01/04/18 12:35	100
Toluene	660		20	3.6	ug/L			01/04/18 12:35	100
Xylenes, Total	190		60	5.4	ug/L			01/04/18 12:35	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	118		63 - 129					01/04/18 12:35	100
4-Bromofluorobenzene	114		64 - 128					01/04/18 12:35	100
Method: 200.7 Rev 4.4 - Metals	s (ICP)								
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Calcium	125000		500	100	ug/L		01/02/18 07:50	01/02/18 22:22	•
Iron	77.4		50.0	19.3	ug/L		01/02/18 07:50	01/02/18 22:22	•
Magnesium	50700		200	43.4	ug/L		01/02/18 07:50	01/02/18 22:22	
Potassium	3680		500	100	ug/L		01/02/18 07:50	01/02/18 22:22	
Sodium	57700		1000	324	ug/L		01/02/18 07:50	01/02/18 22:22	
General Chemistry									
Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fa
Chloride	89.8		2.5	1.4	mg/L			01/08/18 17:01	
Sulfate	145		10.0	1.7	mg/L			01/08/18 17:01	

TestAmerica Buffalo

01/03/18 11:20

50.0

407

20.0 mg/L

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

Lab Sample ID: 480-129554-5

Matrix: Water

Client Sample ID: OUTSIDE SUMP

Date Collected: 12/29/17 11:20 Date Received: 12/29/17 12:08

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	35	J	100	17	ug/L			01/04/18 13:07	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			01/04/18 13:07	500
Benzene	5400		100	12	ug/L			01/04/18 13:07	500
Ethylbenzene	370		100	14	ug/L			01/04/18 13:07	500
Isopropylbenzene	ND		100	14	ug/L			01/04/18 13:07	500
Methyl tert-butyl ether	ND		200	22	ug/L			01/04/18 13:07	500
m,p-Xylene	160	J	200	27	ug/L			01/04/18 13:07	500
n-Butylbenzene	ND		100	15	ug/L			01/04/18 13:07	500
n-Propylbenzene	ND		100	65	ug/L			01/04/18 13:07	500
o-Xylene	86	J	100	14	ug/L			01/04/18 13:07	500
p-Cymene	ND		100	15	ug/L			01/04/18 13:07	500
sec-Butylbenzene	ND		100	10	ug/L			01/04/18 13:07	500
Toluene	960		100	18	ug/L			01/04/18 13:07	500
Xylenes, Total	250	J	300	27	ug/L			01/04/18 13:07	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	118		63 - 129			-		01/04/18 13:07	500
4-Bromofluorobenzene	113		64 - 128					01/04/18 13:07	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-129554-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/29/17 11:00 Date Received: 12/29/17 12:08

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

Client Sample ID: Post-Carbon 2

Date Collected: 12/29/17 11:05

Date Received: 12/29/17 12:08

Lab Sample ID: 480-129554-3

Matrix: Wastewater

Matrix: Wastewater

Matrix: Wastewater

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

Client Sample ID: Post-Carbon 1

Date Collected: 12/29/17 11:10

Date Received: 12/29/17 12:08

_									
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
T - 1 - 1/0.1 A	A	0004D		400	201111	04/04/40 40 00		TAL DUE	

Date Collected: 12/29/17 11:15

Date Received: 12/29/17 12:08

	riep Type	Type	Method	Ituii	i actor	Number	Of Allalyzeu	Allalyst	Lab	
	Total/NA	Analysis	8021B		100	394444	01/04/18 12:03	MAN	TAL BUF	
	-									
C	Client Sample ID	: Pre-Car	bon					Lab	Sample ID: 480-12955	54-4

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		100	394147	12/29/17 22:34	ARS	TAL BUF
Total/NA	Analysis	8021B		100	394444	01/04/18 12:35	MAN	TAL BUF
Total/NA	Prep	200.7			394189	01/02/18 07:50	EMB	TAL BUF
Total/NA	Analysis	200 7 Rev 4 4		1	394343	01/02/18 22:22	LMH	TAL BUF

TestAmerica Buffalo

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Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Pre-Carbon

TestAmerica Job ID: 480-129554-1

Lab Sample ID: 480-129554-4

Matrix: Wastewater

Date Collected: 12/29/17 11:15 Date Received: 12/29/17 12:08

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

Client Sample ID: OUTSIDE SUMP Lab Sample ID: 480-129554-5

394444

01/04/18 13:07

MAN

TAL BUF

Date Collected: 12/29/17 11:20 Matrix: Water Date Received: 12/29/17 12:08

500

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab

Laboratory References:

Total/NA

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

8021B

Analysis

Accreditation/Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-129554-1

Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

ority	Program		EPA Region	Identification Number	Expiration Date
/ York	NELAP		2	10026	03-31-18
The following analytes	are included in this report, bu	t are not accredited/certific	ed under this accred	ditation/certification:	
Analysis Method	Prep Method	Matrix	Analyt	е	
335.4	Distill/CN	Wastewater	Cyanic	de, Total	
,	are included in this report, bu		•		
Analysis Method 8021B	Prep Method	Matrix Wastewater	Analyt m,p-X	е	
Analysis Method	•	Matrix	Analyt	e ylene	
Analysis Method 8021B	•	Matrix Wastewater	Analyt	e ylene ne	
Analysis Method 8021B 8021B	•	Matrix Wastewater Wastewater	Analyt m,p-Xy o-Xyle	e ylene ne ylene	
Analysis Method 8021B 8021B 8021B	•	Matrix Wastewater Wastewater Water	Analyt m,p-X; o-Xyle m,p-X; o-Xyle	e ylene ne ylene	
Analysis Method 8021B 8021B 8021B 8021B	•	Matrix Wastewater Wastewater Water Water	Analyt m,p-X; o-Xyle m,p-X; o-Xyle	e ylene ne ylene ne	

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

lethod	Method Description	Protocol	Laboratory
260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
08	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
00.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
664B	HEM and SGT-HEM	1664B	TAL BUF
00.0	Anions, Ion Chromatography	MCAWW	TAL BUF
10.2	Alkalinity	MCAWW	TAL BUF
35.4	Cyanide, Total	MCAWW	TAL BUF
20.1	Phenolics, Total Recoverable	MCAWW	TAL BUF
M 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
M 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
M 4500 H+ B	pH	SM	TAL BUF
M 5210B	BOD, 5-Day	SM	TAL BUF

Protocol References:

1664B = 1664B

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

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

TestAmerica Buffalo

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-129554-1

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

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Chain of Custody Record

Buffalo 10 Hazelwood Drive

TestAmerica

Client Contact	Project Manager: Glenn May (NYSDEC)	nager: Gle	in May (N)	SDEC)	S	te Con	Site Contact: Thomas Palmer	omas F	almer		Date:	ie:	E 7	<u></u>			COC No:	
Groundwater & Environmental Services, Inc	Tel/Fax: (716) 851-72	6) 851-722	20		T	ab Con	Lab Contact: O. Johnson	Johnse	u C		Ca	Carrier:		_			Jo T	COCs
495 Aero Drive Suite 3		Analysis T	Analysis Turnaround Time	Lime					170			_			7		Job No.	
Cheektowaga, NY 14225	Calendar	(C) or Wo	Calendar (C) or Work Days (W)					7.	8 - V		əldi	_	pasa	_	.FUIV			
(800) 287-7857 Phone	TA	TAT if different from Below	rom Below	1				toM	OA ·		Vera			_	OF			
(866) 902-2187 FAX		2	2 weeks			_	ome	OF	- īsil			_	_		- VO	_	SDG No.	
Project Name: NYSDEC Gatown WWTP		1	week			_	NTAT II	lsil J	_		_	_			AS!	_		
Site: 915171			2 days			1 (d	_	TCI		H	_	_	_		721			
P O # Callout 120597			1 day			OW)	inile	_	_	[d-+]	_			_	(ac			
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Cont.	300.0 Z	200.7 - (MO 310.2 - AIK	M) - 8260B - (M	8021B - (M	H_0024MS	1664A_Ca	- 1294_809	5210B - Bio T - G0482	2540C_Ca	8270C-(MG		Sample S	Sample Specific Notes:
Post-Carbon 3	12/29	1100	Grab	W	19	Z		хх	x	×	x	×	X	×	X			
Post-Carbon 2	-	1105	Grab	A	3	Z			×									
Post-Carbon 1		0111	Grab	W	3	Z			×									
Pre-Carbon		1115	Grab	W	6	×	x	X	×									
Inside / Outside Sump		0211	Grab	W	3	Z			×									
20	7										-							
of 2							F	-			-		-				KH	2
1											-		-					
																		3
																	129554 COC	1000
							,											
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=N	5=NaOH; 6= Other																	
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison B		<i>Unknown</i>	R		Sam	ple Dis ☐Retur	Ne Disposal (At Return To Client	(A fee	e may	be as	sesse posal	y be assessed if san	ample b	s are r	retained lor Archive For	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Monti	ionth) Months
Special Instructions/QC Requirements & Comments:																		
Relinquished by:	Company:	TU U		Date/Tir	Date/Time: 1208	1	Received by:	1/2	1/	11	1		Company	in's	2		Date/Time: 12/29/1	2008
Relinquished by:	Company:			Date/Time:	<u>:</u>	Rece	Received by:						Company	.ku			Date/Time/	
NO Relinquished by:	Company:			Date/Time:	ne:	Rece	Received by:						Company:	my:			Date/Time:	
2018						4						7			1	E.	orm No. CA-C-WI	 Form No. CA-C-WI-002, dated 04/07/20

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-129554-1

Login Number: 129554 List Source: TestAmerica Buffalo

List Number: 1

Creator: Harper, Marcus D

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

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