FORMER GASTOWN MGP SITE SITE NO. 915171

2016 LAB REPORTS FOR THE GROUNDWATER COLLECTION & TREATMENT SYSTEM

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



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: 480-95205-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

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

Attn: Mr. Richard Dana

Authorized for release by: 2/29/2016 5:39:04 AM

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

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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 2/29/2016 5:39:04 AM

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Page 2 of 17

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: 480-95205-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	
Lab Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receint Checklists	17

4

5

6

8

9

10

4 -

Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

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.

Metals

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

General Chemistry

Qualifier Qualifier Description

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

B Compound was found in the blank and sample.

Glossary

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

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)

6

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TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

Job ID: 480-95205-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-95205-1

Receipt

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

Receipt Exceptions

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

GC/MS VOA

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

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

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

HPLC/IC

Method(s) 300.0, SM 4110B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-95205-2). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-95205-2), Post-Carbon 1 (480-95205-4) and 0utside Sump (480-95205-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-95205-1).

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

- 3

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6

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-95205-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 02/12/16 13:00 Date Received: 02/12/16 13:55

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			02/24/16 07:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/24/16 07:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/24/16 07:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/24/16 07:12	1
1,1-Dichloroethene	ND	*	1.0	0.29	ug/L			02/24/16 07:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/24/16 07:12	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			02/24/16 07:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/24/16 07:12	1
2-Hexanone	ND		5.0	1.2	ug/L			02/24/16 07:12	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/24/16 07:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/24/16 07:12	1
Acetone	ND		10	3.0	ug/L			02/24/16 07:12	1
Benzene	ND		1.0	0.41	ug/L			02/24/16 07:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/24/16 07:12	1
Bromoform	ND		1.0	0.26	ug/L			02/24/16 07:12	1
Bromomethane	ND		1.0	0.69	ug/L			02/24/16 07:12	1
Carbon disulfide	ND		1.0		ug/L			02/24/16 07:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/24/16 07:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/24/16 07:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/24/16 07:12	1
Chloroethane	ND		1.0	0.32	ug/L			02/24/16 07:12	1
Chloroform	ND		1.0	0.34	ug/L			02/24/16 07:12	1
Chloromethane	ND		1.0	0.35	ug/L			02/24/16 07:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/24/16 07:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/24/16 07:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/24/16 07:12	1
Styrene	ND		1.0	0.73	ug/L			02/24/16 07:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/24/16 07:12	1
Toluene	ND		1.0	0.51	ug/L			02/24/16 07:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/24/16 07:12	1
Trichloroethene	ND		1.0	0.46	ug/L			02/24/16 07:12	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/24/16 07:12	1
Vinyl acetate	ND		5.0	0.85	ug/L			02/24/16 07:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/24/16 07:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		66 - 137			-		02/24/16 07:12	1
Toluene-d8 (Surr)	94		71 - 126					02/24/16 07:12	1

Method: 8021B	Volatile Organic	Compounds (GC)
Welliou, ouzid.	· voiatile Ordanic	Compounds (GC)

94

4-Bromofluorobenzene (Surr)

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

73 - 120

TestAmerica Buffalo

02/24/16 07:12

Page 6 of 17

2/29/2016

6

8

40

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

Lab Sample ID: 480-95205-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 02/12/16 13:00 Date Received: 02/12/16 13:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			02/16/16 19:09	1
o-Xylene	ND		0.20	0.027	ug/L			02/16/16 19:09	1
p-Cymene	ND		0.20	0.030	ug/L			02/16/16 19:09	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			02/16/16 19:09	1
Toluene	ND		0.20	0.036	ug/L			02/16/16 19:09	1
Xylenes, Total	ND		0.60	0.054	ug/L			02/16/16 19:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		63 - 145					02/16/16 19:09	1
4-Bromofluorobenzene	93		64 - 141					02/16/16 19:09	1
Method: 200.7 Rev 4.4 - Metals (ICP)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	20.0	J	50.0	19.3	ug/L		02/15/16 08:35	02/16/16 15:24	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.029		0.010	0.0050	mg/L		02/17/16 03:15	02/17/16 12:28	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH		HF	0.100	0.100	SU			02/18/16 19:39	

Client: New York State D.E.C.

Date Received: 02/12/16 13:55

Sulfate

Alkalinity, Total

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

Lab Sample ID: 480-95205-2

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 02/12/16 13:15

Method: 8021B - Volatile Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		40	6.9	ug/L			02/16/16 19:41	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			02/16/16 19:41	200
Benzene	690		40	4.7	ug/L			02/16/16 19:41	200
Ethylbenzene	ND		40	5.7	ug/L			02/16/16 19:41	200
Isopropylbenzene	ND		40	5.4	ug/L			02/16/16 19:41	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			02/16/16 19:41	200
m,p-Xylene	29	J	80	11	ug/L			02/16/16 19:41	200
n-Butylbenzene	ND		40	6.2	ug/L			02/16/16 19:41	200
n-Propylbenzene	ND		40	26	ug/L			02/16/16 19:41	200
o-Xylene	30	J	40	5.4	ug/L			02/16/16 19:41	200
p-Cymene	ND		40	5.9	ug/L			02/16/16 19:41	200
sec-Butylbenzene	ND		40	4.1	ug/L			02/16/16 19:41	200
Toluene	53		40	7.1	ug/L			02/16/16 19:41	200
Xylenes, Total	59	J	120	11	ug/L			02/16/16 19:41	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145					02/16/16 19:41	200
4-Bromofluorobenzene	93		64 - 141					02/16/16 19:41	200
Method: 200.7 Rev 4.4 - M									
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Calcium	141000		500	100	-		02/15/16 08:35	02/16/16 15:28	1
Iron	19300		50.0	19.3	ug/L		02/15/16 08:35	02/16/16 15:28	1
Magnesium	73700		200	43.4	ug/L		02/15/16 08:35	02/16/16 15:28	1
Potassium	5340		500	100	ug/L		02/15/16 08:35	02/16/16 15:28	1
Sodium	76000		1000	324	ug/L		02/15/16 08:35	02/16/16 15:28	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		10.0	5.6	mg/L			02/24/16 11:09	20

40.0

50.0

176

493 B

7.0 mg/L

20.0 mg/L

02/24/16 11:09

02/24/16 15:56

20

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

Lab Sample ID: 480-95205-3

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 02/12/16 13:05 Date Received: 02/12/16 13:55

Analyte	Result Qu	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND	0.20	0.035	ug/L			02/16/16 20:13	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			02/16/16 20:13	1
Benzene	ND	0.20	0.023	ug/L			02/16/16 20:13	1
Ethylbenzene	ND	0.20	0.029	ug/L			02/16/16 20:13	1
Isopropylbenzene	ND	0.20	0.027	ug/L			02/16/16 20:13	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			02/16/16 20:13	1
m,p-Xylene	ND	0.40	0.054	ug/L			02/16/16 20:13	1
n-Butylbenzene	ND	0.20	0.031	ug/L			02/16/16 20:13	1
n-Propylbenzene	ND	0.20	0.13	ug/L			02/16/16 20:13	1
o-Xylene	ND	0.20	0.027	ug/L			02/16/16 20:13	1
p-Cymene	ND	0.20	0.030	ug/L			02/16/16 20:13	1
sec-Butylbenzene	ND	0.20	0.020	ug/L			02/16/16 20:13	1
Toluene	ND	0.20	0.036	ug/L			02/16/16 20:13	1
Xylenes, Total	ND	0.60	0.054	ug/L			02/16/16 20:13	1
Surrogate	%Recovery Qu	alifier Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96	63 - 145					02/16/16 20:13	1
4-Bromofluorobenzene	92	64 - 141					02/16/16 20:13	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

Lab Sample ID: 480-95205-4

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 02/12/16 13:10 Date Received: 02/12/16 13:55

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	2.0	0.35	ug/L			02/16/16 20:45	10
1,3,5-Trimethylbenzene	ND	2.0	1.5	ug/L			02/16/16 20:45	10
Benzene	3.2	2.0	0.23	ug/L			02/16/16 20:45	10
Ethylbenzene	ND	2.0	0.29	ug/L			02/16/16 20:45	10
Isopropylbenzene	ND	2.0	0.27	ug/L			02/16/16 20:45	10
Methyl tert-butyl ether	ND	4.0	0.44	ug/L			02/16/16 20:45	10
m,p-Xylene	ND	4.0	0.54	ug/L			02/16/16 20:45	10
n-Butylbenzene	ND	2.0	0.31	ug/L			02/16/16 20:45	10
n-Propylbenzene	ND	2.0	1.3	ug/L			02/16/16 20:45	10
o-Xylene	ND	2.0	0.27	ug/L			02/16/16 20:45	10
p-Cymene	ND	2.0	0.30	ug/L			02/16/16 20:45	10
sec-Butylbenzene	ND	2.0	0.20	ug/L			02/16/16 20:45	10
Toluene	ND	2.0	0.36	ug/L			02/16/16 20:45	10
Xylenes, Total	ND	6.0	0.54	ug/L			02/16/16 20:45	10
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99	63 - 145			•		02/16/16 20:45	10
4-Bromofluorobenzene	96	64 - 141					02/16/16 20:45	10

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

Lab Sample ID: 480-95205-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 02/12/16 13:20 Date Received: 02/12/16 13:55

Method: 8021B - Volatile Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	18	J		3.5	ug/L		-	02/17/16 13:59	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			02/17/16 13:59	100
Benzene	4700		20	2.3	ug/L			02/17/16 13:59	100
Ethylbenzene	340		20	2.9	ug/L			02/17/16 13:59	100
Isopropylbenzene	ND		20	2.7	ug/L			02/17/16 13:59	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			02/17/16 13:59	100
m,p-Xylene	150		40	5.4	ug/L			02/17/16 13:59	100
n-Butylbenzene	ND		20	3.1	ug/L			02/17/16 13:59	100
n-Propylbenzene	ND		20	13	ug/L			02/17/16 13:59	100
o-Xylene	78		20	2.7	ug/L			02/17/16 13:59	100
p-Cymene	ND		20	3.0	ug/L			02/17/16 13:59	100
sec-Butylbenzene	ND		20	2.0	ug/L			02/17/16 13:59	100
Toluene	840		20	3.6	ug/L			02/17/16 13:59	100
Xylenes, Total	230		60	5.4	ug/L			02/17/16 13:59	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145					02/17/16 13:59	100
4-Bromofluorobenzene	91		64 - 141					02/17/16 13:59	100

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-95205-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 02/12/16 13:00 Date Received: 02/12/16 13:55

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

Client Sample ID: Pre-Carbon

Date Collected: 02/12/16 13:15 Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-2

Matrix: Wastewater

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

Client Sample ID: Post-Carbon 2

Date Received: 02/12/16 13:55

Lab Sample ID: 480-95205-3 Date Collected: 02/12/16 13:05 **Matrix: Wastewater**

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

Date Received: 02/12/16 13:55

Client Sample ID: Post-Carbon 1	Lab Sample ID: 480-95205-4
Date Collected: 02/12/16 13:10	Matrix: Water
Data Bassiyadi 02/42/46 42/55	

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

Date Collected: 02/12/16 13:20

Date Received: 02/12/16 13:55

Client Sample ID: Outside Sump	Lab Sample ID: 480-95205-5

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		100	287483	02/17/16 13:59	MRB	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Matrix: Water

Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date	
New York	v York NELAP		2	10026	03-31-16 *	
The following analytes	s are included in this repor	t, but certification is no	ot offered by the go	overning 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			

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^{*} Certification renewal pending - certification considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-95205-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	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: 480-95205-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-95205-1	Post-Carbon 3	Wastewater	02/12/16 13:00	02/12/16 13:55
480-95205-2	Pre-Carbon	Wastewater	02/12/16 13:15	02/12/16 13:55
480-95205-3	Post-Carbon 2	Wastewater	02/12/16 13:05	02/12/16 13:55
480-95205-4	Post-Carbon 1	Water	02/12/16 13:10	02/12/16 13:55
480-95205-5	0utside Sump	Water	02/12/16 13:20	02/12/16 13:55

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TestA	merica	a Buffal	0

10 Hazelwood Drive

-Amherst, NY 14228-2298

Chain of Custody Record

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1111111					
			ШШ		

Phone (716) 691-2600 Fax (716) 691-7991		-1											200							26
Client Information	Sampler:	11			nson, (Orlette	s S			121		С	amer	Tracki	480	0-9520	5 Ch	ain of Custody		
Client Contact: Thomas Palmer	Phone:			E-Ma	ail: tte.johr	nson@	@testa	americ	ainc.	.com								Page 1 of 1		
Company: Groundwater & Environmental Services Inc										alys	is R	Reau	este	ed				Job#:		
Address:	Due Date Requeste	ed:			1-1-	T		П		Ť	T		T	T	T	П	(3)	Preservation Co	des:	
495 Aero Drive Suite 3 City:	TAT Requested (da	avs):			11				1		1		1				3,5	A-HCL	M - Hexane	
Cheektowaga					1 Ta						1			-			1967	B - NaOH C - Zn Acetate	N - None O - AsNaO2	
State, Zip: NY, 14225									1		-						(in Sel	D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3	
Phone:	PO#: CallOut ID 1205	97			7.48						2							F - MeOH G - Amchlor	R - Na2S2SO3 S - H2SO4	
Email:	WO#;	51	· · · ·		- S				1		1 - 8021	-			1		1	H - Ascorbic Acid	T - TSP Dodecahydrat U - Acetone	e
palmer@gesonline.com Project Name:	Project#:				Yes or	Local Method	_			104.2	List - VOA						97.0	J - DI Water K - EDTA	V - MCAA W - ph 4-5	
NYSDEC-Gastown WWTP: Site# 915171/Gastow Event Desc: Me	48002525				Y) 61	al M	Method	_		t OLN	Elst						ntain	L-EDA	Z - other (specify)	
Site: New York	SSOW#:				amp C	Š Š	sal Me	Total		8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS	Total					of con			
				Matrix	Spe	(MOL) Lo	Inity,		D) TC	ls la		E.	1						
			Sample Type	(W=water,	Iltor N	300.0_28D - (MOD)	200.7 - (MOD)	310.2 - Alkalinity,	Lou	(MO	WO.	335,4 - Cyanide,	ŧ,	1			Total Number			
		Sample	(C=comp,	S=solid, O=waste/oil,	Field Filt	0.0	0.7 -	0.2-	200.7 - Iron	60B	21B	6.4	SM4500_H+				tal			
Sample Identification	Sample Date	Time		BT=Tissue, A=Air stion Code:) E E	N N			_			190. 4	200.0	2 King	Sec. 12	F 17	12	Special II	nstructions/Note:	
Pre-Carbon	=10	12.0	-	Water	M.	4	D	N. I	0		Z E	3 N	- 19	- 100	-10- ~		-	3	100 Jr. 300 Jr	6.
	2/12	1315	6		NIA	-	\vdash	-	-	_		+	+	+	-	-	39	1		
Post-Carbon 3	2/12	1300	6	Water	NW	-				-13	X						45	1		
Post carbon 2	2/12	1305	6	hohr	NIN	1					X						15			
Post corbon 1	2/12	1310	G	hadr	MN					×	4						5.	de		
Post corbon 1 Post corbon 1 Outside sump	2/12	1320	G	water	NA			\Box	\exists	_	X		T	\top			yill 1	P		
32 J	-!	132			TT	+	\vdash	H		7	1	1	+	+		\vdash	digital Vision	7		_
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					H	+	\vdash		+	+	+	+	+	+	-		4Ere			-
Possible Hazard Identification					Si	ample	Disp	osal	(Af	ee ma	y be	asse	sse	d if sa	mples	are re	taine	d longer than 1 n	nonth)	-
Non-Hazard Flammable Skin Irritant Poison	B Unknow	n Rad	iological			\Box_{F}	Return	To CI	ient		D	tī Disp	osal	By Lai	,		Archiv		_ Months	
Deliverable Requested: I, II, III, IV, Other (specify)	1 22: KU 11		1000 334 3	40.				uctions			irem	ents:								
Empty Kit Relinquished by:		Date:			Time		_		_	_	_		M	ethod o	f Shipm	nent				
delinquished by:	Date/Time:	112 13	355	Company GES		Rec	eived b	N/)	}	114	4	7			Date	Time:	lic	1200	Company TWOWFFBU	$\overline{}$
delinquished by:	Date/Time:	110 13	323	Company		Rec	eived a	A.	41	41	G	7	5	-		2/17 /Time:	116	1355	Company	1
Relinquished by:	Date/Time:			Company		Rec	eived b	oy:	_	_	-				Date	/Time:			Company	-
						\perp				20	011				1		_	200		
Custody Seals Intact: Custody Seal No.:						Coo	er fem	peratur	re(s)	Cand	Other	Rema	rks:			H	2	3.5		

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-95205-1

Login Number: 95205 List Source: TestAmerica Buffalo

List Number: 1

Creator: Wallace, Cameron

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

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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: 480-96455-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana

Authorized for release by: 3/25/2016 8:33:46 AM

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

orlette.johnson@testamericainc.com

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.

Orlette Johnson

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

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: 480-96455-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	
Client Sample Results	7
Lab Chronicle	
Certification Summary	17
Method Summary	
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
	100 1000 : 1:1

LCS or LCSD is outside acceptance limits.

F1 MS and/or MSD Recovery is outside acceptance 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.

GC Semi VOA

Qualifier **Qualifier Description**

Compound was found in the blank and sample. R

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

Metals

Qualifier **Qualifier Description**

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

General Chemistry

Qualifier **Qualifier Description**

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 the	nie ranart

¤ 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

Method Detection Limit

MDL 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

RI Reporting Limit or Requested Limit (Radiochemistry)

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

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

TestAmerica Buffalo

Page 4 of 21

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Job ID: 480-96455-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-96455-1

Receipt

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

GC/MS VOA

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

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

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

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

GC/MS Semi VOA

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

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

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-96455-3), Pre-Carbon (480-96455-4) and Outside Sump (480-96455-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 608: The continuing calibration verification (CCV) recovered above the upper control limit for Aldrin, Dieldrin and Heptachlor. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: Post-Carbon 3 (480-96455-1), (480-96455-C-1-A MS) and (480-96455-C-1-B MSD).

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-96455-1).

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

Organic Prep

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Job ID: 480-96455-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

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TestAmerica Job ID: 480-96455-1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Date Collected: 03/11/16 09:15 Date Received: 03/11/16 10:15

Lab Sample ID: 480-96455-1

Matrix: Wastewater

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/16/16 18:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/16/16 18:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/16/16 18:45	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/16/16 18:45	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/16/16 18:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/16/16 18:45	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			03/16/16 18:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/16/16 18:45	1
2-Hexanone	ND		5.0	1.2	ug/L			03/16/16 18:45	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			03/16/16 18:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/16/16 18:45	1
Acetone	ND		10	3.0	ug/L			03/16/16 18:45	1
Benzene	ND		1.0	0.41	ug/L			03/16/16 18:45	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/16/16 18:45	1
Bromoform	ND		1.0	0.26	ug/L			03/16/16 18:45	1
Bromomethane	ND		1.0	0.69	ug/L			03/16/16 18:45	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/16/16 18:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/16/16 18:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/16/16 18:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/16/16 18:45	1
Chloroethane	ND		1.0	0.32	ug/L			03/16/16 18:45	1
Chloroform	ND		1.0	0.34	ug/L			03/16/16 18:45	1
Chloromethane	ND		1.0	0.35	ug/L			03/16/16 18:45	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/16/16 18:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/16/16 18:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/16/16 18:45	1
Styrene	ND		1.0	0.73	ug/L			03/16/16 18:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/16/16 18:45	1
Toluene	ND		1.0	0.51	ug/L			03/16/16 18:45	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/16/16 18:45	1
Trichloroethene	ND		1.0	0.46	ug/L			03/16/16 18:45	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/16/16 18:45	1
Vinyl acetate	ND	*	5.0	0.85	ug/L			03/16/16 18:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/16/16 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		66 - 137					03/16/16 18:45	1
Toluene-d8 (Surr)	98		71 - 126					03/16/16 18:45	1

Mothod: 8270D	Somivolatile	Organic Compounds (GC/MS)	١
welliou: oz/up	- Semivolatile	Ordanic Compounds (GC/MS)

99

4-Bromofluorobenzene (Surr)

Wethou. 6270D - Seniivoid	anie Organic Compounds (G	ic/ivi3)						
Analyte	Result Qualifier	ŔL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND —	5.0	0.65	ug/L		03/14/16 14:27	03/21/16 03:08	1
2-Methylnaphthalene	ND	5.0	0.60	ug/L		03/14/16 14:27	03/21/16 03:08	1
Acenaphthene	ND	5.0	0.41	ug/L		03/14/16 14:27	03/21/16 03:08	1
Acenaphthylene	ND	5.0	0.38	ug/L		03/14/16 14:27	03/21/16 03:08	1
Anthracene	ND	5.0	0.28	ug/L		03/14/16 14:27	03/21/16 03:08	1
Benzo[a]anthracene	ND	5.0	0.36	ug/L		03/14/16 14:27	03/21/16 03:08	1
Benzo[a]pyrene	ND	5.0	0.47	ug/L		03/14/16 14:27	03/21/16 03:08	1
Benzo[b]fluoranthene	ND	5.0	0.34	ug/L		03/14/16 14:27	03/21/16 03:08	1

73 - 120

TestAmerica Buffalo

3/25/2016

03/16/16 18:45

Page 7 of 21

2

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-96455-1

03/14/16 14:27 03/21/16 03:08

03/14/16 14:27 03/21/16 03:08

03/14/16 14:27 03/21/16 03:08

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 03/11/16 09:15 Date Received: 03/11/16 10:15

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		03/14/16 14:27	03/21/16 03:08	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		03/14/16 14:27	03/21/16 03:08	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		03/14/16 14:27	03/21/16 03:08	1
Carbazole	ND		5.0	0.30	ug/L		03/14/16 14:27	03/21/16 03:08	1
Chrysene	ND		5.0	0.33	ug/L		03/14/16 14:27	03/21/16 03:08	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		03/14/16 14:27	03/21/16 03:08	1
Dibenzofuran	ND		10	0.51	ug/L		03/14/16 14:27	03/21/16 03:08	1
Fluoranthene	ND		5.0	0.40	ug/L		03/14/16 14:27	03/21/16 03:08	1
Fluorene	ND		5.0	0.36	ug/L		03/14/16 14:27	03/21/16 03:08	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		03/14/16 14:27	03/21/16 03:08	1
Naphthalene	ND		5.0	0.76	ug/L		03/14/16 14:27	03/21/16 03:08	1
Pentachlorophenol	ND		10	2.2	ug/L		03/14/16 14:27	03/21/16 03:08	1
Phenanthrene	ND		5.0	0.44	ug/L		03/14/16 14:27	03/21/16 03:08	1
Phenol	ND		5.0	0.39	ug/L		03/14/16 14:27	03/21/16 03:08	1
Pyrene	ND		5.0	0.34	ug/L		03/14/16 14:27	03/21/16 03:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	89		46 - 120				03/14/16 14:27	03/21/16 03:08	1
2-Fluorobiphenyl	86		48 - 120				03/14/16 14:27	03/21/16 03:08	1
p-Terphenyl-d14	104		67 - 150				03/14/16 14:27	03/21/16 03:08	1

16 - 120

20 - 120

52 - 132

38

60

98

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			03/19/16 14:43	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/16 14:43	1
Benzene	ND		0.20	0.023	ug/L			03/19/16 14:43	1
Ethylbenzene	ND		0.20	0.029	ug/L			03/19/16 14:43	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/16 14:43	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/19/16 14:43	1
m,p-Xylene	ND		0.40	0.054	ug/L			03/19/16 14:43	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/16 14:43	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/16 14:43	1
o-Xylene	ND		0.20	0.027	ug/L			03/19/16 14:43	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/16 14:43	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/16 14:43	1
Toluene	ND		0.20	0.036	ug/L			03/19/16 14:43	1
Xylenes, Total	ND		0.60	0.054	ug/L			03/19/16 14:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145					03/19/16 14:43	1
4-Bromofluorobenzene	94		64 - 141					03/19/16 14:43	1

Method: 608 - Organochlo	rine Pesticides in Water							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND -	0.048	0.0064	ug/L		03/14/16 08:21	03/15/16 11:06	1
alpha-BHC	ND	0.048	0.0064	ug/L		03/14/16 08:21	03/15/16 11:06	1
beta-BHC	ND	0.048	0.024	ua/L		03/14/16 08:21	03/15/16 11:06	1

TestAmerica Buffalo

Page 8 of 21

3/25/2016

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Lab Sample ID: 480-96455-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 03/11/16 09:15 Date Received: 03/11/16 10:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	0.034	JB	0.048	0.0096	ug/L		03/14/16 08:21	03/15/16 11:06	
gamma-BHC (Lindane)	0.0099	J	0.048	0.0058	ug/L		03/14/16 08:21	03/15/16 11:06	
Chlordane (technical)	ND		0.48	0.28	ug/L		03/14/16 08:21	03/15/16 11:06	1
4,4'-DDD	0.021	JB	0.048	0.0089	ug/L		03/14/16 08:21	03/15/16 11:06	1
4,4'-DDE	ND		0.048	0.011	ug/L		03/14/16 08:21	03/15/16 11:06	1
4,4'-DDT	ND		0.048	0.011	ug/L		03/14/16 08:21	03/15/16 11:06	1
Dieldrin	0.032	JB	0.048	0.0094	ug/L		03/14/16 08:21	03/15/16 11:06	1
Endosulfan I	ND		0.048	0.011	ug/L		03/14/16 08:21	03/15/16 11:06	1
Endosulfan II	ND		0.048	0.012	ug/L		03/14/16 08:21	03/15/16 11:06	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		03/14/16 08:21	03/15/16 11:06	1
Endrin	ND		0.048	0.013	ug/L		03/14/16 08:21	03/15/16 11:06	1
Endrin aldehyde	ND		0.048	0.016	ug/L		03/14/16 08:21	03/15/16 11:06	1
Heptachlor	ND		0.048	0.0082	ug/L		03/14/16 08:21	03/15/16 11:06	1
Heptachlor epoxide	ND		0.048	0.0051	ug/L		03/14/16 08:21	03/15/16 11:06	1
Toxaphene	ND		0.48	0.12	ug/L		03/14/16 08:21	03/15/16 11:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	67		23 - 120				03/14/16 08:21	03/15/16 11:06	
Tetrachloro-m-xylene	93		36 - 120				03/14/16 08:21	03/15/16 11:06	1
- Method: 200.7 Rev 4.4 - Met	als (ICP)								
Analyte	· /	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	49.1	J	50.0	19.3	ug/L		03/15/16 07:30	03/15/16 20:56	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.3	1.5	mg/L		03/18/16 14:47	03/21/16 14:46	1
	0.093		0.010	0.0050	mg/L		03/14/16 03:20	03/14/16 13:12	1
Cyanide, Total	0.093			0.0050	mg/L		03/15/16 22:41	03/16/16 11:16	1
Cyanide, Total Phenolics, Total Recoverable	0.093	В	0.010	0.0050	mg/L			03/10/10 11:10	
		В	0.010		mg/L			03/16/16 03:50	
Phenolics, Total Recoverable	0.016	В		4.0	O				
Phenolics, Total Recoverable Total Dissolved Solids	0.016 778 ND	B Qualifier	10.0	4.0 2.0	mg/L	D	Prepared	03/16/16 03:50	Dil Fac
Phenolics, Total Recoverable Total Dissolved Solids Biochemical Oxygen Demand	0.016 778 ND		10.0 2.0	4.0 2.0	mg/L mg/L Unit	<u>D</u>	Prepared	03/16/16 03:50 03/12/16 11:29	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Lab Sample ID: 480-96455-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 03/11/16 09:20 Date Received: 03/11/16 10:15

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			03/19/16 15:15	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			03/19/16 15:15	1
Benzene	ND	0.20	0.023	ug/L			03/19/16 15:15	1
Ethylbenzene	ND	0.20	0.029	ug/L			03/19/16 15:15	1
Isopropylbenzene	ND	0.20	0.027	ug/L			03/19/16 15:15	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			03/19/16 15:15	1
m,p-Xylene	ND	0.40	0.054	ug/L			03/19/16 15:15	1
n-Butylbenzene	ND	0.20	0.031	ug/L			03/19/16 15:15	1
n-Propylbenzene	ND	0.20	0.13	ug/L			03/19/16 15:15	1
o-Xylene	ND	0.20	0.027	ug/L			03/19/16 15:15	1
p-Cymene	ND	0.20	0.030	ug/L			03/19/16 15:15	1
sec-Butylbenzene	ND	0.20	0.020	ug/L			03/19/16 15:15	1
Toluene	ND	0.20	0.036	ug/L			03/19/16 15:15	1
Xylenes, Total	ND	0.60	0.054	ug/L			03/19/16 15:15	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101	63 - 145					03/19/16 15:15	1
4-Bromofluorobenzene	97	64 - 141					03/19/16 15:15	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Lab Sample ID: 480-96455-3

Matrix: Wastewater

Client Sample ID: Post-Carbon 1

Date Collected: 03/11/16 09:25 Date Received: 03/11/16 10:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.13	J	0.20	0.035	ug/L			03/19/16 15:47	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			03/19/16 15:47	1
Benzene	82		1.0	0.12	ug/L			03/22/16 14:30	5
Ethylbenzene	2.8		0.20	0.029	ug/L			03/19/16 15:47	1
Isopropylbenzene	ND		0.20	0.027	ug/L			03/19/16 15:47	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			03/19/16 15:47	1
m,p-Xylene	1.3		0.40	0.054	ug/L			03/19/16 15:47	1
n-Butylbenzene	ND		0.20	0.031	ug/L			03/19/16 15:47	1
n-Propylbenzene	ND		0.20	0.13	ug/L			03/19/16 15:47	1
o-Xylene	0.92		0.20	0.027	ug/L			03/19/16 15:47	1
p-Cymene	ND		0.20	0.030	ug/L			03/19/16 15:47	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			03/19/16 15:47	1
Toluene	8.8		0.20	0.036	ug/L			03/19/16 15:47	1
Xylenes, Total	2.2		0.60	0.054	ug/L			03/19/16 15:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		63 - 145					03/19/16 15:47	1
4-Bromofluorobenzene	100		64 - 141					03/19/16 15:47	1

3/25/2016

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

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-96455-4 Date Collected: 03/11/16 09:30 **Matrix: Wastewater**

Date Received: 03/11/16 10:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			03/16/16 19:09	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			03/16/16 19:09	50
1,1,2-Trichloroethane	ND		50	12	ug/L			03/16/16 19:09	50
1,1-Dichloroethane	ND		50	19	ug/L			03/16/16 19:09	50
1,1-Dichloroethene	ND		50	15	ug/L			03/16/16 19:09	50
1,2-Dichloroethane	ND		50	11	ug/L			03/16/16 19:09	50
1,2-Dichloroethene, Total	ND		100	41	ug/L			03/16/16 19:09	50
1,2-Dichloropropane	ND		50	36	ug/L			03/16/16 19:09	50
2-Hexanone	ND		250	62	ug/L			03/16/16 19:09	50
2-Butanone (MEK)	ND	*	500	66	ug/L			03/16/16 19:09	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			03/16/16 19:09	50
Acetone	ND		500	150	ug/L			03/16/16 19:09	50
Benzene	2900	F1	50	21	ug/L			03/16/16 19:09	50
Bromodichloromethane	ND		50	20	ug/L			03/16/16 19:09	50
Bromoform	ND		50	13	ug/L			03/16/16 19:09	50
Bromomethane	ND		50	35	ug/L			03/16/16 19:09	50
Carbon disulfide	ND		50	9.5	ug/L			03/16/16 19:09	50
Carbon tetrachloride	ND		50	14	ug/L			03/16/16 19:09	50
Chlorobenzene	ND		50	38	ug/L			03/16/16 19:09	50
Dibromochloromethane	ND		50	16	ug/L			03/16/16 19:09	50
Chloroethane	ND		50	16	ug/L			03/16/16 19:09	50
Chloroform	ND		50	17	ug/L			03/16/16 19:09	50
Chloromethane	ND		50	18	ug/L			03/16/16 19:09	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			03/16/16 19:09	50
Ethylbenzene	250		50	37	ug/L			03/16/16 19:09	50
Methylene Chloride	ND		50	22	ug/L			03/16/16 19:09	50
Styrene	ND		50	37	ug/L			03/16/16 19:09	50
Tetrachloroethene	ND		50	18	ug/L			03/16/16 19:09	50
Toluene	540		50	26	ug/L			03/16/16 19:09	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			03/16/16 19:09	50
Trichloroethene	ND		50	23	ug/L			03/16/16 19:09	50
Vinyl chloride	ND		50	45	ug/L			03/16/16 19:09	50
Vinyl acetate	ND	*	250	43	ug/L			03/16/16 19:09	50
Xylenes, Total	120		100	33	ug/L			03/16/16 19:09	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		66 - 137					03/16/16 19:09	50
Toluene-d8 (Surr)	98		71 - 126					03/16/16 19:09	50
4-Bromofluorobenzene (Surr)	101		73 - 120					03/16/16 19:09	50

Method: 8021B -	Volatile	Organic	Compounds	(GC)
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						inas (GC)	Organic Compo	Wethou: 6021B - Volatile C
yzed Dil Fac	Analyzed [D Prepared A	Unit	MDL	RL	Qualifier	Result	Analyte
6 16:19 200	3/19/16 16:19	03/	ug/L	6.9	40		ND	1,2,4-Trimethylbenzene
6 16:19 200	3/19/16 16:19	03/	ug/L	30	40		ND	1,3,5-Trimethylbenzene
6 16:19 200	3/19/16 16:19	03/	ug/L	4.7	40		2700	Benzene
6 16:19 200	3/19/16 16:19	03/	ug/L	5.7	40		180	Ethylbenzene
6 16:19 200	3/19/16 16:19	03/	ug/L	5.4	40		ND	Isopropylbenzene
6 16:19 200	3/19/16 16:19	03/	ug/L	8.7	80		ND	Methyl tert-butyl ether
6 16:19 200	3/19/16 16:19	03/	ug/L	11	80	J	46	m,p-Xylene
6 16:19 200	3/19/16 16:19	03/	ug/L	6.2	40		ND	n-Butylbenzene
1 1 1	3/19/1 3/19/1 3/19/1 3/19/1 3/19/1	03/ 03/ 03/ 03/ 03/	ug/L ug/L ug/L ug/L ug/L	4.7 5.7 5.4 8.7 11	40 40 40 80 80	J	2700 180 ND ND ND	Benzene Ethylbenzene Isopropylbenzene Methyl tert-butyl ether m,p-Xylene

TestAmerica Buffalo

Page 12 of 21

3/25/2016

Client: New York State D.E.C.

Date Received: 03/11/16 10:15

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Lab Sample ID: 480-96455-4

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 03/11/16 09:30

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

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

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Lab Sample ID: 480-96455-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 03/11/16 09:35 Date Received: 03/11/16 10:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			03/19/16 16:51	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			03/19/16 16:51	500
Benzene	3200		100	12	ug/L			03/19/16 16:51	500
Ethylbenzene	220		100	14	ug/L			03/19/16 16:51	500
Isopropylbenzene	ND		100	14	ug/L			03/19/16 16:51	500
Methyl tert-butyl ether	ND		200	22	ug/L			03/19/16 16:51	500
m,p-Xylene	79	J	200	27	ug/L			03/19/16 16:51	500
n-Butylbenzene	ND		100	15	ug/L			03/19/16 16:51	500
n-Propylbenzene	ND		100	65	ug/L			03/19/16 16:51	500
o-Xylene	49	J	100	14	ug/L			03/19/16 16:51	500
p-Cymene	ND		100	15	ug/L			03/19/16 16:51	500
sec-Butylbenzene	ND		100	10	ug/L			03/19/16 16:51	500
Toluene	540		100	18	ug/L			03/19/16 16:51	500
Xylenes, Total	130	J	300	27	ug/L			03/19/16 16:51	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		63 - 145					03/19/16 16:51	500
4-Bromofluorobenzene	98		64 - 141					03/19/16 16:51	500

3/25/2016

2

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-96455-1

Lab Sample ID: 480-96455-2

Lab Sample ID: 480-96455-3

Lab Sample ID: 480-96455-4

Matrix: Wastewater

Matrix: Wastewater

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 03/11/16 09:15 Date Received: 03/11/16 10:15

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

Client Sample ID: Post-Carbon 2

Date Collected: 03/11/16 09:20

Date Received: 03/11/16 10:15

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

Client Sample ID: Post-Carbon 1

Date Collected: 03/11/16 09:25

Date Received: 03/11/16 10:15

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

Client Sample ID: Pre-Carbon

Date Collected: 03/11/16 09:30

Date Received: 03/11/16 10:15

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

TestAmerica Buffalo

Matrix: Wastewater

Page 15 of 21

3/25/2016

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Lab Chronicle

Client: New York State D.E.C.

Date Collected: 03/11/16 09:30

Project/Site: Gastown WWTP #915171

Client Sample ID: Pre-Carbon

TestAmerica Job ID: 480-96455-1

Lab Sample ID: 480-96455-4

March Waster stee

Matrix: Wastewater

Date Received: 03/11/16 10:15

Batch Batch Dilution Batch

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	200.7 Rev 4.4			291228	03/15/16 20:59	LMH	TAL BUF
Total/NA	Analysis	300.0		20	291202	03/16/16 15:16	CAS	TAL BUF
Total/NA	Analysis	310.2		10	291354	03/16/16 09:10	LED	TAL BUF

Client Sample ID: Outside Sump Lab Sample ID: 480-96455-5

Date Collected: 03/11/16 09:35 Matrix: Water

Date Received: 03/11/16 10:15

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

Laboratory References:

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

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Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	Program		Certification ID	Expiration Date	
New York NELA			2	10026		
The following analytes	s are included in this repor	t, but certification is no	ot offered by the go	overning authority:		
Analysis Method	Prep Method	hod Matrix		Analyte		
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			

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^{*} Certification renewal pending - certification considered valid.

TestAmerica Buffalo

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
3270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
3021B	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
664A	HEM and SGT-HEM	1664A	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:

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

TestAmerica Buffalo

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-96455-1

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

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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: Gle	nn May (N	YSDEC)		Site	Cont	act: T	hom	as Pa	almer		I	Date:	: 3	111	11				COC No:
Groundwater & Environmental Services, Inc	Tel/Fax: (7	16) 851-722	20			Lab	Cont	act: I	3. Fis	cher				Carr		, ,					
495 Aero Drive Suite 3		Analysis T	urnaround	Time					П		3021		П		es +			.2			Job No.
Cheektowaga, NY 14225	Calenda	r(C) or Wo	ork Days (W)		Min.	_			1.2	Y- V			able	ticid		olids	M04			
(800) 287-7857 Phone		AT if different f	rom Below _			id.	thoc a			,M0	2			vers	t Pes	lids	og pa	0F			CASE COMP. 1985.
(866) 902-2187 FAX		2	weeks				etho			0	list		Grease	Rec	utan	og po	solv	O.A.			SDG No.
Project Name: NYSDEC Gatown WWTP		1	week			機	Loca			Lis	ARS		Gr.	otal	Poll of	ende	al Di	SV			
Site: 915171		2	2 days				() P	i.)TC	TS(=	S IIC	cs, 7	rity	dsng	Tot	TCI			
P O # Callout 120597			day				ž G	callin	=	100	do l	Î	lc - 0	ionoli	Pric	otal	led -	(go			
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 - Cvanide, Total	SM4500_H+-pH	1664A_Cale - Oil &	420.4 - Phenolics, Total Recoverable	608_Pest - Priority Pollutant Pesticides 52108 - Biochemical Oxygen Demand	2540D - Total Suspended Solids	2540C_Calcd - Total Disolved Solids	8270C-(MOD) TCL SVOA - OLM04.2			Sample Specific Notes:
Post-Carbon 3	3(11	7190	Grab	w	19	N			x	x	x x	X	x	X :	x x	X	x	X			
Post-Carbon 2	3/11	0370	Grab	W	3	N					X										
Post-Carbon 1	3/11	7590	Grab	w	3	N					X										
Pre-Carbon	3/11	0930	Grab	W	9	N	x x	X		X	x										
Inside./ Outside Sump	3/11	0938	Grab	w	3	N					X										
					-										_	480	0-964	455	Chair	n of C	ustody
						H		H	H	+	+	1	\vdash	+	\forall	1	Γ-	T I	[· ·]	T	T
						H		t		1	+	1	\forall	+	+	\dagger	\vdash		\forall	-	
						Ħ	\top			1	T			1	+	\dagger					
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H; 6= Other				,	٦	T	T		1	1			/		T	T				
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison B		Inknown	1		1		le Di Retu				may	-		ssed sal B			es a	re re	taine rchive	d longer than 1 month) e For Months
Special Instructions/QC Requirements & Comments:	Company	ies		Date/Tir	ne:	_ [1	Receiv	ed by	13	72	e.a	7	e i	M		ompa		6	#	Fl	ICE Date/Fime: 3/11/16 10/5
Relinquished by: Relinquished by:	Company:	(5)		Date/Tir	ne:	I	Receiv	ed by			Ce P	J				ompa		11			Date/Time:
Reiniquisited by.	Company:			Date/ Ltr	ne.	1	Receiv	ea by							Co	mpa	ny:				Date/Time.



Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-96455-1

Login Number: 96455 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Creator. Roll, Chiris 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.	True	Yes: Samples checked, no residual chlorine detected

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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: 480-98974-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

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

Attn: Mr. Richard Dana

Authorized for release by: 5/9/2016 8:47:14 AM

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

orlette.johnson@testamericainc.com

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.

Orlette Johnson

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

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: 480-98974-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	
Lab Chronicle	12
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18

3

4

5

7

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-98974-1

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

LCS or LCSD is outside acceptance limits.

GC VOA

Qualifier Qualifier Description

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

Metals

B Compound was found in the blank and sample.

General Chemistry

Qualifier Qualifier Description

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

Glossary

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

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: 480-98974-1

Job ID: 480-98974-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-98974-1

Receipt

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

GC/MS VOA

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

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-299996 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following sample is affected: Post-Carbon 3 (480-98974-1).

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-98974-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-98974-3), Pre-Carbon (480-98974-4) and Outside Sump (480-98974-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-98974-1).

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

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

Project/Site. Gastown WWTP #91517

Lab Sample ID: 480-98974-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 04/25/16 12:15 Date Received: 04/25/16 13:00

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			05/05/16 03:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/05/16 03:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/05/16 03:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/05/16 03:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/05/16 03:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/05/16 03:06	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			05/05/16 03:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/05/16 03:06	1
2-Hexanone	ND		5.0	1.2	ug/L			05/05/16 03:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/05/16 03:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/05/16 03:06	1
Acetone	ND ¹	*	10	3.0	ug/L			05/05/16 03:06	1
Benzene	ND		1.0	0.41	ug/L			05/05/16 03:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/05/16 03:06	1
Bromoform	ND		1.0	0.26	ug/L			05/05/16 03:06	1
Bromomethane	ND		1.0	0.69	ug/L			05/05/16 03:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/05/16 03:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/05/16 03:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/05/16 03:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/05/16 03:06	1
Chloroethane	ND		1.0	0.32	ug/L			05/05/16 03:06	1
Chloroform	ND		1.0	0.34	ug/L			05/05/16 03:06	1
Chloromethane	ND		1.0	0.35	ug/L			05/05/16 03:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/05/16 03:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/05/16 03:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/05/16 03:06	1
Styrene	ND		1.0	0.73	ug/L			05/05/16 03:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/05/16 03:06	1
Toluene	ND		1.0	0.51	ug/L			05/05/16 03:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/05/16 03:06	1
Trichloroethene	ND		1.0	0.46	ug/L			05/05/16 03:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/05/16 03:06	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/05/16 03:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/05/16 03:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		66 - 137			-		05/05/16 03:06	1
Toluene-d8 (Surr)	96		71 - 126					05/05/16 03:06	1
4-Bromofluorobenzene (Surr)	89		73 - 120					05/05/16 03:06	1

Method:	8021B -	Volatile	Organic (Compounds	(GC)
Method.	00210 -	voiatile	Organic C	Julibualias	1001

Method: 8021B - Volatile Org	ganic 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			04/28/16 17:32	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			04/28/16 17:32	1
Benzene	ND	0.20	0.023	ug/L			04/28/16 17:32	1
Ethylbenzene	ND	0.20	0.029	ug/L			04/28/16 17:32	1
Isopropylbenzene	ND	0.20	0.027	ug/L			04/28/16 17:32	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			04/28/16 17:32	1
m,p-Xylene	ND	0.40	0.054	ug/L			04/28/16 17:32	1
n-Butylbenzene	ND	0.20	0.031	ug/L			04/28/16 17:32	1

TestAmerica Buffalo

Page 6 of 18 5/9/2016

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-98974-1

Lab Sample ID: 480-98974-1

Matrix: Wastewater

04/27/16 16:27

Client Sample ID: Post-Carbon 3

Date Collected: 04/25/16 12:15 Date Received: 04/25/16 13:00

рН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			04/28/16 17:32	1
o-Xylene	ND		0.20	0.027	ug/L			04/28/16 17:32	1
p-Cymene	ND		0.20	0.030	ug/L			04/28/16 17:32	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/28/16 17:32	1
Toluene	ND		0.20	0.036	ug/L			04/28/16 17:32	1
Xylenes, Total	ND		0.60	0.054	ug/L			04/28/16 17:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		63 - 145					04/28/16 17:32	1
4-Bromofluorobenzene	140		64 - 141					04/28/16 17:32	1
- Method: 200.7 Rev 4.4 - Me	etals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	52.9	В	50.0	19.3	ug/L		04/27/16 07:15	04/27/16 13:25	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.11		0.010	0.0050	mg/L		04/27/16 07:45	04/27/16 13:07	1
Analyte	Pocult	Qualifier	RL	DI	Unit	D	Prepared	Analyzed	Dil Fac

0.100

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-98974-1

Lab Sample ID: 480-98974-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 04/25/16 12:20 Date Received: 04/25/16 13:00

Method: 8021B - Volatile Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			04/28/16 18:04	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			04/28/16 18:04	1
Benzene	3.0		0.20	0.023	ug/L			04/28/16 18:04	1
Ethylbenzene	ND		0.20	0.029	ug/L			04/28/16 18:04	1
Isopropylbenzene	ND		0.20	0.027	ug/L			04/28/16 18:04	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			04/28/16 18:04	1
m,p-Xylene	ND		0.40	0.054	ug/L			04/28/16 18:04	1
n-Butylbenzene	ND		0.20	0.031	ug/L			04/28/16 18:04	1
n-Propylbenzene	ND		0.20	0.13	ug/L			04/28/16 18:04	1
o-Xylene	ND		0.20	0.027	ug/L			04/28/16 18:04	1
p-Cymene	ND		0.20	0.030	ug/L			04/28/16 18:04	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			04/28/16 18:04	1
Toluene	0.13	J	0.20	0.036	ug/L			04/28/16 18:04	1
Xylenes, Total	ND		0.60	0.054	ug/L			04/28/16 18:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	83		63 - 145					04/28/16 18:04	1
4-Bromofluorobenzene	132		64 - 141					04/28/16 18:04	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-98974-1

Lab Sample ID: 480-98974-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 04/25/16 12:25 Date Received: 04/25/16 13:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.8	J	10	1.7	ug/L			05/05/16 12:31	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			05/05/16 12:31	50
Benzene	1700		10	1.2	ug/L			05/05/16 12:31	50
Ethylbenzene	54		10	1.4	ug/L			05/05/16 12:31	50
Isopropylbenzene	ND		10	1.4	ug/L			05/05/16 12:31	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			05/05/16 12:31	50
m,p-Xylene	49		20	2.7	ug/L			05/05/16 12:31	50
n-Butylbenzene	ND		10	1.5	ug/L			05/05/16 12:31	50
n-Propylbenzene	ND		10	6.5	ug/L			05/05/16 12:31	50
o-Xylene	ND		10	1.4	ug/L			05/05/16 12:31	50
p-Cymene	ND		10	1.5	ug/L			05/05/16 12:31	50
sec-Butylbenzene	ND		10	1.0	ug/L			05/05/16 12:31	50
Toluene	260		10	1.8	ug/L			05/05/16 12:31	50
Xylenes, Total	49		30	2.7	ug/L			05/05/16 12:31	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145			•		05/05/16 12:31	50
4-Bromofluorobenzene	103		64 - 141					05/05/16 12:31	50

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Client: New York State D.E.C.

Date Received: 04/25/16 13:00

Analyte

Sulfate

Chloride

Alkalinity, Total

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-98974-1

Lab Sample ID: 480-98974-4

Matrix: Wastewater

Client Sample ID: Pre-Carbon Date Collected: 04/25/16 12:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,2,4-Trimethylbenzene	23	J	40	6.9	ug/L			04/28/16 19:07	200
1,3,5-Trimethylbenzene	ND		40	30	ug/L			04/28/16 19:07	200
Benzene	4500		40	4.7	ug/L			04/28/16 19:07	200
Ethylbenzene	180		40	5.7	ug/L			04/28/16 19:07	200
Isopropylbenzene	ND		40	5.4	ug/L			04/28/16 19:07	200
Methyl tert-butyl ether	ND		80	8.7	ug/L			04/28/16 19:07	200
m,p-Xylene	150		80	11	ug/L			04/28/16 19:07	200
n-Butylbenzene	ND		40	6.2	ug/L			04/28/16 19:07	200
n-Propylbenzene	ND		40	26	ug/L			04/28/16 19:07	20
o-Xylene	87		40	5.4	ug/L			04/28/16 19:07	200
p-Cymene	ND		40	5.9	ug/L			04/28/16 19:07	20
sec-Butylbenzene	ND		40	4.1	ug/L			04/28/16 19:07	20
Toluene	790		40	7.1	ug/L			04/28/16 19:07	200
Xylenes, Total	240		120	11	ug/L			04/28/16 19:07	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	85		63 - 145					04/28/16 19:07	200
4-Bromofluorobenzene	133		64 - 141					04/28/16 19:07	20
Method: 200.7 Rev 4.4 - N	letals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Calcium	152000		500	100	ug/L		04/27/16 07:15	04/27/16 13:41	
Iron	1030	В	50.0	19.3	ug/L		04/27/16 07:15	04/27/16 13:41	
Magnesium	70900		200	43.4	ug/L		04/27/16 07:15	04/27/16 13:41	
Potassium	3960		500	100	ug/L		04/27/16 07:15	04/27/16 13:41	
Sodium	64400		1000	324	ug/L		04/27/16 07:15	04/27/16 13:41	•
General Chemistry									
Jonat Gridinistry						_			

RL

10.0

20.0

50.0

MDL Unit

5.6 mg/L

3.5 mg/L

20.0 mg/L

Prepared

Analyzed

04/29/16 06:27

05/02/16 11:51

05/02/16 16:45

Dil Fac

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Result Qualifier

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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: 480-98974-1

Lab Sample ID: 480-98974-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 04/25/16 12:40 Date Received: 04/25/16 13:00

Method: 8021B - Volatile Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	34	J	100	17	ug/L		-	04/28/16 19:39	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			04/28/16 19:39	500
Benzene	6000		100	12	ug/L			04/28/16 19:39	500
Ethylbenzene	470		100	14	ug/L			04/28/16 19:39	500
Isopropylbenzene	ND		100	14	ug/L			04/28/16 19:39	500
Methyl tert-butyl ether	ND		200	22	ug/L			04/28/16 19:39	500
m,p-Xylene	170	J	200	27	ug/L			04/28/16 19:39	500
n-Butylbenzene	ND		100	15	ug/L			04/28/16 19:39	500
n-Propylbenzene	ND		100	65	ug/L			04/28/16 19:39	500
o-Xylene	100		100	14	ug/L			04/28/16 19:39	500
p-Cymene	ND		100	15	ug/L			04/28/16 19:39	500
sec-Butylbenzene	ND		100	10	ug/L			04/28/16 19:39	500
Toluene	1100		100	18	ug/L			04/28/16 19:39	500
Xylenes, Total	270	J	300	27	ug/L			04/28/16 19:39	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		63 - 145					04/28/16 19:39	500
4-Bromofluorobenzene	136		64 - 141					04/28/16 19:39	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-98974-1

Lab Sample ID: 480-98974-2

Lab Sample ID: 480-98974-3

Lab Sample ID: 480-98974-4

Lab Sample ID: 480-98974-5

Matrix: Wastewater

Matrix: Water

Matrix: Water

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 04/25/16 12:15 Date Received: 04/25/16 13:00

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

Client Sample ID: Post-Carbon 2

Date Collected: 04/25/16 12:20

Date Received: 04/25/16 13:00

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

Client Sample ID: Post-Carbon 1

Date Collected: 04/25/16 12:25

Date Received: 04/25/16 13:00

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

Client Sample ID: Pre-Carbon

Date Collected: 04/25/16 12:30 Date Received: 04/25/16 13:00

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

Client Sample ID: Outside Sump

Date Collected: 04/25/16 12:40

Date Received: 04/25/16 13:00

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

TestAmerica Buffalo

Matrix: Water

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-98974-1

Laboratory References:

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

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Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-98974-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-17
The following analytes	are included in this repor	t, but certification is no	ot offered by the g	overning authority:	
Analysis Method	Prep Method	Matrix	Analyt	e	
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		

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-98974-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	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: 480-98974-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991	10.411														1.	.(TestAmerica Laboratories, Inc.
Client Contact	Project Ma	mager: Gle	nn May (N	(SDEC)		Site	Conta	ect: T	hom	as Pal	lmer		Da	te:	4125	116			COG No:
Groundwater & Environmental Services, Inc	Tel/Fax: (7	16) 851-722	20	-		Lab	Cont	act: I	3. Fis	scher		- 69	Ca	rrier:					of 1 COCs
495 Aero Drive Suite 3		Analysis T	urnaround	Time		切的 公用 被数				3021	170	П							Job No.
Cheektowaga, NY 14225	Calenda	r(C) or Wo	ork Days (W)		du ra				1.2 A - 8									I
(800) 287-7857 Phone	T	AT if different f	from Below _							M04	2								
(866) 902-2187 FAX	I X	2	weeks			相明 邓中	etho			t OL									SDG No.
Project Name: NYSDEC Gatown WWTP		1	week				I W			L lis	TE I								
Site: 915171		1	2 days			20 6	Loca	Į,		TC	7, 10	-							}
P O # Callout 120597		1	l day			Talia S	(a)	alini		(do)	mide	Td-							
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Kiltered 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 Specific Notes:
Post-Carbon 3	4/25	1215	Grab	W	9	N			X	x x	X	x							
Post-Carbon 2	1	12ZO	Grab	W	3	N				X	X								
Post-Carbon I		1225	Grab	W	3	N				X	ζ .								
Pre-Carbon		1230	Grab	W	6	N 2	x x	X		X	c								
Inside Outside Sump		1240	Grab	w	3	N				X	ζ .								
	7																		
		Į.														48	80-989	74 Ch	nain of Custody
						Ш												T	
						Ц													
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H; 6= Other	<u>yeve v</u>									T								
Possible Hazard Identification Non-Hazard Flammable Skin Irritant Special Instructions/QC Requirements & Comments:	Poison B		Inknown	\angle		S				s al (A o Clier		may			i if sar By Lab		s are r	etain Archiv	ed longer than 1 month) ve For Months
	1							_//	7		_	_/	1		_				
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Relinquished by:	Company:			Date/Tin	ne:	R	eceive	ed by						C	ompan	y:			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: 480-98974-1

Login Number: 98974 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Answer	Comment
True	
True	ges
True	
N/A	
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: 480-100478-1

Client Project/Site: Gastown WWTP #915171

Sampling Event: Monthly

For:

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

Attn: Mr. Richard Dana

Authorized for release by: 6/6/2016 12:30:22 PM

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

orlette.johnson@testamericainc.com

-----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.

Orlette Johnson

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

TestAmerica Job ID: 480-100478-1

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: 480-100478-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	
Lab Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Qualifiers

GC VOA

alifier 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**

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, 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 MLMinimum Level (Dioxin)

NC Not Calculated

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

PQL Practical Quantitation Limit

Quality Control QC **RER** Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

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TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Job ID: 480-100478-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-100478-1

Receipt

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

GC/MS VOA

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-100478-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-100478-3), Pre-Carbon (480-100478-4) and Outside Sump (480-100478-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-100478-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-100478-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 05/20/16 13:30 Date Received: 05/20/16 14:50

Method: 8260C - Volatile O Analyte	Result Q	•	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/25/16 03:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/25/16 03:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/25/16 03:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/25/16 03:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/25/16 03:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/25/16 03:36	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			05/25/16 03:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/25/16 03:36	1
2-Hexanone	ND		5.0	1.2	ug/L			05/25/16 03:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/25/16 03:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/25/16 03:36	1
Acetone	ND		10	3.0	ug/L			05/25/16 03:36	1
Benzene	ND		1.0	0.41	ug/L			05/25/16 03:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/25/16 03:36	1
Bromoform	ND		1.0	0.26	ug/L			05/25/16 03:36	1
Bromomethane	ND		1.0	0.69	ug/L			05/25/16 03:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/25/16 03:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/25/16 03:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/25/16 03:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/25/16 03:36	1
Chloroethane	ND		1.0	0.32	ug/L			05/25/16 03:36	1
Chloroform	ND		1.0	0.34	ug/L			05/25/16 03:36	1
Chloromethane	ND		1.0	0.35	ug/L			05/25/16 03:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/25/16 03:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/25/16 03:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/25/16 03:36	1
Styrene	ND		1.0	0.73	ug/L			05/25/16 03:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/25/16 03:36	1
Toluene	ND		1.0	0.51	ug/L			05/25/16 03:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/25/16 03:36	1
Trichloroethene	ND		1.0	0.46	ug/L			05/25/16 03:36	1
Vinyl chloride	ND		1.0	0.90				05/25/16 03:36	1
Vinyl acetate	ND		5.0	0.85	ug/L			05/25/16 03:36	1
Xylenes, Total	ND		2.0	0.66				05/25/16 03:36	1
Surrogate	%Recovery Q	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		66 - 137			-		05/25/16 03:36	1
Toluene-d8 (Surr)	96		71 - 126					05/25/16 03:36	1
4-Bromofluorobenzene (Surr)	104		73 - 120					05/25/16 03:36	1

Mothod: 801	21R - Volat	ile Organic	Compounds	(GC)
Metriou, ou	z i D - voiai	ne Organic	Compounds	1001

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

TestAmerica Buffalo

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Lab Sample ID: 480-100478-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 05/20/16 13:30 Date Received: 05/20/16 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			05/24/16 16:14	1
o-Xylene	ND		0.20	0.027	ug/L			05/24/16 16:14	1
o-Cymene	ND		0.20	0.030	ug/L			05/24/16 16:14	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/24/16 16:14	1
Toluene	ND		0.20	0.036	ug/L			05/24/16 16:14	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/24/16 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 145					05/24/16 16:14	1
4-Bromofluorobenzene	108		64 - 141					05/24/16 16:14	1
Method: 200.7 Rev 4.4 - I	Metals (ICP)								
Analyte	· ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	49.3	J	50.0	19.3	ug/L		05/23/16 09:05	05/24/16 17:28	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.12		0.010	0.0050	mg/L		06/02/16 16:20	06/03/16 11:00	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН	7.28	HE	0.100	0.100	SU			05/23/16 14:52	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Lab Sample ID: 480-100478-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 05/20/16 13:35 Date Received: 05/20/16 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			05/24/16 16:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			05/24/16 16:46	1
Benzene	6.2		0.20	0.023	ug/L			05/24/16 16:46	1
Ethylbenzene	0.034	J	0.20	0.029	ug/L			05/24/16 16:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			05/24/16 16:46	1
Methyl tert-butyl ether	0.13	J	0.40	0.044	ug/L			05/24/16 16:46	1
m,p-Xylene	ND		0.40	0.054	ug/L			05/24/16 16:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			05/24/16 16:46	1
n-Propylbenzene	ND		0.20	0.13	ug/L			05/24/16 16:46	1
o-Xylene	ND		0.20	0.027	ug/L			05/24/16 16:46	1
p-Cymene	ND		0.20	0.030	ug/L			05/24/16 16:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			05/24/16 16:46	1
Toluene	0.19	J	0.20	0.036	ug/L			05/24/16 16:46	1
Xylenes, Total	ND		0.60	0.054	ug/L			05/24/16 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 145			-		05/24/16 16:46	1
4-Bromofluorobenzene	111		64 - 141					05/24/16 16:46	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Lab Sample ID: 480-100478-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 05/20/16 13:40 Date Received: 05/20/16 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.7	J	10	1.7	ug/L			05/25/16 18:08	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			05/25/16 18:08	50
Benzene	1800		10	1.2	ug/L			05/25/16 18:08	50
Ethylbenzene	70		10	1.4	ug/L			05/25/16 18:08	50
Isopropylbenzene	ND		10	1.4	ug/L			05/25/16 18:08	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			05/25/16 18:08	50
m,p-Xylene	28		20	2.7	ug/L			05/25/16 18:08	50
n-Butylbenzene	ND		10	1.5	ug/L			05/25/16 18:08	50
n-Propylbenzene	ND		10	6.5	ug/L			05/25/16 18:08	50
o-Xylene	17		10	1.4	ug/L			05/25/16 18:08	50
p-Cymene	ND		10	1.5	ug/L			05/25/16 18:08	50
sec-Butylbenzene	ND		10	1.0	ug/L			05/25/16 18:08	50
Toluene	200		10	1.8	ug/L			05/25/16 18:08	50
Xylenes, Total	45		30	2.7	ug/L			05/25/16 18:08	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 145					05/25/16 18:08	50
4-Bromofluorobenzene	104		64 - 141					05/25/16 18:08	50

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Client: New York State D.E.C.

Date Received: 05/20/16 14:50

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Lab Sample ID: 480-100478-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 05/20/16 13:45

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

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

Method: 200.7 Rev 4.4 - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	134000		500	100	ug/L		05/23/16 09:05	05/24/16 17:31	1
Iron	1300		50.0	19.3	ug/L		05/23/16 09:05	05/24/16 17:31	1
Magnesium	68700		200	43.4	ug/L		05/23/16 09:05	05/24/16 17:31	1
Potassium	4190		500	100	ug/L		05/23/16 09:05	05/24/16 17:31	1
Sodium	60500		1000	324	ug/L		05/23/16 09:05	05/24/16 17:31	1

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

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Lab Sample ID: 480-100478-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 05/20/16 13:50 Date Received: 05/20/16 14:50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	22	J	100	17	ug/L			05/24/16 18:32	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			05/24/16 18:32	500
Benzene	7700		100	12	ug/L			05/24/16 18:32	500
Ethylbenzene	600		100	14	ug/L			05/24/16 18:32	500
Isopropylbenzene	ND		100	14	ug/L			05/24/16 18:32	500
Methyl tert-butyl ether	ND		200	22	ug/L			05/24/16 18:32	500
m,p-Xylene	200		200	27	ug/L			05/24/16 18:32	500
n-Butylbenzene	ND		100	15	ug/L			05/24/16 18:32	500
n-Propylbenzene	ND		100	65	ug/L			05/24/16 18:32	500
o-Xylene	130		100	14	ug/L			05/24/16 18:32	500
p-Cymene	ND		100	15	ug/L			05/24/16 18:32	500
sec-Butylbenzene	ND		100	10	ug/L			05/24/16 18:32	500
Toluene	1400		100	18	ug/L			05/24/16 18:32	500
Xylenes, Total	330		300	27	ug/L			05/24/16 18:32	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145					05/24/16 18:32	500
4-Bromofluorobenzene	109		64 - 141					05/24/16 18:32	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-100478-1

Lab Sample ID: 480-100478-2

Lab Sample ID: 480-100478-3

Lab Sample ID: 480-100478-4

Lab Sample ID: 480-100478-5

Matrix: Wastewater

Matrix: Water

Matrix: Water

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 05/20/16 13:30 Date Received: 05/20/16 14:50

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

Client Sample ID: Post-Carbon 2

Date Collected: 05/20/16 13:35

Date Received: 05/20/16 14:50

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

Client Sample ID: Post-Carbon 1

Date Collected: 05/20/16 13:40

Date Received: 05/20/16 14:50

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

Client Sample ID: Pre-Carbon

Date Collected: 05/20/16 13:45

Date Received: 05/20/16 14:50

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

Client Sample ID: Outside Sump

Date Collected: 05/20/16 13:50

Date Received: 05/20/16 14:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	303344	05/24/16 18:32	MRB	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Matrix: Water

Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-17
The following analytes	s are included in this repor	t, but certification is no	ot offered by the go	overning 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-Dio	chloroethene, Total	
SM 4500 H+ B		Wastewater	рН		

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-100478-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8021B	Volatile Organic Compounds (GC)	SW846	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
335.4	Cyanide, Total	MCAWW	TAL BUF
SM 4500 H+ B	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: 480-100478-1

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

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10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228 phone 716.504.9852 fax 716.691.7991														1					TestAmerica Laboratories, Inc.
Client Contact	Project Ma	anager: Gle	nn May (N	YSDEC)		Site	Cont	act:	Thon	nas Pa	almer		Date:	51	20	16			COC No:
Groundwater & Environmental Services, Inc	Tel/Fax: (7	716) 851-722	20			Lab	Cont	tact:	B. Fi	scher			Carrier						of COCs
495 Aero Drive Suite 3		Analysis T	urnaround	Time		22	T	Т			021			П		T			Job No.
Cheektowaga, NY 14225	Calenda	r(C)orWo	ork Days (W)		200				7.	A-8								
(800) 287-7857 Phone	T.	AT if different i	from Below			aletai (AG)	thod			M04	8								
(866) 902-2187 FAX		2	weeks			400	Me			[5]	list -								SDG No.
Project Name: NYSDEC Gatown WWTP		1	week				Coca			Llis	E SS								-1
Site: 915171		4	2 days			213	5 5	è		TC	To To	-							
P O # Callout 120597			l day			idiu	(MOD) Local Method	alini		(aoi	IOD)	1 m							
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sa	300.0_28D (MOD) Local Method 200.7 - (MOD) Local Method	1	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	5/20	1330	Grab	W	9	N			X	x	x x	X							
Post-Carbon 2		1335	Grab	W	3	N					x								4
Post-Carbon 1		1340	Grab	W	3	N					x							T	
Pre-Carbon	-	1345	Grab	W	6	N	x x	X			x								
Inside / Outside Sump	V	1350	Grab	W	3	N					x				T	П		T	
														4	80-10	0478	Chair	n of C	custody
					-	\parallel						H		1	I	I. I	T	T	
						П													
						Ц		1_											
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=Na(OH; 6= Other				,														
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison B		Inknown	/		ľ				sal (. o Clie		may b	e assess Disposa	ed if al By L	samp .ab	les a	re ret	ained chive	d longer than 1 month) For Months
Special Instructions/QC Requirements & Comments:																14.1			
									6					5	6,	101			
Relinquished by 2	Company	-2		Date/Tir	ne. 145	O	Recety	ed-by	5 6	Æ				Com	pany:	Ba	2	v	Date/Time: 5(20/11/1450
Relinquished by.	Company:			Date/Tir			Receiv	red by	/:					Com	pany:		-		Date/Time:
Relinquished by:	Company:			Date/Tir	me:	F	Receiv	red by	<i>/</i> :			-		Com	pany:				Date/Time:
		-		-	WC227/27		-				-			-					No CA C XVI 002 detail 04/07/2011

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

















Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-100478-1

Login Number: 100478 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

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

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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: 480-102466-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana

Authorized for release by: 7/12/2016 7:03:07 AM

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

orlette.johnson@testamericainc.com

-----LINKS

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

Senior Project Manager

7/12/2016 7:03:07 AM

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-102466-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	7
Lab Chronicle	16
Certification Summary	
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receipt Checklists	22

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

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

GC/MS Semi VOA

Qualifier Qualifier Description

RPD of the LCS and LCSD exceeds the control limits

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

GC VOA

Qualifier Qualifier Description

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

General Chemistry

Qualifier Qualifier Description

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

B Compound was found in the blank and sample.

Glossary

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

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)

TestAmerica Buffalo

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Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Job ID: 480-102466-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-102466-1

Receipt

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

GC/MS VOA

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

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-102466-4). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA

Method(s) 8270D: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-309488 recovered outside control limits for the following analytes: 2,4,5-Trichlorophenol, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Anthracene, Butyl benzyl phthalate ,Chrysene, Diethyl phthalate, Di-n-butyl phthalate, Fluoranthene and Fluorene.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-309641 recovered outside acceptance criteria, low biased, for Benzaldehyde. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-102466-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-102466-3), Pre-Carbon (480-102466-4) and Outside Sump (480-102466-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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

Metals

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

General Chemistry

Method(s) SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-102466-1).

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

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Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Job ID: 480-102466-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Organic Prep

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

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-102466-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 06/30/16 13:30 Date Received: 06/30/16 14:20

Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	-			07/06/16 00:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/06/16 00:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/06/16 00:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/06/16 00:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/06/16 00:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/06/16 00:51	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			07/06/16 00:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/06/16 00:51	1
2-Hexanone	ND		5.0	1.2	ug/L			07/06/16 00:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/06/16 00:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/06/16 00:51	1
Acetone	ND		10	3.0	ug/L			07/06/16 00:51	1
Benzene	ND		1.0	0.41	ug/L			07/06/16 00:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/06/16 00:51	1
Bromoform	ND		1.0	0.26	ug/L			07/06/16 00:51	1
Bromomethane	ND		1.0	0.69	ug/L			07/06/16 00:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/06/16 00:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/06/16 00:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/06/16 00:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/06/16 00:51	1
Chloroethane	ND		1.0	0.32	ug/L			07/06/16 00:51	1
Chloroform	ND		1.0	0.34	ug/L			07/06/16 00:51	1
Chloromethane	ND		1.0	0.35	ug/L			07/06/16 00:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/06/16 00:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/06/16 00:51	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/06/16 00:51	1
Styrene	ND		1.0	0.73	ug/L			07/06/16 00:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/06/16 00:51	1
Toluene	ND		1.0	0.51	ug/L			07/06/16 00:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/06/16 00:51	1
Trichloroethene	ND		1.0	0.46	ug/L			07/06/16 00:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/06/16 00:51	1
Vinyl acetate	ND		5.0	0.85	ug/L			07/06/16 00:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/06/16 00:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		66 - 137			-		07/06/16 00:51	1
Toluene-d8 (Surr)	92		71 - 126					07/06/16 00:51	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105	66 - 137		07/06/16 00:51	1
Toluene-d8 (Surr)	92	71 - 126		07/06/16 00:51	1
4-Bromofluorobenzene (Surr)	90	73 - 120		07/06/16 00:51	1

Wiethou. 62/0D - Semilyolath	e Organic Compounds (G							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND —	5.0	0.65	ug/L		07/01/16 07:32	07/02/16 18:42	1
bis (2-chloroisopropyl) ether	ND	5.0	0.52	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4,5-Trichlorophenol	ND *	5.0	0.48	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4,6-Trichlorophenol	ND	5.0	0.61	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4-Dichlorophenol	ND	5.0	0.51	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4-Dimethylphenol	ND	5.0	0.50	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4-Dinitrophenol	ND *	10	2.2	ug/L		07/01/16 07:32	07/02/16 18:42	1
2,4-Dinitrotoluene	ND	5.0	0.45	ug/L		07/01/16 07:32	07/02/16 18:42	1

TestAmerica Buffalo

Page 7 of 22

7/12/2016

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-102466-1

TestAmerica Job ID: 480-102466-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 06/30/16 13:30 Date Received: 06/30/16 14:20

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

TestAmerica Buffalo

TestAmerica Job ID: 480-102466-1

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

Project/Site. Gastowii WWTP #915171

Client Sample ID: Post-Carbon 3

Date Collected: 06/30/16 13:30 Date Received: 06/30/16 14:20 Lab Sample ID: 480-102466-1

Matrix: Wastewater

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/01/16 07:32	07/02/16 18:42	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/01/16 07:32	07/02/16 18:42	1
Naphthalene	ND		5.0	0.76	ug/L		07/01/16 07:32	07/02/16 18:42	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/01/16 07:32	07/02/16 18:42	1
Pentachlorophenol	ND		10	2.2	ug/L		07/01/16 07:32	07/02/16 18:42	1
Phenanthrene	ND		5.0	0.44	ug/L		07/01/16 07:32	07/02/16 18:42	1
Phenol	ND		5.0	0.39	ug/L		07/01/16 07:32	07/02/16 18:42	1
Pyrene	ND		5.0	0.34	ug/L		07/01/16 07:32	07/02/16 18:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	93		46 - 120				07/01/16 07:32	07/02/16 18:42	1
Phenol-d5 (Surr)	52		16 - 120				07/01/16 07:32	07/02/16 18:42	1
p-Terphenyl-d14 (Surr)	102		67 - 150				07/01/16 07:32	07/02/16 18:42	1
2,4,6-Tribromophenol (Surr)	89		52 - 132				07/01/16 07:32	07/02/16 18:42	1
2-Fluorobiphenyl	89		48 - 120				07/01/16 07:32	07/02/16 18:42	1
2-Fluorophenol (Surr)	71		20 - 120				07/01/16 07:32	07/02/16 18:42	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			07/06/16 16:32	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			07/06/16 16:32	1
Benzene	0.072	J	0.20	0.023	ug/L			07/06/16 16:32	1
Ethylbenzene	ND		0.20	0.029	ug/L			07/06/16 16:32	1
Isopropylbenzene	ND		0.20	0.027	ug/L			07/06/16 16:32	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			07/06/16 16:32	1
m,p-Xylene	ND		0.40	0.054	ug/L			07/06/16 16:32	1
n-Butylbenzene	ND		0.20	0.031	ug/L			07/06/16 16:32	1
n-Propylbenzene	ND		0.20	0.13	ug/L			07/06/16 16:32	1
o-Xylene	ND		0.20	0.027	ug/L			07/06/16 16:32	1
p-Cymene	ND		0.20	0.030	ug/L			07/06/16 16:32	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			07/06/16 16:32	1
Toluene	ND		0.20	0.036	ug/L			07/06/16 16:32	1
Xylenes, Total	ND		0.60	0.054	ug/L			07/06/16 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145					07/06/16 16:32	1
4-Bromofluorobenzene	102		64 - 141					07/06/16 16:32	1

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

TestAmerica Buffalo

Page 9 of 22

5

4

6

8

9

10

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Lab Sample ID: 480-102466-1

Matrix: Wastewater

C	lient	Samp	le ID:	Post-	Carb	on 3
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Date Collected: 06/30/16 13:30 Date Received: 06/30/16 14:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND		0.048	0.011	ug/L		07/02/16 09:58	07/06/16 11:19	1
Endosulfan II	ND		0.048	0.012	ug/L		07/02/16 09:58	07/06/16 11:19	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		07/02/16 09:58	07/06/16 11:19	1
Endrin	ND		0.048	0.013	ug/L		07/02/16 09:58	07/06/16 11:19	1
Endrin aldehyde	ND		0.048	0.016	ug/L		07/02/16 09:58	07/06/16 11:19	1
Heptachlor	ND		0.048	0.0082	ug/L		07/02/16 09:58	07/06/16 11:19	1
Heptachlor epoxide	ND		0.048	0.0051	ug/L		07/02/16 09:58	07/06/16 11:19	1
Toxaphene	ND		0.48	0.12	ug/L		07/02/16 09:58	07/06/16 11:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	71		23 - 120				07/02/16 09:58	07/06/16 11:19	1
-	68 als (ICP)		36 - 120				07/02/16 09:58	07/06/16 11:19	1
Tetrachloro-m-xylene Method: 200.7 Rev 4.4 - Meta Analyte	als (ICP) Result	Qualifier	RL	MDL 19.3		<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 200.7 Rev 4.4 - Meta Analyte Iron	als (ICP)	Qualifier		MDL 19.3		D			Dil Fac
Method: 200.7 Rev 4.4 - Meta Analyte	als (ICP) Result 137	Qualifier Qualifier	RL		ug/L	D_	Prepared	Analyzed	Dil Fac
Method: 200.7 Rev 4.4 - Meta Analyte Iron General Chemistry	als (ICP) Result 137		RL 50.0	19.3	ug/L		Prepared 07/01/16 07:55	Analyzed 07/05/16 19:20	Dil Fac Dil Fac 1
Method: 200.7 Rev 4.4 - Meta Analyte Iron General Chemistry Analyte	Result Result		RL 50.0	19.3	ug/L Unit mg/L		Prepared 07/01/16 07:55 Prepared 07/05/16 15:39	Analyzed 07/05/16 19:20 Analyzed	Dil Fac
Method: 200.7 Rev 4.4 - Meta Analyte Iron General Chemistry Analyte Oil & Grease	Result ND		RL 50.0 -	19.3 MDL 1.5	ug/L Unit mg/L mg/L		Prepared 07/01/16 07:55 Prepared 07/05/16 15:39 07/01/16 13:02	Analyzed 07/05/16 19:20 Analyzed 07/05/16 22:52	Dil Fac
Method: 200.7 Rev 4.4 - Meta Analyte Iron General Chemistry Analyte Oil & Grease Cyanide, Total	Result 137 Result ND 0.18		RL 5.3 0.010	19.3 MDL 1.5 0.0050 0.0050	ug/L Unit mg/L mg/L		Prepared 07/01/16 07:55 Prepared 07/05/16 15:39 07/01/16 13:02	Analyzed 07/05/16 19:20 Analyzed 07/05/16 22:52 07/02/16 10:28	Dil Fac
Method: 200.7 Rev 4.4 - Meta Analyte Iron General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable	Result 137 Result ND 0.18 0.15		RL 50.0 RL 5.3 0.010 0.010	19.3 MDL 1.5 0.0050 0.0050	ug/L Unit mg/L mg/L mg/L mg/L		Prepared 07/01/16 07:55 Prepared 07/05/16 15:39 07/01/16 13:02	Analyzed 07/05/16 19:20 Analyzed 07/05/16 22:52 07/02/16 10:28 07/01/16 10:52	Dil Fac
Method: 200.7 Rev 4.4 - Meta Analyte Iron General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable Total Dissolved Solids	Result 137 Result ND 0.18 0.15 546 ND		RL 50.0 RL 5.3 0.010 0.010	19.3 MDL 1.5 0.0050 0.0050 4.0 2.0	ug/L Unit mg/L mg/L mg/L mg/L		Prepared 07/01/16 07:55 Prepared 07/05/16 15:39 07/01/16 13:02	Analyzed 07/05/16 19:20 Analyzed 07/05/16 22:52 07/02/16 10:28 07/01/16 10:52 06/30/16 20:19	Dil Fac 1 Dil Fac 1 1 1 1
Method: 200.7 Rev 4.4 - Meta Analyte Iron General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable Total Dissolved Solids Biochemical Oxygen Demand	Result 137 Result ND 0.18 0.15 546 ND	Qualifier	RL 50.0	19.3 MDL 1.5 0.0050 0.0050 4.0 2.0	ug/L Unit mg/L mg/L mg/L mg/L mg/L Mg/L Unit	<u>D</u>	Prepared 07/01/16 07:55 Prepared 07/05/16 15:39 07/01/16 13:02 07/01/16 01:35	Analyzed 07/05/16 19:20 Analyzed 07/05/16 22:52 07/02/16 10:28 07/01/16 10:52 06/30/16 20:19 07/01/16 10:18	Dil Fac 1 Dil Fac 1 1 1 1 1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Lab Sample ID: 480-102466-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 06/30/16 13:35 Date Received: 06/30/16 14:20

Method: 8021B - Volatile Analyte	Result Qualit	•	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			07/06/16 17:04	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			07/06/16 17:04	1
Benzene	2.4	0.20	0.023	ug/L			07/06/16 17:04	1
Ethylbenzene	ND	0.20	0.029	ug/L			07/06/16 17:04	1
Isopropylbenzene	ND	0.20	0.027	ug/L			07/06/16 17:04	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			07/06/16 17:04	1
m,p-Xylene	ND	0.40	0.054	ug/L			07/06/16 17:04	1
n-Butylbenzene	ND	0.20	0.031	ug/L			07/06/16 17:04	1
n-Propylbenzene	ND	0.20	0.13	ug/L			07/06/16 17:04	1
o-Xylene	ND	0.20	0.027	ug/L			07/06/16 17:04	1
p-Cymene	ND	0.20	0.030	ug/L			07/06/16 17:04	1
sec-Butylbenzene	ND	0.20	0.020	ug/L			07/06/16 17:04	1
Toluene	ND	0.20	0.036	ug/L			07/06/16 17:04	1
Xylenes, Total	ND	0.60	0.054	ug/L			07/06/16 17:04	1
Surrogate	%Recovery Quali	fier Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95	63 - 145					07/06/16 17:04	1
4-Bromofluorobenzene	101	64 - 141					07/06/16 17:04	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Lab Sample ID: 480-102466-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 06/30/16 13:40 Date Received: 06/30/16 14:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		5.0	0.87	ug/L			07/07/16 17:02	25
1,3,5-Trimethylbenzene	ND		5.0	3.8	ug/L			07/07/16 17:02	25
Benzene	780		5.0	0.58	ug/L			07/07/16 17:02	25
Ethylbenzene	5.1		5.0	0.72	ug/L			07/07/16 17:02	25
Isopropylbenzene	ND		5.0	0.68	ug/L			07/07/16 17:02	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			07/07/16 17:02	25
m,p-Xylene	2.5	J	10	1.4	ug/L			07/07/16 17:02	25
n-Butylbenzene	ND		5.0	0.77	ug/L			07/07/16 17:02	25
n-Propylbenzene	ND		5.0	3.3	ug/L			07/07/16 17:02	25
o-Xylene	3.1	J	5.0	0.68	ug/L			07/07/16 17:02	25
p-Cymene	ND		5.0	0.74	ug/L			07/07/16 17:02	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			07/07/16 17:02	25
Toluene	28		5.0	0.89	ug/L			07/07/16 17:02	25
Xylenes, Total	5.6	J	15	1.4	ug/L			07/07/16 17:02	25
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 145					07/07/16 17:02	25
4-Bromofluorobenzene	104		64 - 141					07/07/16 17:02	25

8

9

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

Date Received: 06/30/16 14:20

Lab Sample ID: 480-102466-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 06/30/16 13:45

Method: 8260C - Volatile Organic Compounds by GC/MS Result Qualifier RL **MDL** Unit D Analyzed Dil Fac Analyte Prepared 1,1,1-Trichloroethane $\overline{\mathsf{ND}}$ 200 160 ug/L 07/05/16 20:10 200 ND 200 1.1.2.2-Tetrachloroethane 42 ug/L 07/05/16 20:10 200 1,1,2-Trichloroethane ND 200 46 ug/L 07/05/16 20:10 200 ND 200 76 ug/L 07/05/16 20:10 200 1.1-Dichloroethane 1,1-Dichloroethene ND 200 ug/L 07/05/16 20:10 200 1.2-Dichloroethane ND 200 42 ug/L 07/05/16 20:10 200 1,2-Dichloroethene, Total ND 400 160 ug/L 07/05/16 20:10 200 1,2-Dichloropropane ND 200 140 ug/L 07/05/16 20:10 200 ND 200 2-Hexanone 1000 250 ug/L 07/05/16 20:10 2-Butanone (MEK) ND 2000 260 ug/L 07/05/16 20:10 200 200 4-Methyl-2-pentanone (MIBK) ND 1000 420 ug/L 07/05/16 20:10 Acetone ND 2000 600 ug/L 07/05/16 20:10 200 6900 200 82 ug/L 200 **Benzene** 07/05/16 20:10 200 Bromodichloromethane ND 200 78 ug/L 07/05/16 20:10 200 Bromoform ND 200 52 ug/L 07/05/16 20:10 Bromomethane ND 200 140 ug/L 07/05/16 20:10 200 Carbon disulfide 200 07/05/16 20:10 200 ND 38 ug/L Carbon tetrachloride ND 200 54 ug/L 07/05/16 20:10 200 Chlorobenzene ND 200 150 07/05/16 20:10 200 ug/L Dibromochloromethane ND 200 64 ug/L 07/05/16 20:10 200 Chloroethane ND 200 64 ug/L 07/05/16 20:10 200 ND 200 Chloroform 68 ug/L 07/05/16 20:10 200 Chloromethane ND 200 70 ug/L 07/05/16 20:10 200 cis-1,3-Dichloropropene ND 200 72 ug/L 07/05/16 20:10 200 Ethylbenzene 200 200 150 ug/L 07/05/16 20:10 200 200 200 Methylene Chloride ND 88 ug/L 07/05/16 20:10 Styrene ND 200 150 ug/L 07/05/16 20:10 200 200 200 Tetrachloroethene ND 72 ug/L 07/05/16 20:10 200 100 ug/L 07/05/16 20:10 200 **Toluene** 980 ND 200 200 74 ug/L 07/05/16 20:10 trans-1,3-Dichloropropene Trichloroethene ND 200 ug/L 07/05/16 20:10 200 Vinyl chloride ND 200 180 ug/L 07/05/16 20:10 200 Vinyl acetate ND 1000 170 ug/L 07/05/16 20:10 200 **Xylenes, Total** 140 400 130 ug/L 07/05/16 20:10 200 Surrogate Qualifier Limits Prepared Dil Fac %Recovery Analyzed 66 - 137 200 1,2-Dichloroethane-d4 (Surr) 102 07/05/16 20:10 Toluene-d8 (Surr) 92 71 - 126 07/05/16 20:10 200

Method: 8021B -	Volatile Organic	Compounds	(GC)
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4-Bromofluorobenzene (Surr)

90

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

73 - 120

TestAmerica Buffalo

07/05/16 20:10

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Lab Sample ID: 480-102466-4

Analyzed

07/01/16 13:55

07/01/16 13:55

07/07/16 11:24

Prepared

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 06/30/16 13:45

Date Received: 06/30/16 14:20

General Chemistry

Analyte

Sulfate

Chloride

Alkalinity, Total

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		20	13	ug/L			07/06/16 18:08	100
o-Xylene	95		20	2.7	ug/L			07/06/16 18:08	100
p-Cymene	ND		20	3.0	ug/L			07/06/16 18:08	100
sec-Butylbenzene	5.4	J	20	2.0	ug/L			07/06/16 18:08	100
Toluene	880		20	3.6	ug/L			07/06/16 18:08	100
Xylenes, Total	280		60	5.4	ug/L			07/06/16 18:08	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		63 - 145					07/06/16 18:08	100
4-Bromofluorobenzene	98		64 - 141					07/06/16 18:08	100
Method: 200.7 Rev 4.4 -	Metals (ICP)								
Analyte	` '	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	5270		50.0	19.3	ug/L		07/01/16 07:55	07/05/16 19:23	1

RL

10.0

40.0

60.0

MDL Unit

5.6 mg/L

7.0 mg/L

24.0 mg/L

Result Qualifier

93.3

337

143 B

Dil Fac

20

20

6

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Lab Sample ID: 480-102466-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 06/30/16 13:50 Date Received: 06/30/16 14:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	46	J	100	17	ug/L			07/07/16 16:30	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			07/07/16 16:30	500
Benzene	11000		100	12	ug/L			07/07/16 16:30	500
Ethylbenzene	780		100	14	ug/L			07/07/16 16:30	500
Isopropylbenzene	ND		100	14	ug/L			07/07/16 16:30	500
Methyl tert-butyl ether	ND		200	22	ug/L			07/07/16 16:30	500
m,p-Xylene	340		200	27	ug/L			07/07/16 16:30	500
n-Butylbenzene	ND		100	15	ug/L			07/07/16 16:30	500
n-Propylbenzene	ND		100	65	ug/L			07/07/16 16:30	500
o-Xylene	ND		100	14	ug/L			07/07/16 16:30	500
p-Cymene	ND		100	15	ug/L			07/07/16 16:30	500
sec-Butylbenzene	ND		100	10	ug/L			07/07/16 16:30	500
Toluene	1900		100	18	ug/L			07/07/16 16:30	500
Xylenes, Total	340		300	27	ug/L			07/07/16 16:30	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 145					07/07/16 16:30	500
4-Bromofluorobenzene	103		64 - 141					07/07/16 16:30	500

3

5

7

9

10

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-102466-1

Lab Sample ID: 480-102466-2

Lab Sample ID: 480-102466-3

Matrix: Wastewater

Matrix: Water

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 06/30/16 13:30 Date Received: 06/30/16 14:20

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

Client Sample ID: Post-Carbon 2

Date Collected: 06/30/16 13:35

Date Received: 06/30/16 14:20

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

Client Sample ID: Post-Carbon 1

Date Collected: 06/30/16 13:40

Date Received: 06/30/16 14:20

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

Date Received: 06/30/16 14:20

Client Sample ID: Pre-Carbon	Lab Sample ID: 480-102466-4
Date Collected: 06/30/16 13:45	Matrix: Water

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

TestAmerica Buffalo

Page 16 of 22

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Lab Sample ID: 480-102466-4

Client Sample ID: Pre-Carbon Date Collected: 06/30/16 13:45 **Matrix: Water**

Date Received: 06/30/16 14:20

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

Lab Sample ID: 480-102466-5 **Client Sample ID: Outside Sump**

Date Collected: 06/30/16 13:50 **Matrix: Water**

Date Received: 06/30/16 14:20

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

Laboratory References:

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

Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-17
The following analytes	s are included in this report	, but certification is n	ot offered by the	governing authority:	
Analysis Method	Prep Method	Matrix	Anal	yte	
8021B		Wastewater	m,p-	Xylene	
8021B		Wastewater	o-Xy	lene	
8021B		Water	m,p-	Xylene	
8021B		Water	o-Xy	lene	
8260C		Wastewater	1,2-[Dichloroethene, Total	
8260C		Water	1,2-[Dichloroethene, Total	
SM 4500 H+ B		Wastewater	рН		

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

lethod	Method Description	Protocol	Laboratory
260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
21B	Volatile Organic Compounds (GC)	SW846	TAL BUF
8	Organochlorine Pesticides in Water	40CFR136A	TAL BUF
0.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
664A	HEM and SGT-HEM	1664A	TAL BUF
0.0	Anions, Ion Chromatography	MCAWW	TAL BUF
0.2	Alkalinity	MCAWW	TAL BUF
5.4	Cyanide, Total	MCAWW	TAL BUF
20.1	Phenolics, Total Recoverable	MCAWW	TAL BUF
И 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
И 2540D	Solids, Total Suspended (TSS)	SM	TAL BUF
И 4500 H+ B	pH	SM	TAL BUF
Л 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

TestAmerica Buffalo

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-102466-1

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

Buffalo

10 Hazelwood Drive

Chain of Custody Record



Amherst, NY 14228

phone 716.504.9852 fax 716.691.7991		-														1	1	20000			T	estAmerica Lab	oratories, In	1
Client Contact	Project Ma	anager: Gle	nn May (N)	(SDEC)		Site	Conta	et: T	hom	as Pa	lmer		Date: 6 30 16							COC No:				
Groundwater & Environmental Services, Inc	Tel/Fax: (7	16) 851-722	20			Lab	Conta	act: B	B. Fis	cher				Carı	arrier:					_		COCs		
495 Aero Drive Suite 3		Analysis T	urnaround	Time		1005 1006 2006				1	8021				S .			2.			J	ob No.		
Cheektowaga, NY 14225	Calenda	r(C)orWo	ork Days (W)						- 11	A - 8					nano Mids M04								
(800) 287-7857 Phone	Т.	AT if different f	from Below			180	P			M04	STARS list - VOA			over:	r Pes	lids	og pa	OF			L			
(866) 902-2187 FAX		2	weeks			140 E	otho			i or	list		ase	Reco	Itan	d So	solve	PAO.			S	DG No.		7.
Project Name: NYSDEC Gatown WWTP		1	week				I We			Llis	E S		Gre	otal	Polle	Suspended Solids	ig	SV						
Site: 915171		1	2 days				Loca	5		TC	To To	_	Sil &	s, T	rity .	uspe	Tots	ICL						
P O # Callout 120597		1	l day				G G	alini	_	00	OD	Td-+) - o	nolic	Prio	tal S	led -	(ac			L			
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) STAR 335,4 - Cyanide, Total	SM4500_H+-pH	1664A_Calc - Oil & Grease	420.4 - Phenolics, Total Recoverable	608_Pest - Priority Pollutant Pesticides	2540D - Total Suspended Solids	2540C_Caled - Total Disolved Solids	8270C-(MOD) TCL SVOA - OLM04.2				Sample Spe	ecific Notes:	
Post-Carbon 3	6/30	1330	Grab	W	19	N			X	X :	x x	X	x	x	X :	XX	X	X						
Post-Carbon 2	-	1335	Grab	W	3	N	T				x													
Post-Carbon 1		1340	Grab	W	3	N					x											N. 1975	3.0.2	
Pre-Carbon		1345	Grab	W	9	N 2	xx	x		X :	x													
Inside Outside Sump	U	1350	Grab	W	3	N					x						,	1	1 1	1				
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						\vdash	-			4	_	\perp		_	4	_	_	-		_	+			
						Ш																		
						П															T			
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaC	H: 6= Other					+	+		\vdash	+	+	+-			\neg	+	t	+		+	+			
Possible Hazard Identification Non-Hazard Flammable Skin Irritant Special Instructions/QC Requirements & Comments:	Poison B		Inknown .	otag		S		le Dis Retui				may	be j	asse Dispo	essed osal E	I if sa	amp b			rchive		onger than 1 mor	nth) onths	
A																								
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Relinquished by:	Company: Date				Date/Time:		Received by:								Company:						Date/Time:			
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-	1									+				_			"	1		F	Forn	n No. CA-C-WI-00	2. dated 04/07	/2011

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-102466-1

Login Number: 102466 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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

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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: 480-104197-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana

Authorized for release by:

8/16/2016 9:15:33 AM

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

orlette.johnson@testamericainc.com

LINKS

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.

Orlette Johnson

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

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.

Page 2 of 17

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-104197-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	
Lab Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17

6

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
*	LCC ar LCCD is suitaide assentance limite

LCS or LCSD is outside acceptance limits.

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

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

Glossary

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

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

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

DER Duplicate error ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

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

DLC Decision level concentration MDA Minimum detectable activity **EDL Estimated Detection Limit** MDC

Minimum detectable concentration

MDL Method Detection Limit MLMinimum Level (Dioxin) NC Not Calculated

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

PQL Practical Quantitation Limit

Quality Control QC **RER** Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

Job ID: 480-104197-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-104197-1

Receipt

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

GC/MS VOA

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-104197-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The laboratory control sample (LCS) recovered outside control limits for the following analytes: n-Propylbenzene. These analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-104197-3), Pre-Carbon (480-104197-4) and Outside Sump (480-104197-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 335.4: The results reported for the following sample do not concur with results previously reported for this site: Post-Carbon 3 (480-104197-1). Reanalysis was performed, and the result(s) confirmed.

Method(s) 9040B, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-104197-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-104197-1

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 08/05/16 11:00 Date Received: 08/05/16 12:45

Method: 8260C - Volatile On Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/11/16 00:30	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/11/16 00:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/11/16 00:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/11/16 00:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/11/16 00:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/11/16 00:30	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			08/11/16 00:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/11/16 00:30	1
2-Hexanone	ND		5.0	1.2	ug/L			08/11/16 00:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/11/16 00:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/11/16 00:30	1
Acetone	ND		10	3.0	ug/L			08/11/16 00:30	1
Benzene	ND		1.0	0.41	ug/L			08/11/16 00:30	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/11/16 00:30	1
Bromoform	ND		1.0	0.26	ug/L			08/11/16 00:30	1
Bromomethane	ND		1.0	0.69	ug/L			08/11/16 00:30	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/11/16 00:30	1
Carbon tetrachloride	ND		1.0	0.27				08/11/16 00:30	1
Chlorobenzene	ND		1.0		ug/L			08/11/16 00:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/11/16 00:30	1
Chloroethane	ND		1.0	0.32				08/11/16 00:30	1
Chloroform	ND		1.0		ug/L			08/11/16 00:30	1
Chloromethane	ND		1.0		ug/L			08/11/16 00:30	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/11/16 00:30	1
Ethylbenzene	ND		1.0		ug/L			08/11/16 00:30	1
Methylene Chloride	ND		1.0	0.44	-			08/11/16 00:30	1
Styrene	ND		1.0		ug/L			08/11/16 00:30	1
Tetrachloroethene	ND		1.0		ug/L			08/11/16 00:30	1
Toluene	ND		1.0	0.51				08/11/16 00:30	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			08/11/16 00:30	1
Trichloroethene	ND		1.0		ug/L			08/11/16 00:30	1
Vinyl chloride	ND		1.0		ug/L			08/11/16 00:30	1
Vinyl acetate	ND		5.0		ug/L			08/11/16 00:30	1
Xylenes, Total	ND		2.0		ug/L			08/11/16 00:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120			-		08/11/16 00:30	1
Toluene-d8 (Surr)	95		80 - 120					08/11/16 00:30	1

Surrogate	%Recovery Qualit	ier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101	77 - 120		08/11/16 00:30	1
Toluene-d8 (Surr)	95	80 - 120		08/11/16 00:30	1
4-Bromofluorobenzene (Surr)	111	73 - 120		08/11/16 00:30	1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			08/09/16 14:05	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			08/09/16 14:05	1
Benzene	ND	0.20	0.023	ug/L			08/09/16 14:05	1
Ethylbenzene	ND	0.20	0.029	ug/L			08/09/16 14:05	1
Isopropylbenzene	ND	0.20	0.027	ug/L			08/09/16 14:05	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			08/09/16 14:05	1
m,p-Xylene	ND	0.40	0.054	ug/L			08/09/16 14:05	1
n-Butylbenzene	ND	0.20	0.031	ug/L			08/09/16 14:05	1

TestAmerica Buffalo

Page 6 of 17

8/16/2016

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

Lab Sample ID: 480-104197-1

Matrix: Water

Cli	ent	San	nple	ID:	Pos	t-(Carbon 3	

Date Collected: 08/05/16 11:00 Date Received: 08/05/16 12:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND	*	0.20	0.13	ug/L			08/09/16 14:05	1
o-Xylene	ND		0.20	0.027	ug/L			08/09/16 14:05	1
p-Cymene	ND		0.20	0.030	ug/L			08/09/16 14:05	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/09/16 14:05	1
Toluene	ND		0.20	0.036	ug/L			08/09/16 14:05	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/09/16 14:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129					08/09/16 14:05	1
4-Bromofluorobenzene	105		64 - 128					08/09/16 14:05	1
Method: 200.7 Rev 4.4 - I	Metals (ICP)								
Analyte	` '	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	677		50.0	19.3	ug/L		08/09/16 08:15	08/09/16 17:45	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	2.7		0.10	0.050	mg/L		08/09/16 17:52	08/10/16 14:32	10
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
рН	7.1	HE	0.1	0.1	SU			08/10/16 15:30	

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

Lab Sample ID: 480-104197-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 08/05/16 11:05 Date Received: 08/05/16 12:45

Method: 8021B - Volatile Analyte	Result Qualifie	•	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			08/09/16 14:37	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			08/09/16 14:37	1
Benzene	5.2	0.20	0.023	ug/L			08/09/16 14:37	1
Ethylbenzene	ND	0.20	0.029	ug/L			08/09/16 14:37	1
Isopropylbenzene	ND	0.20	0.027	ug/L			08/09/16 14:37	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			08/09/16 14:37	1
m,p-Xylene	ND	0.40	0.054	ug/L			08/09/16 14:37	1
n-Butylbenzene	ND	0.20	0.031	ug/L			08/09/16 14:37	1
n-Propylbenzene	ND *	0.20	0.13	ug/L			08/09/16 14:37	1
o-Xylene	ND	0.20	0.027	ug/L			08/09/16 14:37	1
p-Cymene	ND	0.20	0.030	ug/L			08/09/16 14:37	1
sec-Butylbenzene	ND	0.20	0.020	ug/L			08/09/16 14:37	1
Toluene	ND	0.20	0.036	ug/L			08/09/16 14:37	1
Xylenes, Total	ND	0.60	0.054	ug/L			08/09/16 14:37	1
Surrogate	%Recovery Qualifie	r Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108	63 - 129					08/09/16 14:37	1
4-Bromofluorobenzene	106	64 - 128					08/09/16 14:37	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

Lab Sample ID: 480-104197-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 08/05/16 11:10 Date Received: 08/05/16 12:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		5.0	0.87	ug/L			08/09/16 15:09	25
1,3,5-Trimethylbenzene	ND		5.0	3.8	ug/L			08/09/16 15:09	25
Benzene	820		5.0	0.58	ug/L			08/09/16 15:09	25
Ethylbenzene	4.4	J	5.0	0.72	ug/L			08/09/16 15:09	25
Isopropylbenzene	ND		5.0	0.68	ug/L			08/09/16 15:09	25
Methyl tert-butyl ether	ND		10	1.1	ug/L			08/09/16 15:09	25
m,p-Xylene	ND		10	1.4	ug/L			08/09/16 15:09	25
n-Butylbenzene	ND		5.0	0.77	ug/L			08/09/16 15:09	25
n-Propylbenzene	ND ¹	*	5.0	3.3	ug/L			08/09/16 15:09	25
o-Xylene	1.1	J	5.0	0.68	ug/L			08/09/16 15:09	25
p-Cymene	ND		5.0	0.74	ug/L			08/09/16 15:09	25
sec-Butylbenzene	ND		5.0	0.51	ug/L			08/09/16 15:09	25
Toluene	19		5.0	0.89	ug/L			08/09/16 15:09	25
Xylenes, Total	ND		15	1.4	ug/L			08/09/16 15:09	25
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		63 - 129					08/09/16 15:09	25
4-Bromofluorobenzene	103		64 - 128					08/09/16 15:09	25

Client: New York State D.E.C.

Date Received: 08/05/16 12:45

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

Lab Sample ID: 480-104197-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 08/05/16 11:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		20	3.5	ug/L			08/09/16 16:14	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			08/09/16 16:14	100
Benzene	4600		20	2.3	ug/L			08/09/16 16:14	100
Ethylbenzene	180		20	2.9	ug/L			08/09/16 16:14	100
Isopropylbenzene	ND		20	2.7	ug/L			08/09/16 16:14	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			08/09/16 16:14	100
m,p-Xylene	39	J	40	5.4	ug/L			08/09/16 16:14	100
n-Butylbenzene	ND		20	3.1	ug/L			08/09/16 16:14	100
n-Propylbenzene	ND	*	20	13	ug/L			08/09/16 16:14	100
o-Xylene	34		20	2.7	ug/L			08/09/16 16:14	100
p-Cymene	ND		20		ug/L			08/09/16 16:14	100
sec-Butylbenzene	ND		20	2.0	ug/L			08/09/16 16:14	100
Toluene	460		20	3.6	ug/L			08/09/16 16:14	100
Xylenes, Total	73		60	5.4	ug/L			08/09/16 16:14	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	112		63 - 129					08/09/16 16:14	100
4-Bromofluorobenzene	110		64 - 128					08/09/16 16:14	100
Method: 200.7 Rev 4.4 - I	Metals (ICP)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	135000	В	500	100	ug/L		08/09/16 08:15	08/09/16 17:48	1
Iron	8560		50.0	19.3	ug/L		08/09/16 08:15	08/09/16 17:48	1
Magnesium	48100		200	43.4	ug/L		08/09/16 08:15	08/09/16 17:48	1
Potassium	3700		500	100	ug/L		08/09/16 08:15	08/09/16 17:48	1
Sodium	36500		1000	324	ug/L		08/09/16 08:15	08/09/16 17:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	193		10.0	5.6	mg/L			08/08/16 14:23	20
			40.0					00/00/40 44:00	20
Sulfate	84.7		40.0	7.0	mg/L			08/08/16 14:23	20

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

Lab Sample ID: 480-104197-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 08/05/16 11:30 Date Received: 08/05/16 12:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			08/09/16 17:19	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			08/09/16 17:19	500
Benzene	7400		100	12	ug/L			08/09/16 17:19	500
Ethylbenzene	520		100	14	ug/L			08/09/16 17:19	500
Isopropylbenzene	ND		100	14	ug/L			08/09/16 17:19	500
Methyl tert-butyl ether	ND		200	22	ug/L			08/09/16 17:19	500
m,p-Xylene	100	J	200	27	ug/L			08/09/16 17:19	500
n-Butylbenzene	ND		100	15	ug/L			08/09/16 17:19	500
n-Propylbenzene	ND	*	100	65	ug/L			08/09/16 17:19	500
o-Xylene	93	J	100	14	ug/L			08/09/16 17:19	500
p-Cymene	ND		100	15	ug/L			08/09/16 17:19	500
sec-Butylbenzene	ND		100	10	ug/L			08/09/16 17:19	500
Toluene	1100		100	18	ug/L			08/09/16 17:19	500
Xylenes, Total	190	J	300	27	ug/L			08/09/16 17:19	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	109		63 - 129					08/09/16 17:19	500
4-Bromofluorobenzene	107		64 - 128					08/09/16 17:19	500

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Date Collected: 08/05/16 11:00 Date Received: 08/05/16 12:45 Lab Sample ID: 480-104197-1

Lab Sample ID: 480-104197-2

Lab Sample ID: 480-104197-3

Lab Sample ID: 480-104197-4

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

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

Client Sample ID: Post-Carbon 2

Date Collected: 08/05/16 11:05

Date Received: 08/05/16 12:45

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

Client Sample ID: Post-Carbon 1

Date Collected: 08/05/16 11:10

Date Received: 08/05/16 12:45

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

Client Sample ID: Pre-Carbon

Date Collected: 08/05/16 11:15

Date Received: 08/05/16 12:45

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

Client Sample ID: Outside Sump	Lab Sample ID: 480-104197-5
Date Collected: 08/05/16 11:30	Matrix: Water
Date Received: 08/05/16 12:45	

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

Laboratory References:

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

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date			
New York	NELAP		2	10026	03-31-17			
The following analytes	s are included in this repo	rt, but certification is	not offered by the g	overning authority:				
Analysis Method	Prep Method	Matrix	Analy	te				
8021B		Water	m,p-X	ylene				
8021B		Water	o-Xyle	ene				
8260C		Water	1,2-Di	chloroethene, Total				
SM 4500 H+ B		Water	рН					

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-104197-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

Amherst, NY 14228						480-104197 COC Tott Amorica I above																				
phone 716.504.9852 fax 716.691.7991	-					TestAmerica Laboratories, Inc.																				
Client Contact				nn May (NY	(SDEC)								01110						COC No:							
Groundwater & Environmental Services, Inc	Tel/Fa	_	16) 851-722				La	b Co	ontac	t: 0	. Jol	_		-	_	Car	rier:	_	_	_	_	_	_	of	COCs	
495 Aero Drive Suite 3	-	- 10	STANDARD VAN	urnaround							- 1		802											Job No.		
Cheektowaga, NY 14225	Cal			ork Days (W)			p				4.2	-VC													
(800) 287-7857 Phone	-		T if different f	rom Below _				etho	pc			Ę	۶					1				Ш				
(866) 902-2187 FAX	1	X	2	weeks				al M	etho	- 1		0	list									Н		SDG No.		
Project Name: NYSDEC Gatown WWTP			1	week				Loc	al M			3	ARS	<u> </u>												
Site: 915171			2	2 days			9	â	I,0c	Ē		티	TS (: <u>:</u>												
P O # Callout 120597			1	day			Ī	Š	(qc	la li	_	9	0	P Z	1							1				
Sample Identification	Sam		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	SM4500 H+-pH	'									Sample	Specific No	otes:
Post-Carbon 3	8/5		1100	Grab	w	9	N				x	x	x :	x x												
Post-Carbon 2	8/2		1105	Grab	w	3	N						X													
Post-Carbon 1	8/5		1110	Grab	w	3	N						X													
Pre-Carbon	8/3		1115	Grab	w	6	N	x	X	x			x													
Inside / Outside Sump	8	~	1130	Grab	w	3	N						x													
					DE-0823																			120-110		
				88									200					5								- 22
= 2.2							П																			
																								0.00		
							П											T	T							
330000000000000000000000000000000000000							П			1				T		,			T	T						
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H; 6= 0	ther			,		П			\Box				T		/		П	Т		П					
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Pois	on R		Inknown			٦	San	nple □ _R e	Dis	pos	al (A fe	e ma	y be	asse	esse	d if s	amp			etair Archi		longer than 1 n	nonth) Months	
Special Instructions/QC Requirements & Comments:	1013	OH D		nonown	_				710	cturi	110	One	om	_		Jispe	Joan I	Dy L	20			AIGII	IVE	roi	WOITUIS	
							_				1							7	#	1	2	7(7			
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Relinquished by:	Compa	my:			Date/Tir	ne:		Rece	ived	by:	ŧ	U					C	Comp	any:					Date/Time:		
Relinquished by:	Compa	my:	-		Date/Tir	ne:		Rece	eived	by:							C	Comp	any:					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: 480-104197-1

Login Number: 104197 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Creator. Roll, Chiris 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

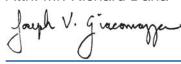
TestAmerica Job ID: 480-105111-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana



Authorized for release by: 9/7/2016 5:09:49 PM

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

Designee for

Orlette Johnson, Senior Project Manager (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.

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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. gircomagger

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Joe Giacomazza Project Management Assistant II 9/7/2016 5:09:49 PM 7

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Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-105111-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions	4
Case Narrative	5
Client Sample Results	
Chronicle	12
Certification Summary	13
Method Summary	14
Sample Summary	15
Chain of Custody	16
Receipt Checklists	17

Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

Qualifiers

GC/MS VOA

Qualifier Qu	alifier Description
Qualifier Qu	anner Description

* LCS or LCSD is outside acceptance 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 Description
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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 Net Coloridated

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: 480-105111-1

Job ID: 480-105111-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-105111-1

Receipt

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

GC/MS VOA

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

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

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

HPLC/IC

Method(s) 300.0: The following sample was diluted due to the nature of the sample matrix: Pre-Carbon (480-105111-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-105111-3), Pre-Carbon (480-105111-4) and Outside Sump (480-105111-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-105111-1).

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-105111-1

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 08/26/16 08:45 Date Received: 08/26/16 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/27/16 05:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/27/16 05:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/27/16 05:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/27/16 05:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/27/16 05:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/27/16 05:10	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			08/27/16 05:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/27/16 05:10	1
2-Hexanone	ND		5.0	1.2	ug/L			08/27/16 05:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/27/16 05:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/27/16 05:10	1
Acetone	ND	*	10	3.0	ug/L			08/27/16 05:10	1
Benzene	ND		1.0	0.41	ug/L			08/27/16 05:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/27/16 05:10	1
Bromoform	ND		1.0	0.26	ug/L			08/27/16 05:10	1
Bromomethane	ND		1.0	0.69	ug/L			08/27/16 05:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/27/16 05:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/27/16 05:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/27/16 05:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/27/16 05:10	1
Chloroethane	ND		1.0	0.32	ug/L			08/27/16 05:10	1
Chloroform	ND		1.0	0.34	ug/L			08/27/16 05:10	1
Chloromethane	ND		1.0	0.35	ug/L			08/27/16 05:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/27/16 05:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/27/16 05:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/27/16 05:10	1
Styrene	ND		1.0	0.73	ug/L			08/27/16 05:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/27/16 05:10	1
Toluene	ND		1.0	0.51	ug/L			08/27/16 05:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/27/16 05:10	1
Trichloroethene	ND		1.0	0.46	ug/L			08/27/16 05:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/27/16 05:10	1
Vinyl acetate	ND		5.0	0.85	ug/L			08/27/16 05:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/27/16 05:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		77 - 120		08/27/16 05:10	1
Toluene-d8 (Surr)	89		80 - 120		08/27/16 05:10	1
4-Bromofluorobenzene (Surr)	104		73 - 120		08/27/16 05:10	1

Method: 8021B - Volatile Organic	Compounds	(GC)
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		-,						
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND ND	0.20	0.035	ug/L			08/31/16 16:16	1
1,3,5-Trimethylbenzene	ND	0.20	0.15	ug/L			08/31/16 16:16	1
Benzene	ND	0.20	0.023	ug/L			08/31/16 16:16	1
Ethylbenzene	ND	0.20	0.029	ug/L			08/31/16 16:16	1
Isopropylbenzene	ND	0.20	0.027	ug/L			08/31/16 16:16	1
Methyl tert-butyl ether	ND	0.40	0.044	ug/L			08/31/16 16:16	1
m,p-Xylene	ND	0.40	0.054	ug/L			08/31/16 16:16	1
n-Butylbenzene	ND	0.20	0.031	ug/L			08/31/16 16:16	1

TestAmerica Buffalo

Page 6 of 17

9/7/2016

6

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

Lab Sample ID: 480-105111-1

Matrix: Water

Client Sample ID: Post-Carbon 3	Client	Samp	le ID:	Post-	Carbon	3
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Date Collected: 08/26/16 08:45 Date Received: 08/26/16 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			08/31/16 16:16	1
o-Xylene	ND		0.20	0.027	ug/L			08/31/16 16:16	1
p-Cymene	ND		0.20	0.030	ug/L			08/31/16 16:16	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/31/16 16:16	1
Toluene	ND		0.20	0.036	ug/L			08/31/16 16:16	1
Xylenes, Total	ND		0.60	0.054	ug/L			08/31/16 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	115		63 - 129					08/31/16 16:16	1
4-Bromofluorobenzene	115		64 - 128					08/31/16 16:16	1
Method: 200.7 Rev 4.4 - Met	als (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	453		50.0	19.3	ug/L		08/30/16 09:18	08/30/16 16:56	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.1		0.10	0.050	mg/L		08/29/16 06:21	08/29/16 13:31	10
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.3	HE	0.1	0.1	SU			08/30/16 10:43	

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

Lab Sample ID: 480-105111-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 08/26/16 08:50 Date Received: 08/26/16 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			08/31/16 16:48	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			08/31/16 16:48	1
Benzene	19		0.20	0.023	ug/L			08/31/16 16:48	1
Ethylbenzene	0.72		0.20	0.029	ug/L			08/31/16 16:48	1
Isopropylbenzene	ND		0.20	0.027	ug/L			08/31/16 16:48	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			08/31/16 16:48	1
m,p-Xylene	0.30	J	0.40	0.054	ug/L			08/31/16 16:48	1
n-Butylbenzene	ND		0.20	0.031	ug/L			08/31/16 16:48	1
n-Propylbenzene	ND		0.20	0.13	ug/L			08/31/16 16:48	1
o-Xylene	0.24		0.20	0.027	ug/L			08/31/16 16:48	1
p-Cymene	ND		0.20	0.030	ug/L			08/31/16 16:48	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			08/31/16 16:48	1
Toluene	1.6		0.20	0.036	ug/L			08/31/16 16:48	1
Xylenes, Total	0.54	J	0.60	0.054	ug/L			08/31/16 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	125		63 - 129			-		08/31/16 16:48	1
4-Bromofluorobenzene	123		64 - 128					08/31/16 16:48	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

Lab Sample ID: 480-105111-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 08/26/16 08:55 Date Received: 08/26/16 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene			10	1.7	ug/L			08/31/16 18:55	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			08/31/16 18:55	50
Benzene	2700		10	1.2	ug/L			08/31/16 18:55	50
Ethylbenzene	170		10	1.4	ug/L			08/31/16 18:55	50
Isopropylbenzene	ND		10	1.4	ug/L			08/31/16 18:55	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			08/31/16 18:55	50
m,p-Xylene	79		20	2.7	ug/L			08/31/16 18:55	50
n-Butylbenzene	ND		10	1.5	ug/L			08/31/16 18:55	50
n-Propylbenzene	ND		10	6.5	ug/L			08/31/16 18:55	50
o-Xylene	70		10	1.4	ug/L			08/31/16 18:55	50
p-Cymene	ND		10	1.5	ug/L			08/31/16 18:55	50
sec-Butylbenzene	ND		10	1.0	ug/L			08/31/16 18:55	50
Toluene	390		10	1.8	ug/L			08/31/16 18:55	50
Xylenes, Total	150		30	2.7	ug/L			08/31/16 18:55	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	123		63 - 129			-		08/31/16 18:55	50
4-Bromofluorobenzene	115		64 - 128					08/31/16 18:55	50

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

Lab Sample ID: 480-105111-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 08/26/16 09:00

Date Received: 08/26/16 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,2,4-Trimethylbenzene	15	J	20	3.5	ug/L			08/31/16 18:24	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			08/31/16 18:24	100
Benzene	3500		20	2.3	ug/L			08/31/16 18:24	100
Ethylbenzene	260		20	2.9	ug/L			08/31/16 18:24	100
Isopropylbenzene	ND		20	2.7	ug/L			08/31/16 18:24	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			08/31/16 18:24	100
m,p-Xylene	130		40	5.4	ug/L			08/31/16 18:24	100
n-Butylbenzene	ND		20	3.1	ug/L			08/31/16 18:24	100
n-Propylbenzene	ND		20	13	ug/L			08/31/16 18:24	100
o-Xylene	110		20	2.7	ug/L			08/31/16 18:24	100
p-Cymene	ND		20	3.0	ug/L			08/31/16 18:24	100
sec-Butylbenzene	ND		20	2.0	ug/L			08/31/16 18:24	100
Toluene	570		20	3.6	ug/L			08/31/16 18:24	100
Xylenes, Total	240		60	5.4	ug/L			08/31/16 18:24	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene	119		63 - 129					08/31/16 18:24	100
4-Bromofluorobenzene	113		64 - 128					08/31/16 18:24	100
Method: 200.7 Rev 4.4 - Metals (IC	P)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Calcium	69400		500	100	ug/L		08/30/16 09:18	08/30/16 17:00	
Iron	2870		50.0	19.3	ug/L		08/30/16 09:18	08/30/16 17:00	
	26300		200	43.4	ug/L		08/30/16 09:18	08/30/16 17:00	
Magnesium							08/30/16 09:18	08/30/16 17:00	
Magnesium Potassium	3090		500	100	ug/L		06/30/16 09.16	00/00/10 17:00	
			500 1000		ug/L ug/L		08/30/16 09:18	08/30/16 17:00	
Potassium	3090			324	ug/L				
Potassium Sodium	3090 25200	Qualifier			ug/L	D			
Potassium Sodium General Chemistry Analyte	3090 25200	Qualifier	1000	324 MDL	ug/L	<u>D</u>	08/30/16 09:18	08/30/16 17:00	Dil Fa
Potassium Sodium General Chemistry	3090 25200 Result	Qualifier	1000	324 MDL 5.6	ug/L Unit	<u>D</u>	08/30/16 09:18	08/30/16 17:00 Analyzed	Dil Fac

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

Lab Sample ID: 480-105111-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 08/26/16 09:15 Date Received: 08/26/16 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	36	J	100	17	ug/L			08/31/16 17:20	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			08/31/16 17:20	500
Benzene	3600		100	12	ug/L			08/31/16 17:20	500
Ethylbenzene	400		100	14	ug/L			08/31/16 17:20	500
Isopropylbenzene	ND		100	14	ug/L			08/31/16 17:20	500
Methyl tert-butyl ether	ND		200	22	ug/L			08/31/16 17:20	500
m,p-Xylene	210		200	27	ug/L			08/31/16 17:20	500
n-Butylbenzene	ND		100	15	ug/L			08/31/16 17:20	500
n-Propylbenzene	ND		100	65	ug/L			08/31/16 17:20	500
o-Xylene	230		100	14	ug/L			08/31/16 17:20	500
p-Cymene	ND		100	15	ug/L			08/31/16 17:20	500
sec-Butylbenzene	ND		100	10	ug/L			08/31/16 17:20	500
Toluene	690		100	18	ug/L			08/31/16 17:20	500
Xylenes, Total	440		300	27	ug/L			08/31/16 17:20	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	114		63 - 129			-		08/31/16 17:20	500
4-Bromofluorobenzene	113		64 - 128					08/31/16 17:20	500

9/7/2016

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-105111-1

Lab Sample ID: 480-105111-2

Lab Sample ID: 480-105111-3

Lab Sample ID: 480-105111-4

Lab Sample ID: 480-105111-5

Analyst

MRB

or Analyzed

318505 08/31/16 17:20

Lab

TAL BUF

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 08/26/16 08:45 Date Received: 08/26/16 09:40

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

Client Sample ID: Post-Carbon 2

Date Collected: 08/26/16 08:50

Date Received: 08/26/16 09:40

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

Client Sample ID: Post-Carbon 1

Date Collected: 08/26/16 08:55

Date Received: 08/26/16 09:40

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

Client Sample ID: Pre-Carbon

Date Collected: 08/26/16 09:00

Date Received: 08/26/16 09:40

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

Run

Client Sample ID: Outside Sump

Type

Analysis

Date Collected: 08/26/10	6 09:15					Matrix: Water
Date Received: 08/26/16	09:40					
Bato	:h B	3atch	Dilution	Batch	Prepared	

Factor

500

Number

Laboratory References:

Prep Type

Total/NA

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

Method

8021B

TestAmerica Buffalo

Certification Summary

Client: New York State D.E.C. TestA

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-17
The following analytes	are included in this report, bu	t certification is not offe	ered by the governing a	authority:	
Analysis Method	Prep Method	Matrix	Analyt	te	
8021B		Water	m,p-X	ylene	
8021B		Water	o-Xyle	ene	
8260C		Water	1,2-Di	chloroethene, Total	
SM 4500 H+ B		Water	На		

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-105111-1

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

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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, I	ac.		
Client Contact	Project M	anager: Gle	nn May (N	(SDEC)		Site Contact: Thomas Palm			lmer		D	ate:	8	8126116					COC No:					
Groundwater & Environmental Services, Inc	Tel/Fax: (716) 851-72:	20			Lab	Cont	act: (). Jo	hnson	Š.	100	C	arrie	r:	,	1				of COCs			
495 Aero Drive Suite 3		Analysis T	urnaround	Time		П	T								\neg			П		Т			Job No.	
Cheektowaga, NY 14225	Calenda	r(C) or Wo	ork Days (W)						TCL list OLM04.2 STARS list - VOA - 8021											600000			
(800) 287-7857 Phone	Т	AT if different	from Below _			1				MOM S											1863			
(866) 902-2187 FAX		2 weeks				ž	thoc		П	is Of											SDG I			
Project Name: NYSDEC Gatown WWTP	7 🗆	1	week			1 8	M			LIIS	Tal la													
Site: 915171			2 days				Loca	ţ,		TC	, To	_									480-105111 COC			
P O # Callout 120597			l day			mple		alini	_	0 0	nide	Id.									- XX			
Sample Identification	Sample Ņate	Sample Time	Sample Type	Matrix	# of Cont.	Fiftered Sample	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2 8021B - (MOD) STARS list - VOA	335.4 - Cyanide, Total	SM4500_H+-pH									Sample Specific Notes:			
Post-Carbon 3	8/2C	845	Grab	w	9	N			x	X X	x	x												
Post-Carbon 2		820	Grab	w	3	N				3	ζ .													
Post-Carbon 1		855	Grab	w	3	N				3	ζ .				П		\top					-11.00		
Pre-Carbon		900	Grab	w	6	N 2	x x	x		2	ζ .	П									100 77 -			
Inside Outside Sump		915	Grab	w	3	N	1			2		П		\top			_	1	П					
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V 1991						Ш	_	_		\perp	1		4	_			_	_	Ш	7				
			,			Ш																		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=Na	OH; 6= Othe	r																T						
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison I	. 🗆 :	Inknown	4		s				al (A		may [-	be∕as □ _{Di}	sposa	se d it al By	sam Lab	ples	are i	retai Arch	ned ive i	longer than 1 month) For Months			
Special Instructions/QC Requirements & Comments:									١		4													
Relinquished by:	Company:	55		Date/Tir				by	U	10	1	_				Tpany					Descrime 6 094	9		
Relinquished by:	Company:			Date/Tir	ne:	R	eceiv	ed by:							Con	ipany	:				Date/Time:			
Relinquished by:	Company:			Date/Tir	ne:	R	eceiv	ed by:		R11					Con	ipany	:				Date/Time:			
						-1			_				-	_	1		w î			For	rm No. CA-C-WI-002 dated 04/	77/2011		





Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-105111-1

Login Number: 105111 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Creator. Rolb, Criris 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	

TestAmerica Buffalo



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

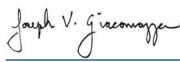
TestAmerica Job ID: 480-106738-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana



Authorized for release by: 10/7/2016 1:10:18 PM

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

Designee for

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.

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.

Joseph V. Gireomanger

Joe Giacomazza Project Management Assistant II 10/7/2016 1:10:18 PM

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Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-106738-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions	4
Case Narrative	5
Client Sample Results	7
Chronicle	15
Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21

4

5

6

8

9

Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

Qualifiers

GC/MS VOA

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

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

GC VOA

Qualifier Qualifier Description

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

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

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

General Chemistry

Qualifier	Qualifier Description
В	Compound was found in the blank and sample.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

RPD

TEF

TEQ

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

TestAmerica Buffalo

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

Job ID: 480-106738-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-106738-1

Receipt

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

GC/MS VOA

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

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

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

GC/MS Semi VOA

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-106738-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-106738-3), Pre-Carbon (480-106738-4) and Outside Sump (480-106738-5). Elevated reporting limits (RLs) are provided.

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

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

Metals

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

General Chemistry

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

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-106738-1).

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

Organic Prep

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

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

Job ID: 480-106738-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

4

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2

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Date Collected: 09/29/16 14:20 Date Received: 09/29/16 15:05 Lab Sample ID: 480-106738-1

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.82	ug/L			09/30/16 16:29	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/L			09/30/16 16:29	1
1,1,2-Trichloroethane	ND	1.0	0.23	ug/L			09/30/16 16:29	1
1,1-Dichloroethane	ND	1.0	0.38	ug/L			09/30/16 16:29	1
1,1-Dichloroethene	ND	1.0	0.29	ug/L			09/30/16 16:29	1
1,2-Dichloroethane	ND	1.0	0.21	ug/L			09/30/16 16:29	1
1,2-Dichloroethene, Total	ND	2.0	0.81	ug/L			09/30/16 16:29	1
1,2-Dichloropropane	ND	1.0	0.72	ug/L			09/30/16 16:29	1
2-Hexanone	ND	5.0	1.2	ug/L			09/30/16 16:29	1
2-Butanone (MEK)	ND	10	1.3	ug/L			09/30/16 16:29	1
4-Methyl-2-pentanone (MIBK)	ND	5.0	2.1	ug/L			09/30/16 16:29	1
Acetone	ND	10	3.0	ug/L			09/30/16 16:29	1
Benzene	ND	1.0	0.41	ug/L			09/30/16 16:29	1
Bromodichloromethane	ND	1.0	0.39	ug/L			09/30/16 16:29	1
Bromoform	ND	1.0	0.26	ug/L			09/30/16 16:29	1
Bromomethane	ND	1.0	0.69	ug/L			09/30/16 16:29	1
Carbon disulfide	ND	1.0	0.19	ug/L			09/30/16 16:29	1
Carbon tetrachloride	ND	1.0	0.27	ug/L			09/30/16 16:29	1
Chlorobenzene	ND	1.0	0.75	ug/L			09/30/16 16:29	1
Dibromochloromethane	ND	1.0	0.32	ug/L			09/30/16 16:29	1
Chloroethane	ND	1.0	0.32	ug/L			09/30/16 16:29	1
Chloroform	ND	1.0	0.34	ug/L			09/30/16 16:29	
Chloromethane	ND	1.0	0.35	ug/L			09/30/16 16:29	1
cis-1,3-Dichloropropene	ND	1.0	0.36	ug/L			09/30/16 16:29	1
Ethylbenzene	ND	1.0	0.74	ug/L			09/30/16 16:29	1
Methylene Chloride	ND	1.0	0.44	ug/L			09/30/16 16:29	1
Styrene	ND	1.0	0.73	ug/L			09/30/16 16:29	1
Tetrachloroethene	ND	1.0	0.36	ug/L			09/30/16 16:29	1
Toluene	ND	1.0	0.51	ug/L			09/30/16 16:29	1
trans-1,3-Dichloropropene	ND	1.0	0.37	ug/L			09/30/16 16:29	1
Trichloroethene	ND	1.0	0.46	ug/L			09/30/16 16:29	1
Vinyl chloride	ND	1.0	0.90	ug/L			09/30/16 16:29	1
Vinyl acetate	ND	5.0	0.85	ug/L			09/30/16 16:29	1
Xylenes, Total	ND	2.0	0.66	ug/L			09/30/16 16:29	1

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

Method: 8270D - Semivolatile	e Organic Compou	nas (GC/MS)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		09/30/16 07:01	10/02/16 04:44	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/30/16 07:01	10/02/16 04:44	1
Acenaphthene	ND		5.0	0.41	ug/L		09/30/16 07:01	10/02/16 04:44	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/30/16 07:01	10/02/16 04:44	1
Anthracene	ND		5.0	0.28	ug/L		09/30/16 07:01	10/02/16 04:44	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/30/16 07:01	10/02/16 04:44	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/30/16 07:01	10/02/16 04:44	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/30/16 07:01	10/02/16 04:44	1

TestAmerica Buffalo

Page 7 of 21

10/7/2016

6

Q

9

10

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-106738-1

Client Sample ID: Post-Carbon 3 Date Collected: 09/29/16 14:20

Date Received: 09/29/16 15:05

m,p-Xylene

n-Butylbenzene

n-Propylbenzene

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/30/16 07:01	10/02/16 04:44	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/30/16 07:01	10/02/16 04:44	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/30/16 07:01	10/02/16 04:44	1
Carbazole	ND		5.0	0.30	ug/L		09/30/16 07:01	10/02/16 04:44	1
Chrysene	ND		5.0	0.33	ug/L		09/30/16 07:01	10/02/16 04:44	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/30/16 07:01	10/02/16 04:44	1
Dibenzofuran	ND		10	0.51	ug/L		09/30/16 07:01	10/02/16 04:44	1
Fluoranthene	ND		5.0	0.40	ug/L		09/30/16 07:01	10/02/16 04:44	1
Fluorene	ND		5.0	0.36	ug/L		09/30/16 07:01	10/02/16 04:44	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/30/16 07:01	10/02/16 04:44	1
Naphthalene	ND		5.0	0.76	ug/L		09/30/16 07:01	10/02/16 04:44	1
Pentachlorophenol	ND		10	2.2	ug/L		09/30/16 07:01	10/02/16 04:44	1
Phenanthrene	ND		5.0	0.44	ug/L		09/30/16 07:01	10/02/16 04:44	1
Phenol	ND		5.0	0.39	ug/L		09/30/16 07:01	10/02/16 04:44	1
Pyrene	ND		5.0	0.34	ug/L		09/30/16 07:01	10/02/16 04:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	85		46 - 120				09/30/16 07:01	10/02/16 04:44	1
2-Fluorobiphenyl	89		48 - 120				09/30/16 07:01	10/02/16 04:44	1
p-Terphenyl-d14	97		67 - 150				09/30/16 07:01	10/02/16 04:44	1
Phenol-d5	50		16 - 120				09/30/16 07:01	10/02/16 04:44	1
2-Fluorophenol	68		20 - 120				09/30/16 07:01	10/02/16 04:44	1
2,4,6-Tribromophenol	100		52 - 132				09/30/16 07:01	10/02/16 04:44	1
Method: 8021B - Volatile Org	anic Compounds	(GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			09/30/16 16:14	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/30/16 16:14	1
Benzene	ND		0.20	0.023	ug/L			09/30/16 16:14	1
Ethylbenzene	ND		0.20	0.029	ug/L			09/30/16 16:14	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/30/16 16:14	1

4-Bromofluorobenzene	94	64 - 128			09/30/16 16:14	1
a,a,a-Trifluorotoluene	97	63 - 129			09/30/16 16:14	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
Xylenes, Total	ND	0.60	0.054 ug/L		09/30/16 16:14	1
Toluene	ND	0.20	0.036 ug/L		09/30/16 16:14	1
sec-Butylbenzene	ND	0.20	0.020 ug/L		09/30/16 16:14	1
p-Cymene	ND	0.20	0.030 ug/L		09/30/16 16:14	1
o-Xylene	ND	0.20	0.027 ug/L		09/30/16 16:14	1

0.40

0.20

0.20

0.054 ug/L

0.031 ug/L

0.13 ug/L

ND

ND

ND

Method: 608 - Organochio	orine Pesticides in Water							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND ND	0.049	0.0064	ug/L		09/30/16 06:52	10/04/16 13:19	1
alpha-BHC	ND	0.049	0.0064	ug/L		09/30/16 06:52	10/04/16 13:19	1
beta-BHC	ND	0.049	0.024	ug/L		09/30/16 06:52	10/04/16 13:19	1

TestAmerica Buffalo

09/30/16 16:14

09/30/16 16:14

09/30/16 16:14

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

Lab Sample ID: 480-106738-1

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 09/29/16 14:20 Date Received: 09/29/16 15:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.049	0.0097	ug/L		09/30/16 06:52	10/04/16 13:19	
gamma-BHC (Lindane)	ND		0.049	0.0058	ug/L		09/30/16 06:52	10/04/16 13:19	
Chlordane (technical)	ND		0.49	0.28	ug/L		09/30/16 06:52	10/04/16 13:19	
4,4'-DDD	ND		0.049	0.0090	ug/L		09/30/16 06:52	10/04/16 13:19	
4,4'-DDE	ND		0.049	0.011	ug/L		09/30/16 06:52	10/04/16 13:19	
4,4'-DDT	ND		0.049	0.011	ug/L		09/30/16 06:52	10/04/16 13:19	
Dieldrin	ND		0.049	0.0096	ug/L		09/30/16 06:52	10/04/16 13:19	
Endosulfan I	ND		0.049	0.011	ug/L		09/30/16 06:52	10/04/16 13:19	
Endosulfan II	ND		0.049	0.012	ug/L		09/30/16 06:52	10/04/16 13:19	
Endosulfan sulfate	ND		0.049	0.015	ug/L		09/30/16 06:52	10/04/16 13:19	,
Endrin	ND		0.049	0.013	ug/L		09/30/16 06:52	10/04/16 13:19	
Endrin aldehyde	ND		0.049	0.016	ug/L		09/30/16 06:52	10/04/16 13:19	
Heptachlor	ND		0.049	0.0083	ug/L		09/30/16 06:52	10/04/16 13:19	
Heptachlor epoxide	ND		0.049	0.0052	ug/L		09/30/16 06:52	10/04/16 13:19	
Toxaphene	ND		0.49	0.12	ug/L		09/30/16 06:52	10/04/16 13:19	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
DCB Decachlorobiphenyl	58		23 - 120				09/30/16 06:52	10/04/16 13:19	
Tetrachloro-m-xylene	71		44 - 120				09/30/16 06:52	10/04/16 13:19	
Method: 200.7 Rev 4.4 - Metals	(ICP)								
Analyte	Desuit	Qualifier			1114	D	Prepared	Analyzed	DUE
	Result	Qualifier	RL	MDL		D			DII Fa
Iron	153	Qualifier			ug/L		10/01/16 08:05	10/03/16 16:41	Dil Fac
Iron General Chemistry		Quanner						10/03/16 16:41	
• •	153	Qualifier			ug/L	D		10/03/16 16:41 Analyzed	
General Chemistry	153		50.0	19.3	ug/L		10/01/16 08:05		Dil Fa
General Chemistry Analyte	153		50.0	19.3	ug/L Unit		10/01/16 08:05 Prepared	Analyzed	Dil Fa
General Chemistry Analyte Oil & Grease	153 Result ND	Qualifier		19.3 MDL 1.4	ug/L Unit mg/L		10/01/16 08:05 Prepared 09/30/16 19:10	Analyzed 09/30/16 21:01	Dil Fa
General Chemistry Analyte Oil & Grease Cyanide, Total	Result ND 0.14	Qualifier J	50.0 RL 5.1 0.010	19.3 MDL 1.4 0.0050	ug/L Unit mg/L mg/L		Prepared 09/30/16 19:10 09/30/16 15:10	Analyzed 09/30/16 21:01 10/02/16 13:35	Dil Fa
General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable	Result ND 0.14 0.0061	Qualifier J	50.0 RL 5.1 0.010 0.010	19.3 MDL 1.4 0.0050 0.0050	ug/L Unit mg/L mg/L mg/L		Prepared 09/30/16 19:10 09/30/16 15:10	Analyzed 09/30/16 21:01 10/02/16 13:35 10/04/16 08:31	Dil Fa
General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable Total Dissolved Solids	Result	Qualifier J	50.0 RL 5.1 0.010 0.010 10.0	19.3 MDL 1.4 0.0050 0.0050 4.0 2.0	Unit mg/L mg/L mg/L mg/L		Prepared 09/30/16 19:10 09/30/16 15:10	Analyzed 09/30/16 21:01 10/02/16 13:35 10/04/16 08:31 09/30/16 13:36	Dil Fac
General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable Total Dissolved Solids Biochemical Oxygen Demand	Result	Qualifier J B	50.0 RL 5.1 0.010 0.010 10.0 2.0	19.3 MDL 1.4 0.0050 0.0050 4.0 2.0	ug/L Unit mg/L mg/L mg/L mg/L mg/L	<u>D</u>	Prepared 09/30/16 19:10 09/30/16 15:10 10/04/16 00:20	Analyzed 09/30/16 21:01 10/02/16 13:35 10/04/16 08:31 09/30/16 13:36 09/30/16 17:15	

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

Lab Sample ID: 480-106738-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 09/29/16 14:25 Date Received: 09/29/16 15:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.22		0.20	0.035	ug/L			09/30/16 16:46	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			09/30/16 16:46	1
Benzene	36		0.20	0.023	ug/L			09/30/16 16:46	1
Ethylbenzene	3.1		0.20	0.029	ug/L			09/30/16 16:46	1
Isopropylbenzene	ND		0.20	0.027	ug/L			09/30/16 16:46	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			09/30/16 16:46	1
m,p-Xylene	1.8		0.40	0.054	ug/L			09/30/16 16:46	1
n-Butylbenzene	ND		0.20	0.031	ug/L			09/30/16 16:46	1
n-Propylbenzene	ND		0.20	0.13	ug/L			09/30/16 16:46	1
o-Xylene	1.2		0.20	0.027	ug/L			09/30/16 16:46	1
p-Cymene	ND		0.20	0.030	ug/L			09/30/16 16:46	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			09/30/16 16:46	1
Toluene	5.7		0.20	0.036	ug/L			09/30/16 16:46	1
Xylenes, Total	3.0		0.60	0.054	ug/L			09/30/16 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 129			-		09/30/16 16:46	1
4-Bromofluorobenzene	101		64 - 128					09/30/16 16:46	1

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

Lab Sample ID: 480-106738-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 09/29/16 14:30 Date Received: 09/29/16 15:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.9	J	10	1.7	ug/L			09/30/16 18:23	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			09/30/16 18:23	50
Benzene	430		10	1.2	ug/L			09/30/16 18:23	50
Ethylbenzene	48		10	1.4	ug/L			09/30/16 18:23	50
Isopropylbenzene	ND		10	1.4	ug/L			09/30/16 18:23	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			09/30/16 18:23	50
m,p-Xylene	26		20	2.7	ug/L			09/30/16 18:23	50
n-Butylbenzene	ND		10	1.5	ug/L			09/30/16 18:23	50
n-Propylbenzene	ND		10	6.5	ug/L			09/30/16 18:23	50
o-Xylene	16		10	1.4	ug/L			09/30/16 18:23	50
p-Cymene	ND		10	1.5	ug/L			09/30/16 18:23	50
sec-Butylbenzene	ND		10	1.0	ug/L			09/30/16 18:23	50
Toluene	96		10	1.8	ug/L			09/30/16 18:23	50
Xylenes, Total	42		30	2.7	ug/L			09/30/16 18:23	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 129			-		09/30/16 18:23	50
4-Bromofluorobenzene	99		64 - 128					09/30/16 18:23	50

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-106738-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 09/29/16 14:35

Date Received: 09/29/16 15:05

n-Butylbenzene

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
1,1,1-Trichloroethane	ND		10	8.2	ug/L			10/01/16 01:45	1
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			10/01/16 01:45	1
1,1,2-Trichloroethane	ND		10	2.3	ug/L			10/01/16 01:45	1
1,1-Dichloroethane	ND		10	3.8	ug/L			10/01/16 01:45	1
1,1-Dichloroethene	ND		10	2.9	ug/L			10/01/16 01:45	1
1,2-Dichloroethane	ND		10	2.1	ug/L			10/01/16 01:45	1
1,2-Dichloroethene, Total	ND		20	8.1	ug/L			10/01/16 01:45	1
1,2-Dichloropropane	ND		10	7.2	ug/L			10/01/16 01:45	1
2-Hexanone	ND		50	12	ug/L			10/01/16 01:45	1
2-Butanone (MEK)	ND		100	13	ug/L			10/01/16 01:45	1
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			10/01/16 01:45	1
Acetone	ND		100	30	ug/L			10/01/16 01:45	1
Benzene	470	F1	10	4.1	ug/L			10/01/16 01:45	1
Bromodichloromethane	5.1	J	10	3.9	ug/L			10/01/16 01:45	1
Bromoform	ND		10	2.6	ug/L			10/01/16 01:45	1
Bromomethane	ND		10	6.9	ug/L			10/01/16 01:45	1
Carbon disulfide	ND		10	1.9	ug/L			10/01/16 01:45	1
Carbon tetrachloride	ND		10	2.7	ug/L			10/01/16 01:45	1
Chlorobenzene	ND		10	7.5	ug/L			10/01/16 01:45	1
Dibromochloromethane	ND		10	3.2	ug/L			10/01/16 01:45	1
Chloroethane	ND		10	3.2	ug/L			10/01/16 01:45	1
Chloroform	25		10	3.4	ug/L			10/01/16 01:45	1
Chloromethane	ND		10	3.5	ug/L			10/01/16 01:45	1
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			10/01/16 01:45	1
Ethylbenzene	51		10	7.4	ug/L			10/01/16 01:45	1
Methylene Chloride	9.1	J	10	4.4	ug/L			10/01/16 01:45	1
Styrene	ND		10	7.3	ug/L			10/01/16 01:45	1
Tetrachloroethene	ND		10	3.6	ug/L			10/01/16 01:45	1
Toluene	100		10	5.1	ug/L			10/01/16 01:45	1
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			10/01/16 01:45	1
Trichloroethene	ND		10	4.6	ug/L			10/01/16 01:45	1
Vinyl chloride	ND		10	9.0	ug/L			10/01/16 01:45	1
Vinyl acetate	ND		50	8.5	ug/L			10/01/16 01:45	1
Xylenes, Total	47		20	6.6	ug/L			10/01/16 01:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	94		77 - 120			-		10/01/16 01:45	1
Toluene-d8 (Surr)	93		80 - 120					10/01/16 01:45	1
4-Bromofluorobenzene (Surr)	100		73 - 120					10/01/16 01:45	1

Method: 8021B - Volatile Orga Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	11	J	20	3.5	ug/L			09/30/16 17:51	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			09/30/16 17:51	100
Benzene	420		20	2.3	ug/L			09/30/16 17:51	100
Ethylbenzene	48		20	2.9	ug/L			09/30/16 17:51	100
Isopropylbenzene	ND		20	2.7	ug/L			09/30/16 17:51	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			09/30/16 17:51	100
m,p-Xylene	25	J	40	5.4	ug/L			09/30/16 17:51	100

TestAmerica Buffalo

100

09/30/16 17:51

Page 12 of 21

20

3.1 ug/L

ND

10/7/2016

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

Lab Sample ID: 480-106738-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 09/29/16 14:35

Date Received: 09/29/16 15:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		20	13	ug/L			09/30/16 17:51	100
o-Xylene	18	J	20	2.7	ug/L			09/30/16 17:51	100
p-Cymene	ND		20	3.0	ug/L			09/30/16 17:51	100
sec-Butylbenzene	ND		20	2.0	ug/L			09/30/16 17:51	100
Toluene	94		20	3.6	ug/L			09/30/16 17:51	100
Xylenes, Total	43	J	60	5.4	ug/L			09/30/16 17:51	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		63 - 129					09/30/16 17:51	100
4-Bromofluorobenzene	100		64 - 128					09/30/16 17:51	100
Method: 200.7 Rev 4.4 - Met	tals (ICP)								
Method: 200.7 Rev 4.4 - Met Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	RL		Unit ug/L	D	Prepared 10/01/16 08:05	Analyzed 10/03/16 16:44	Dil Fac
Analyte Calcium	Result	Qualifier			ug/L	D	<u> </u>		Dil Fac
Analyte Calcium Iron	Result 102000	Qualifier	500	100	ug/L ug/L	D_	10/01/16 08:05	10/03/16 16:44	Dil Fac
Analyte Calcium Iron Magnesium	Result 102000 4220	Qualifier	500 50.0	100 19.3 43.4	ug/L ug/L	<u>D</u>	10/01/16 08:05 10/01/16 08:05	10/03/16 16:44 10/03/16 16:44	Dil Fac 1 1 1
	Result 102000 4220 46200	Qualifier	500 50.0 200	100 19.3 43.4 100	ug/L ug/L ug/L	<u>D</u>	10/01/16 08:05 10/01/16 08:05 10/01/16 08:05	10/03/16 16:44 10/03/16 16:44 10/03/16 16:44	Dil Fac 1 1 1 1 1
Analyte Calcium Iron Magnesium Potassium Sodium	Result 102000 4220 46200 4090	Qualifier	500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L	<u>D</u>	10/01/16 08:05 10/01/16 08:05 10/01/16 08:05 10/01/16 08:05	10/03/16 16:44 10/03/16 16:44 10/03/16 16:44 10/03/16 16:44	Dil Fac
Analyte Calcium Iron Magnesium Potassium Sodium General Chemistry	Result 102000 4220 46200 4090 51300	Qualifier	500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L ug/L	<u>D</u>	10/01/16 08:05 10/01/16 08:05 10/01/16 08:05 10/01/16 08:05	10/03/16 16:44 10/03/16 16:44 10/03/16 16:44 10/03/16 16:44	1 1 1 1
Analyte Calcium Iron Magnesium Potassium Sodium General Chemistry Analyte	Result 102000 4220 46200 4090 51300		500 50.0 200 500 1000	100 19.3 43.4 100 324	ug/L ug/L ug/L ug/L ug/L		10/01/16 08:05 10/01/16 08:05 10/01/16 08:05 10/01/16 08:05 10/01/16 08:05	10/03/16 16:44 10/03/16 16:44 10/03/16 16:44 10/03/16 16:44 10/03/16 16:44	1 1 1 1 Dil Fac
Analyte Calcium Iron Magnesium Potassium	Result 102000 4220 46200 4090 51300		500 50.0 200 500 1000	100 19.3 43.4 100 324 MDL 5.6	ug/L ug/L ug/L ug/L ug/L		10/01/16 08:05 10/01/16 08:05 10/01/16 08:05 10/01/16 08:05 10/01/16 08:05	10/03/16 16:44 10/03/16 16:44 10/03/16 16:44 10/03/16 16:44 10/03/16 16:44 Analyzed	Dil Face 1 1 1 1 1 1 Dil Face 20 20

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

Lab Sample ID: 480-106738-5

Matrix: Water

Client Sample ID: Outside Sump Date Collected: 09/29/16 14:45

Date Received: 09/29/16 15:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	50	J	100	17	ug/L			09/30/16 17:18	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			09/30/16 17:18	500
Benzene	2100		100	12	ug/L			09/30/16 17:18	500
Ethylbenzene	130		100	14	ug/L			09/30/16 17:18	500
Isopropylbenzene	ND		100	14	ug/L			09/30/16 17:18	500
Methyl tert-butyl ether	ND		200	22	ug/L			09/30/16 17:18	500
m,p-Xylene	59	J	200	27	ug/L			09/30/16 17:18	500
n-Butylbenzene	ND		100	15	ug/L			09/30/16 17:18	500
n-Propylbenzene	ND		100	65	ug/L			09/30/16 17:18	500
o-Xylene	45	J	100	14	ug/L			09/30/16 17:18	500
p-Cymene	ND		100	15	ug/L			09/30/16 17:18	500
sec-Butylbenzene	ND		100	10	ug/L			09/30/16 17:18	500
Toluene	350		100	18	ug/L			09/30/16 17:18	500
Xylenes, Total	100	J	300	27	ug/L			09/30/16 17:18	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		63 - 129			-		09/30/16 17:18	500
4-Bromofluorobenzene	101		64 - 128					09/30/16 17:18	500

10/7/2016

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-106738-1

Lab Sample ID: 480-106738-2

Lab Sample ID: 480-106738-3

Lab Sample ID: 480-106738-4

Matrix: Water

Matrix: Water

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 09/29/16 14:20 Date Received: 09/29/16 15:05

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

Client Sample ID: Post-Carbon 2

Date Collected: 09/29/16 14:25 Matrix: Water Date Received: 09/29/16 15:05

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

Client Sample ID: Post-Carbon 1

Date Collected: 09/29/16 14:30

Date Received: 09/29/16 15:05

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

Client Sample ID: Pre-Carbon

Date Collected: 09/29/16 14:35

Date Received: 09/29/16 15:05

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

TestAmerica Buffalo

Page 15 of 21

10/7/2016

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Pre-Carbon

TestAmerica Job ID: 480-106738-1

Lab Sample ID: 480-106738-4

Matrix: Water

Date Collected: 09/29/16 14:35 Date Received: 09/29/16 15:05

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

Client Sample ID: Outside Sump Lab Sample ID: 480-106738-5

Date Collected: 09/29/16 14:45 Matrix: Water Date Received: 09/29/16 15:05

323283 09/30/16 17:18

MRB

TAL BUF

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

Certification Summary

Client: New York State D.E.C. TestAmerica Job ID: 480-106738-1

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	are included in this report, bu	it certification is not off	ered by the governing	authority:	
Analysis Method	Prep Method	Matrix	Analy	te	
8021B		Water	m,p-X	ylene	
8021B		Water	o-Xyle	ene	
8260C		Water	1,2-Di	chloroethene, Total	
SM 4500 H+ B		Water	Hq		

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

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
0.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
664A	HEM and SGT-HEM	1664A	TAL BUF
0.0	Anions, Ion Chromatography	MCAWW	TAL BUF
0.2	Alkalinity	MCAWW	TAL BUF
5.4	Cyanide, Total	MCAWW	TAL BUF
.0.1	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:

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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TestAmerica Buffalo

Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-106738-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record

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THE LEADER IN ENVIRONMENTAL TESTING

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phone 716.504.9852 fax 716.691.7991	In		75 07			-	_								_		1	20	-	_			TestAmerica Laboratories, Inc.		
Client Contact Groundwater & Environmental Services, Inc		anager: Gle		(SDEC)			Site Contact: Thomas Palmer Lab Contact: O. Johnson							Dat	_	9/2	241	16				COC No:			
495 Aero Drive Suite 3		716) 851-722				La	ıb C	onta	ct: C). Jo	-			_	Car	rrier:	: '	$\overline{}$	_	_					
			urnaround		-	-						8021				les	9			7.7			Job No		
Cheektowaga, NY 14225		ar (C) or Wo)		4	٦				4.2	STARS list - VOA - 8021			able	sticic	man		olids	M04			M24643		
(800) 287-7857 Phone		AT if different f	from Below _				etho	p			MO	>			over	t Pes	De	lids	S pa	OF			199482		
(866) 902-2187 FAX		2	2 weeks				X	etho			toI	list		ase	Rec	Itali	yger	d So	solve	VO.			SDG1		
Project Name: NYSDEC Gatown WWTP		1	l week				Гося	M I			L lis	KRS	Ē	Gre	otal	Pollt	Ox	nde	io i	SVC					
Site: 915171		i f	2 days				9	Loca	2		TC	T		8 11	s, T	rity	nica	nsbe	Fota	CL			480-106738 COC		
P O # Callout 120597			1 day			mple	(M	(ac	alini	_	9	OD)	t-pI	. 0-0	nolic	Prior	chen	talS	- pa	(6)					
#	Sample	S-mula	S1-			ed Sa	300.0 28D (MOD) Local Method	200.7 - (MOD) Local Method	310,2 - Alkalinity	- Iroi	8260B - (MOD) TCL list OLM04.2	8021B - (MOD)	335.4 - Cyanide, Total SM4500_H+-pH	1664A_Calc - Oil & Grease	420.4 - Phenolics, Total Recoverable	608_Pest - Priority Pollutant Pesticides	3-Bic)-To	Cal	-(MC					
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filter	300.0	200.7	310,2	200.7 - Iron	82601	225 4	333.4 SM4	1664/	420.4	1 809	5210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids	2540C_Calcd - Total Disolved Solids	8270C-(MOD) TCL SVOA - OLM04.2			Sample Specific Notes:		
Post-Carbon 3	9/29	1420	Grab	w	19	N	T			x	$\overline{}$	x y	x x	X	x					x					
Post-Carbon 2	1	1425	Grab	w	3	N	Г				П	x		\top	П			1	1	7					
Post-Carbon 1		1430	Grab	w	3	N						x		T		\Box	\Box	1	1	1					
Pre-Carbon		1435	Grab	w	9	N	x	x	x		x	x					\sqcap		\dagger	1					
Inside Outside Sump	1	1445	Grab	w	3	N						x		\dagger			口	1	+	+		\top	i		
						T			П	П			\top	\dagger	\Box		\sqcap		\top	+	+	T			
						\dagger	Г									\Box	\vdash	7	+	+	\top	+			
						+	T	\Box	П			\top	+	\dagger	H	H	\sqcap	+	+	+	+				
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						\top	F					+		T	H	\Box	\sqcap	+		\dagger	+				
						\top					\sqcap	+			\vdash	\sqcap	\dashv	\top	+	+	+	+	1		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOl	H; 6= Other				122	-						+	+	+			\top	+	+	\dagger	+	+			
Possible Hazard Identification Non-Hazard Flammable Skin Irritant	Poison B		Inknown	1			Sar				sal () o Clie		may	y be	Disp	esse osal	e d if	sam l ab	ple	s ar	re reta	ined	For Months		
Special Instructions/QC Requirements & Comments:				10.5																			1		
Relinquished by		JES		Date/Tim	150.	_	-	TVed	V	- 2	7	A	5	4		(Comp	Land.	Bi	B			Date/Time: 91)9/14 1505		
Relinquished by:	Company:			Date/Tim	ie:		Rec	eived	by:								Comp						Date/Time:		
Belinquished by:	Company:			Date/Tim	ie:		Rece	eived	l by:							(Comp	pany	:		100		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: 480-106738-1

Login Number: 106738 List Source: TestAmerica Buffalo

List Number: 1 Creator: Kolb, Chris M

Question Answer Comment Radioactivity either was not measured or, if measured, is at or below True background The cooler's custody seal, if present, is intact. True The cooler or samples do not appear to have been compromised or True tampered with. 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 True the COC. Samples are received within Holding Time (Excluding tests with immediate True HTs).. 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 True MS/MSDs VOA sample vials do not have headspace or bubble is <6mm (1/4") in True If necessary, staff have been informed of any short hold time or quick TAT True needs Multiphasic samples are not present. True Samples do not require splitting or compositing. True

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Sampling Company provided.

Chlorine Residual checked.

Samples received within 48 hours of sampling.

Samples requiring field filtration have been filtered in the field.

True

True

True N/A **GES**



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

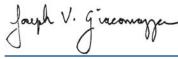
TestAmerica Job ID: 480-107725-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana



Authorized for release by: 10/26/2016 3:33:53 PM

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

Designee for

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

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.

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

Joe Giacomazza

Project Management Assistant II

10/26/2016 3:33:53 PM

Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-107725-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions	4
Case Narrative	5
Client Sample Results	
Chronicle	12
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receint Checklists	18

4

5

7

8

9

Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

Qualifiers

GC VOA

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	Descri	ntion
Qualifici	Qualifici	Descri	puon

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.
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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

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: 480-107725-1

Job ID: 480-107725-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-107725-1

Receipt

The samples were received on 10/14/2016 1:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.7° C.

GC/MS VOA

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

HPLC/IC

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

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 1 (480-107725-3), Pre-Carbon (480-107725-4) and Outside Sump (480-107725-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

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

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-107725-1

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 10/14/16 12:30 Date Received: 10/14/16 13:25

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			10/18/16 15:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/16 15:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/16 15:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/16 15:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/16 15:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/16 15:22	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			10/18/16 15:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/16 15:22	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/16 15:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/16 15:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/16 15:22	1
Acetone	ND		10	3.0	ug/L			10/18/16 15:22	1
Benzene	ND		1.0	0.41	ug/L			10/18/16 15:22	1
Bromodichloromethane	ND		1.0		ug/L			10/18/16 15:22	1
Bromoform	ND		1.0	0.26	ug/L			10/18/16 15:22	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/16 15:22	1
Carbon disulfide	ND		1.0		ug/L			10/18/16 15:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/16 15:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/16 15:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/16 15:22	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/16 15:22	1
Chloroform	ND		1.0	0.34	ug/L			10/18/16 15:22	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/16 15:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/16 15:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/16 15:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/16 15:22	1
Styrene	ND		1.0	0.73	ug/L			10/18/16 15:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/16 15:22	1
Toluene	ND		1.0	0.51	ug/L			10/18/16 15:22	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/18/16 15:22	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/16 15:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/16 15:22	1
Vinyl acetate	ND		5.0	0.85	ug/L			10/18/16 15:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/16 15:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120			-		10/18/16 15:22	1
Toluene-d8 (Surr)	98		80 - 120					10/18/16 15:22	1
4-Bromofluorobenzene (Surr)	92		73 - 120					10/18/16 15:22	1

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

janic Compounds (GC)							
Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND ND	0.20	0.035	ug/L			10/20/16 18:34	1
ND	0.20	0.15	ug/L			10/20/16 18:34	1
ND	0.20	0.023	ug/L			10/20/16 18:34	1
ND	0.20	0.029	ug/L			10/20/16 18:34	1
ND	0.20	0.027	ug/L			10/20/16 18:34	1
ND	0.40	0.044	ug/L			10/20/16 18:34	1
ND	0.40	0.054	ug/L			10/20/16 18:34	1
ND	0.20	0.031	ug/L			10/20/16 18:34	1
	Result Qualifier ND ND ND ND ND ND ND ND ND N	Result ND Qualifier RL ND 0.20 ND 0.20 ND 0.20 ND 0.20 ND 0.20 ND 0.40 ND 0.40	Result Qualifier RL MDL ND 0.20 0.035 ND 0.20 0.15 ND 0.20 0.023 ND 0.20 0.029 ND 0.20 0.027 ND 0.40 0.044 ND 0.40 0.054	Result Qualifier RL MDL Unit ND 0.20 0.035 ug/L ND 0.20 0.15 ug/L ND 0.20 0.023 ug/L ND 0.20 0.029 ug/L ND 0.20 0.027 ug/L ND 0.40 0.044 ug/L ND 0.40 0.054 ug/L	Result Qualifier RL MDL Unit D ND 0.20 0.035 ug/L ug/L ND 0.20 0.15 ug/L ND 0.20 0.023 ug/L ND 0.20 0.029 ug/L ND 0.20 0.027 ug/L ND 0.40 0.044 ug/L ND 0.40 0.054 ug/L	Result ND Qualifier RL MDL ug/L Unit D Prepared ND 0.20 0.035 ug/L ug/L	Result ND Qualifier RL MDL Unit D Prepared Analyzed ND 0.20 0.035 ug/L 10/20/16 18:34 ND 0.20 0.15 ug/L 10/20/16 18:34 ND 0.20 0.023 ug/L 10/20/16 18:34 ND 0.20 0.029 ug/L 10/20/16 18:34 ND 0.20 0.027 ug/L 10/20/16 18:34 ND 0.40 0.044 ug/L 10/20/16 18:34 ND 0.40 0.054 ug/L 10/20/16 18:34

TestAmerica Buffalo

Page 6 of 18

10/26/2016

Client: New York State D.E.C.

Date Received: 10/14/16 13:25

рН

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

10/17/16 14:09

Lab Sample ID: 480-107725-1

Client Sample ID: Post-Carbon 3 Date Collected: 10/14/16 12:30

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			10/20/16 18:34	1
o-Xylene	ND		0.20	0.027	ug/L			10/20/16 18:34	1
p-Cymene	ND		0.20	0.030	ug/L			10/20/16 18:34	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/20/16 18:34	1
Toluene	ND		0.20	0.036	ug/L			10/20/16 18:34	1
Xylenes, Total	ND		0.60	0.054	ug/L			10/20/16 18:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		63 - 129					10/20/16 18:34	1
4-Bromofluorobenzene	97		64 - 128					10/20/16 18:34	1
- Method: 200.7 Rev 4.4 - I	Metals (ICP)								
Analyte	` '	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	175		50.0	19.3	ug/L		10/18/16 12:55	10/19/16 23:32	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.21	В	0.010	0.0050	mg/L		10/18/16 05:10	10/19/16 13:25	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

0.1

0.1 SU

7.2 HF

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

Lab Sample ID: 480-107725-2

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 10/14/16 12:35 Date Received: 10/14/16 13:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.14	J	0.20	0.035	ug/L			10/20/16 19:06	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			10/20/16 19:06	1
Benzene	13		0.20	0.023	ug/L			10/20/16 19:06	1
Ethylbenzene	0.83		0.20	0.029	ug/L			10/20/16 19:06	1
Isopropylbenzene	ND		0.20	0.027	ug/L			10/20/16 19:06	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			10/20/16 19:06	1
m,p-Xylene	0.57		0.40	0.054	ug/L			10/20/16 19:06	1
n-Butylbenzene	ND		0.20	0.031	ug/L			10/20/16 19:06	1
n-Propylbenzene	ND		0.20	0.13	ug/L			10/20/16 19:06	1
o-Xylene	0.34		0.20	0.027	ug/L			10/20/16 19:06	1
p-Cymene	ND		0.20	0.030	ug/L			10/20/16 19:06	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			10/20/16 19:06	1
Toluene	0.84		0.20	0.036	ug/L			10/20/16 19:06	1
Xylenes, Total	0.91		0.60	0.054	ug/L			10/20/16 19:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		63 - 129			•		10/20/16 19:06	1
4-Bromofluorobenzene	94		64 - 128					10/20/16 19:06	1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

Lab Sample ID: 480-107725-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 10/14/16 12:40 Date Received: 10/14/16 13:25

Analyte	Result Qualifi	ier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.5	2.0	0.35	ug/L			10/22/16 18:51	10
1,3,5-Trimethylbenzene	ND	2.0	1.5	ug/L			10/22/16 18:51	10
Benzene	88	2.0	0.23	ug/L			10/22/16 18:51	10
Ethylbenzene	15	2.0	0.29	ug/L			10/22/16 18:51	10
Isopropylbenzene	ND	2.0	0.27	ug/L			10/22/16 18:51	10
Methyl tert-butyl ether	ND	4.0	0.44	ug/L			10/22/16 18:51	10
m,p-Xylene	10	4.0	0.54	ug/L			10/22/16 18:51	10
n-Butylbenzene	ND	2.0	0.31	ug/L			10/22/16 18:51	10
n-Propylbenzene	ND	2.0	1.3	ug/L			10/22/16 18:51	10
o-Xylene	5.2	2.0	0.27	ug/L			10/22/16 18:51	10
p-Cymene	ND	2.0	0.30	ug/L			10/22/16 18:51	10
sec-Butylbenzene	ND	2.0	0.20	ug/L			10/22/16 18:51	10
Toluene	15	2.0	0.36	ug/L			10/22/16 18:51	10
Xylenes, Total	15	6.0	0.54	ug/L			10/22/16 18:51	10
Surrogate	%Recovery Qualif	ier Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103	63 - 129			-		10/22/16 18:51	10
4-Bromofluorobenzene	106	64 - 128					10/22/16 18:51	10

Client: New York State D.E.C.

Chloride

Alkalinity, Total

Sulfate

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

Lab Sample ID: 480-107725-4

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 10/14/16 12:45 Date Received: 10/14/16 13:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1.4		1.0	0.17	ug/L		-	10/22/16 19:23	5
1,3,5-Trimethylbenzene	ND		1.0	0.75	ug/L			10/22/16 19:23	5
Benzene	35		1.0	0.12	ug/L			10/22/16 19:23	5
Ethylbenzene	11		1.0	0.14	ug/L			10/22/16 19:23	5
Isopropylbenzene	ND		1.0	0.14	ug/L			10/22/16 19:23	5
Methyl tert-butyl ether	ND		2.0	0.22	ug/L			10/22/16 19:23	5
m,p-Xylene	6.7		2.0	0.27	ug/L			10/22/16 19:23	5
n-Butylbenzene	ND		1.0	0.15	ug/L			10/22/16 19:23	5
n-Propylbenzene	ND		1.0	0.65	ug/L			10/22/16 19:23	5
o-Xylene	3.6		1.0	0.14	ug/L			10/22/16 19:23	5
p-Cymene	ND		1.0	0.15	ug/L			10/22/16 19:23	5
sec-Butylbenzene	ND		1.0	0.10	ug/L			10/22/16 19:23	5
Toluene	9.7		1.0	0.18	ug/L			10/22/16 19:23	5
Xylenes, Total	10		3.0	0.27	ug/L			10/22/16 19:23	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		63 - 129					10/22/16 19:23	5
4-Bromofluorobenzene	103		64 - 128					10/22/16 19:23	5
Method: 200.7 Rev 4.4 - M	etals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	83600		500	100	ug/L		10/18/16 12:55	10/19/16 23:35	1
Iron	2550		50.0	19.3	ug/L		10/18/16 12:55	10/19/16 23:35	1
Magnesium	46000		200	43.4	ug/L		10/18/16 12:55	10/19/16 23:35	1
Potassium	3510		500	100	ug/L		10/18/16 12:55	10/19/16 23:35	1
Sodium	35000		1000	324	ug/L		10/18/16 12:55	10/19/16 23:35	1
General Chemistry									
Analyte	Pocult	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac

0.50

10.0

30.0

0.28 mg/L

1.7 mg/L

12.0 mg/L

73.8

252

106 B

TestAmerica Buffalo

10/18/16 16:50

10/19/16 16:29

10/19/16 11:22

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

Lab Sample ID: 480-107725-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 10/14/16 13:00 Date Received: 10/14/16 13:25

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			10/20/16 19:38	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			10/20/16 19:38	500
Benzene	260		100	12	ug/L			10/20/16 19:38	500
Ethylbenzene	69	J	100	14	ug/L			10/20/16 19:38	500
Isopropylbenzene	ND		100	14	ug/L			10/20/16 19:38	500
Methyl tert-butyl ether	ND		200	22	ug/L			10/20/16 19:38	500
m,p-Xylene	ND		200	27	ug/L			10/20/16 19:38	500
n-Butylbenzene	ND		100	15	ug/L			10/20/16 19:38	500
n-Propylbenzene	ND		100	65	ug/L			10/20/16 19:38	500
o-Xylene	17	J	100	14	ug/L			10/20/16 19:38	500
p-Cymene	ND		100	15	ug/L			10/20/16 19:38	500
sec-Butylbenzene	ND		100	10	ug/L			10/20/16 19:38	500
Toluene	82	J	100	18	ug/L			10/20/16 19:38	500
Xylenes, Total	ND		300	27	ug/L			10/20/16 19:38	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		63 - 129					10/20/16 19:38	500
4-Bromofluorobenzene	91		64 - 128					10/20/16 19:38	500

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Lab Sample ID: 480-107725-1

Matrix: Water

Date Collected: 10/14/16 12:30 Date Received: 10/14/16 13:25

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

Client Sample ID: Post-Carbon 2

Lab Sample ID: 480-107725-2 Date Collected: 10/14/16 12:35

Matrix: Water

Date Received: 10/14/16 13:25

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

Client Sample ID: Post-Carbon 1

Lab Sample ID: 480-107725-3 Date Collected: 10/14/16 12:40 **Matrix: Water**

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

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-107725-4 Date Collected: 10/14/16 12:45 **Matrix: Water**

Date Received: 10/14/16 13:25

Date Received: 10/14/16 13:25

Prep Type Total/NA	Batch Type Analysis	Batch Method 8021B	Run	Dilution Factor	Batch Number	Prepared or Analyzed 10/22/16 19:23	Analyst MRB	Lab TAL BUF
Total/NA	Prep	200.7		4	326225	10/18/16 12:55	MVZ	TAL BUF
Total/NA Total/NA	Analysis Analysis	200.7 Rev 4.4 300.0		1	326672 326053	10/19/16 23:35 10/18/16 16:50		TAL BUF TAL BUF
Total/NA Total/NA	Analysis Analysis	300.0 310.2		5 3	326477 326570	10/19/16 16:29 10/19/16 11:22		TAL BUF

Client Sample ID: Outside Sump

Lab Sample ID: 480-107725-5 Date Collected: 10/14/16 13:00 **Matrix: Water**

Date Received: 10/14/16 13:25

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

TestAmerica Buffalo

Lab Chronicle

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

Laboratory References:

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

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Certification Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date				
New York	NELAP		2	10026	03-31-17				
The following analyte:	s are included in this repo	rt, but certification is	s not offered by the g	overning authority:					
Analysis Method	Prep Method	Matrix	Analyte						
8021B		Water	m,p-X	ylene					
8021B		Water	o-Xyle	ene					
8260C		Water	1,2-Di	chloroethene, Total					
SM 4500 H+ B		Water	pH						

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Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-107725-1

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

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Buffalo

10 Hazelwood Drive

Chain of Custody Record

THE LEADER IN ENVIRONMENTAL TESTING

Amherst, NY 14228 phone 716.504.9852 fax 716.691.7991															į .				TestAr	nerica L	abora	tories, I	nc.
Client Contact	Project Ma	nager: Gle	nn May (N	YSDEC)		Site	Cont	act: 7	Thon	nas Pa	lmer		D	te: 10	141	l.			COC N				
Groundwater & Environmental Services, Inc		16) 851-722	CA _ CO CO CO T	•		Lab	Cont	act: (O. Jo	hnsor	1			rrier:	1 7		1,00		1	of L	C	OCs	
495 Aero Drive Suite 3	Analysis Turnaround Time				-ale			П	2	170			T			TT		Job No				- 1	
Cheektowaga, NY 14225	Calendar	r(C)orWo	ork Days (W)						2: 3	8-4									800	eer:	>	
(800) 287-7857 Phone	T/	AT if different	from Below _			330 3 974 -	001			M04	0									_ B		2	
(866) 902-2187 FAX		2	e weeks			6013 X	thod			0	IISt -								SDG N	P.		G -	
Project Name: NYSDEC Gatown WWTP		1	week			6686	I Me			list	E ES											-	
Site: 915171			2 days			**** G	Loca	5		TC IS	Tol.	_								480-10	7725	COC	
P O # Callout 120597			l day			alan S	a la	alimi	_	(go	(OD)	1d-+								* * -			
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Mitered Sample	200.7 - (MOD) Local Method	310.2 - Alkalinity	200.7 - Iron	8260B - (MOD) TCL list OLM04.2	335.4 - Cyanide, Total	SM4500_H+-pH							i.	Sample	Specifi	ic Notes:	,
Post-Carbon 3	10/14	1230	Grab	W	9	N			X	X 2	x x	X											
Post-Carbon 2	10/14	1235	Grab	W	3	N				2	X								1			30 00 42	
Post-Carbon 1	10/14	1240	Grab	W	3	N					X								i.				
Pre-Carbon	10/14	1245	Grab	W	6	N :	x x	X			x			П									
Inside /Outside Sump	10/14	1300	Grab	W	3	N]	X										1		
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	Tr. 6- Othor					4	+	+	-	+	-		+	++	+	+	+		1				+
Possible Hazard Identification	ii, o- Omei	-				s	amp	le Di	ispo	sal ()	A fee	mav	be as	sesse	d if sa	mples	are ret	ained	longer	than 1 n	nonth)	
Non-Hazard Flammable Skin Irritant	Poison B		Inknown	X						o Clie		Ţ	Z) Dis	oosal l	By Lab		□ _{An}				Mont		
Special Instructions/QC Requirements & Comments:																							
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Relinquished by:	Company:			Date/Tir	ne:	R	eceiv	ed by	<i>r</i> :	200			124	C	ompan	y:			Date/Tir	ne:	İ		7.00

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-107725-1

Login Number: 107725 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

orodion riolo, omio 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

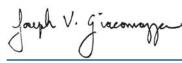
TestAmerica Job ID: 480-109991-1

Client Project/Site: Gastown WWTP #915171

For:

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

Attn: Mr. Richard Dana



Authorized for release by: 12/2/2016 11:23:00 AM

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

Designee for

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

.....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.

Joseph V. Gireomagger

Joe Giacomazza Project Management Assistant II 12/2/2016 11:23:00 AM Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-109991-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions	4
Case Narrative	5
Client Sample Results	6
Chronicle	12
Certification Summary	
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receint Checklists	18

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

Qualifiers

GC/MS VOA

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
-----------	-----------------------

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

Glossary

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

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

Practical Quantitation Limit PQL

Quality Control QC RER Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

Job ID: 480-109991-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-109991-1

Receipt

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

GC/MS VOA

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

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

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

HPLC/IC

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-109991-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 2 (480-109991-2), Post-Carbon 1 (480-109991-3), Pre-Carbon (480-109991-4) and Outside Sump (480-109991-5). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 335.4: The results reported for the following sample do not concur with results previously reported for this site: Post-Carbon 3 (480-109991-1). Reanalysis was performed, and the result(s) confirmed.

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-109991-1).

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

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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: 480-109991-1

Matrix: Water

Date Collected: 11/21/16 16:00 Date Received: 11/21/16 16:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/01/16 03:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/01/16 03:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/01/16 03:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/01/16 03:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/01/16 03:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/01/16 03:37	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			12/01/16 03:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/01/16 03:37	1
2-Hexanone	ND	*	5.0	1.2	ug/L			12/01/16 03:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/01/16 03:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/01/16 03:37	1
Acetone	ND	*	10	3.0	ug/L			12/01/16 03:37	1
Benzene	ND		1.0	0.41	ug/L			12/01/16 03:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/01/16 03:37	1
Bromoform	ND		1.0	0.26	ug/L			12/01/16 03:37	1
Bromomethane	ND		1.0	0.69	ug/L			12/01/16 03:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/01/16 03:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/01/16 03:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/01/16 03:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/01/16 03:37	1
Chloroethane	ND		1.0	0.32	ug/L			12/01/16 03:37	1
Chloroform	ND		1.0	0.34	ug/L			12/01/16 03:37	1
Chloromethane	ND		1.0	0.35	ug/L			12/01/16 03:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/01/16 03:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/01/16 03:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/01/16 03:37	1
Styrene	ND		1.0	0.73	ug/L			12/01/16 03:37	1
Tetrachloroethene	ND	*	1.0	0.36	ug/L			12/01/16 03:37	1
Toluene	ND		1.0	0.51	ug/L			12/01/16 03:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/01/16 03:37	1
Trichloroethene	ND		1.0	0.46	ug/L			12/01/16 03:37	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/01/16 03:37	1
Vinyl acetate	ND		5.0	0.85	ug/L			12/01/16 03:37	1
Xylenes, Total	ND		2.0		ug/L			12/01/16 03:37	1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		77 - 120	_		12/01/16 03:37	1
Toluene-d8 (Surr)	115		80 - 120			12/01/16 03:37	1
4-Bromofluorobenzene (Surr)	120		73 - 120			12/01/16 03:37	1

Method: 8021B - Volatile Organic Compounds (GC)

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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			11/23/16 10:07	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/23/16 10:07	1
Benzene	ND		0.20	0.023	ug/L			11/23/16 10:07	1
Ethylbenzene	ND		0.20	0.029	ug/L			11/23/16 10:07	1
Isopropylbenzene	ND		0.20	0.027	ug/L			11/23/16 10:07	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			11/23/16 10:07	1
m,p-Xylene	ND		0.40	0.054	ug/L			11/23/16 10:07	1
n-Butylbenzene	ND		0.20	0.031	ug/L			11/23/16 10:07	1

TestAmerica Buffalo

Page 6 of 18

12/2/2016

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

Lab Sample ID: 480-109991-1

Matrix: Water

Client Sample ID: Post-Carbon 3
Date Collected: 11/21/16 16:00

Date Received: 11/21/16 16:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		0.20	0.13	ug/L			11/23/16 10:07	1
o-Xylene	ND		0.20	0.027	ug/L			11/23/16 10:07	1
p-Cymene	ND		0.20	0.030	ug/L			11/23/16 10:07	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/23/16 10:07	1
Toluene	ND		0.20	0.036	ug/L			11/23/16 10:07	1
Xylenes, Total	ND		0.60	0.054	ug/L			11/23/16 10:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	113		63 - 129					11/23/16 10:07	1
4-Bromofluorobenzene	104		64 - 128					11/23/16 10:07	1
Method: 200.7 Rev 4.4 - Metals	s (ICP)								
Analyte	. ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	61.2		50.0	19.3	ug/L		11/23/16 09:45	11/26/16 09:42	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.037		0.010	0.0050	mg/L		11/29/16 01:05	11/29/16 15:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH		HE	0.1	0.1	SU			11/22/16 13:36	

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

Lab Sample ID: 480-109991-2

Prepared

Analyzed

11/23/16 12:47

11/23/16 12:47

Matrix: Water

Client Sample ID: Post-Carbon 2

Date Collected: 11/21/16 16:10 Date Received: 11/21/16 16:55

Surrogate

a,a,a-Trifluorotoluene

4-Bromofluorobenzene

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.20	0.035	ug/L			11/23/16 10:39	1
1,3,5-Trimethylbenzene	ND		0.20	0.15	ug/L			11/23/16 10:39	1
Ethylbenzene	8.2		0.20	0.029	ug/L			11/23/16 10:39	1
Isopropylbenzene	0.11	J	0.20	0.027	ug/L			11/23/16 10:39	1
Methyl tert-butyl ether	ND		0.40	0.044	ug/L			11/23/16 10:39	1
m,p-Xylene	1.4		0.40	0.054	ug/L			11/23/16 10:39	1
n-Butylbenzene	0.24		0.20	0.031	ug/L			11/23/16 10:39	1
n-Propylbenzene	ND		0.20	0.13	ug/L			11/23/16 10:39	1
o-Xylene	2.1		0.20	0.027	ug/L			11/23/16 10:39	1
p-Cymene	ND		0.20	0.030	ug/L			11/23/16 10:39	1
sec-Butylbenzene	ND		0.20	0.020	ug/L			11/23/16 10:39	1
Toluene	12		0.20	0.036	ug/L			11/23/16 10:39	1
Xylenes, Total	3.5		0.60	0.054	ug/L			11/23/16 10:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	110		63 - 129			-		11/23/16 10:39	1
4-Bromofluorobenzene	100		64 - 128					11/23/16 10:39	1
- Method: 8021B - Volatile Or	ganic Compounds ((GC) - DL							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	53		1.0	0.12	ug/L			11/23/16 12:47	5

Limits

63 - 129

64 - 128

%Recovery Qualifier

111

101

TestAmerica Buffalo

Dil Fac

5

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

Lab Sample ID: 480-109991-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 11/21/16 16:15 Date Received: 11/21/16 16:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		10	1.7	ug/L			11/23/16 11:11	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			11/23/16 11:11	50
Benzene	670		10	1.2	ug/L			11/23/16 11:11	50
Ethylbenzene	79		10	1.4	ug/L			11/23/16 11:11	50
Isopropylbenzene	ND		10	1.4	ug/L			11/23/16 11:11	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			11/23/16 11:11	50
m,p-Xylene	12	J	20	2.7	ug/L			11/23/16 11:11	50
n-Butylbenzene	ND		10	1.5	ug/L			11/23/16 11:11	50
n-Propylbenzene	ND		10	6.5	ug/L			11/23/16 11:11	50
o-Xylene	17		10	1.4	ug/L			11/23/16 11:11	50
p-Cymene	ND		10	1.5	ug/L			11/23/16 11:11	50
sec-Butylbenzene	ND		10	1.0	ug/L			11/23/16 11:11	50
Toluene	120		10	1.8	ug/L			11/23/16 11:11	50
Xylenes, Total	29	J	30	2.7	ug/L			11/23/16 11:11	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	115		63 - 129			-		11/23/16 11:11	50
4-Bromofluorobenzene	107		64 - 128					11/23/16 11:11	50

Client: New York State D.E.C.

Date Received: 11/21/16 16:55

a,a,a-Trifluorotoluene

Potassium

Sodium

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

Lab Sample ID: 480-109991-4

11/23/16 11:43

11/26/16 09:57

11/23/16 09:45

11/23/16 09:45 11/26/16 09:57

Matrix: Water

Client Sample ID: Pre-Carbon Date Collected: 11/21/16 16:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		20	3.5	ug/L			11/23/16 11:43	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			11/23/16 11:43	100
Benzene	750		20	2.3	ug/L			11/23/16 11:43	100
Ethylbenzene	86		20	2.9	ug/L			11/23/16 11:43	100
Isopropylbenzene	ND		20	2.7	ug/L			11/23/16 11:43	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			11/23/16 11:43	100
m,p-Xylene	17	J	40	5.4	ug/L			11/23/16 11:43	100
n-Butylbenzene	ND		20	3.1	ug/L			11/23/16 11:43	100
n-Propylbenzene	ND		20	13	ug/L			11/23/16 11:43	100
o-Xylene	24		20	2.7	ug/L			11/23/16 11:43	100
p-Cymene	ND		20	3.0	ug/L			11/23/16 11:43	100
sec-Butylbenzene	ND		20	2.0	ug/L			11/23/16 11:43	100
Toluene	150		20	3.6	ug/L			11/23/16 11:43	100
Xylenes, Total	41	J	60	5.4	ug/L			11/23/16 11:43	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

4-Bromofluorobenzene	102		64 - 128					11/23/16 11:43	100
Method: 200.7 Rev 4.4 - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95300		500	100	ug/L		11/23/16 09:45	11/26/16 09:57	1
Iron	1530		50.0	19.3	ug/L		11/23/16 09:45	11/26/16 09:57	1
Magnesium	45600		200	43.4	ug/L		11/23/16 09:45	11/26/16 09:57	1

500

1000

100 ug/L

324 ug/L

63 - 129

110

3820

48900

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

100

12/2/2016

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

Lab Sample ID: 480-109991-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 11/21/16 16:30 Date Received: 11/21/16 16:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	17	ug/L			11/23/16 12:15	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			11/23/16 12:15	500
Benzene	3300		100	12	ug/L			11/23/16 12:15	500
Ethylbenzene	250		100	14	ug/L			11/23/16 12:15	500
Isopropylbenzene	ND		100	14	ug/L			11/23/16 12:15	500
Methyl tert-butyl ether	ND		200	22	ug/L			11/23/16 12:15	500
m,p-Xylene	110	J	200	27	ug/L			11/23/16 12:15	500
n-Butylbenzene	ND		100	15	ug/L			11/23/16 12:15	500
n-Propylbenzene	ND		100	65	ug/L			11/23/16 12:15	500
o-Xylene	64	J	100	14	ug/L			11/23/16 12:15	500
p-Cymene	ND		100	15	ug/L			11/23/16 12:15	500
sec-Butylbenzene	ND		100	10	ug/L			11/23/16 12:15	500
Toluene	500		100	18	ug/L			11/23/16 12:15	500
Xylenes, Total	170	J	300	27	ug/L			11/23/16 12:15	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129			-		11/23/16 12:15	500
4-Bromofluorobenzene	104		64 - 128					11/23/16 12:15	500

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-109991-1

Lab Sample ID: 480-109991-2

Lab Sample ID: 480-109991-3

Lab Sample ID: 480-109991-4

Lab Sample ID: 480-109991-5

Matrix: Water

Matrix: Water

Matrix: Water

Matrix: Water

Client Sample ID: Post-Carbon 3

Date Collected: 11/21/16 16:00 Date Received: 11/21/16 16:55

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

Client Sample ID: Post-Carbon 2

Date Collected: 11/21/16 16:10

Date Received: 11/21/16 16:55

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

Client Sample ID: Post-Carbon 1

Date Collected: 11/21/16 16:15

Date Received: 11/21/16 16:55

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

Client Sample ID: Pre-Carbon

Date Collected: 11/21/16 16:20

Date Received: 11/21/16 16:55

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

Client Sample ID: Outside Sump

Date Collected: 11/21/16 16:30

Date Received: 11/21/16 16:55

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		500	333221	11/23/16 12:15	MAN	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: 480-109991-1

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Certification Summary

Client: New York State D.E.C.

TestAmerica Job ID: 480-109991-1 Project/Site: Gastown WWTP #915171

Laboratory: TestAmerica Buffalo

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

Authority	Program		EPA Region	Certification ID	Expiration Date
New York	NELAP		2	10026	03-31-17
The following analytes	are included in this report, bu	ut certification is not off	ered by the governing a	authority:	
Analysis Method	Prep Method	Matrix	Analyt	te	
8021B		Water	m,p-X	ylene	
8021B		Water	o-Xyle	ene	
8260C		Water	1,2-Di	chloroethene, Total	

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Laboratory References:

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

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Sample Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-109991-1

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

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10 Hazelwood Drive

Chain of Custody Record

Amherst, NY 14228

THE LEADER IN ENVIRONMENTAL TESTING

phone 716.504.9852 fax 716.691.7991																				Tes	tAmeric	a Labor	ratories	, Inc.	
Client Contact	Project Ma	nager: Gle	on May (NY	(SDEC)		Site (Conta	ct: T	hom	as Pa	lmer		Ţ	Date: 11-21-16						CO	COC No:				
Groundwater & Environmental Services, Inc	Tel/Fax: (7	16) 851-722	20			Lab	Conta	ct: C	. Jol	hnson	1			Carrier:							of_	L	COCs		
495 Aero Drive Suite 3		Analysis T	arnaround	Time		П	T			100	170	Γ	П	T	Т			r		Joh	No.				
Cheektowaga, NY 14225	Calendar	(C) or Wo	rk Days (W)						7 7	-					D.	12	12	- 1	-					
(800) 287-7857 Phone	T/	TAT if different from Below				1 3				MON S						B	W	ĸ.		L					
(866) 902-2187 FAX		2 weeks				Į	etho			I O	isi	1 1	1		1			Θ		SD	G No.	100	-	272 (5	
Project Name: NYSDEC Gatown WWTP		1	week			. 8	I W			C IIs	E E				4	80-10	9991	000							
Site: 915171			2 days				1002	2		TC	To	1-1			1		0001	COC	1	1					
P O # Callout 120597			day			old in	la e	alini	_	8	mide	Id-						1							
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) STABS list - VOA - 802	335.4 - Cyanide, Total	SM4500_H+-pH									Sam	ple Spec	ific Note	:s:	
Post-Carbon 3	1121-16	1600	Grab	w	9	N			X	X X	x x	x												62	
Post-Carbon 2		1610	Grab	w	3	N	T			,	x		1					T						1	
Post-Carbon 1		1615	Grab	W	3	N				2	x													lie.	
Pre-Carbon		1620	Grab	w	6	N 2	X	X		2	X			T			T								
Inside Outside Sump	上	1630	Grab	w	3	N				2	X	П						T	П						
						П	T					П					T							3	
						П					T			T				T							
						П				T									П					18	
						П			٦	T		П						1	П		-			-	
						П	T					\sqcap		T			1	T			4200		20.25		
						H	T	П	1	1	\top	\Box	\Box	T		\top	1	T	\sqcap						
						H	T			\top	1	T	T	T		1	1	T	\sqcap	T					\neg
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H: 6= Other					+	+			\top	+	\vdash	1	_		\dashv	\top	\dagger	\vdash	\top					
Possible Hazard Identification	.,					S	ampl	e Dis	spos	al (A	4 fee	may	be a	sses	sed in	sam	ples	are i	etaine	ed lon	ger than	1 mont	h)		
Non-Hazard Flammable Skin Irritant	Poison B	X X	Inknown							Clie				ispos					Archiv	ve For			nths		
Special Instructions/QC Requirements & Comments:						1000								1				. 72							П
																								100	
1 1.						,	/			,		1		_											
Relinquished by:	Company:			Date/Tir	165	3 R	eceiye	d by:	1		1				Con	ipany:			_	Date	e/Timey	6	165	5	
Relinquished by:	Company:			Date/Tir		$\overline{}$	eceive				/				Con	pany:				Date	e/Time:				
Relinquished by:	Company:			Date/Tir	ne:	Re	ceive	d by:			_		_		Con	npany:				Date	e/Time:				

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





















Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-109991-1

Login Number: 109991 List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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

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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: 480-111162-1

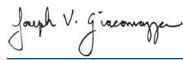
Client Project/Site: Gastown WWTP #915171

Sampling Event: Quarterly

For:

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

Attn: Mr. Richard Dana



Authorized for release by: 12/23/2016 1:18:07 PM

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

Designee for

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

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,

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and with written approval from the laboratory. For questions please contact the Project Manager

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



Review your project results through

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Have a Question?



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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. gireomogger

Joe Giacomazza Project Management Assistant II 12/23/2016 1:18:07 PM Client: New York State D.E.C. Project/Site: Gastown WWTP #915171 TestAmerica Job ID: 480-111162-1

Table of Contents

Cover Page	1
Table of Contents	3
Definitions	4
Case Narrative	5
Client Sample Results	7
Chronicle	15
Certification Summary	
Method Summary	
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21

6

Δ

5

6

8

9

10

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

Qualifiers

GC/MS SeV i OAc

Qualifier	Qualifier Desprihtion
F2	MS/MSD RPD exceeds control limits

GC OAc

Qualifier Qualifier	Desprihtion
---------------------	-------------

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

General CmeV istry

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

Glossary

c bbreviation	Trese poV V only used abbreviations V ay or V ay not be hresent in this rehort.
¤	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

MDA Minimum detectable activity
EDL Estimated Detection Limit
MDC Minimum detectable concentration

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

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

PQL Practical Quantitation Limit

QC Quality Control
RER Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

Job ID: 480-111162-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-111162-1

Receipt

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

GC/MS VOA

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

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-336974 recovered outside acceptance criteria, low biased, for 2-Hexanone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: Pre-Carbon (480-111162-4).

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

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-337178 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-111162-1).

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

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

GC/MS Semi VOA

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

HPLC/IC

Method(s) 300.0, SM 4110B: The following sample was diluted to bring the concentration of target analytes within the calibration range: Pre-Carbon (480-111162-4). Elevated reporting limits (RLs) are provided.

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

GC VOA

Method(s) 8021B: The following samples were diluted to bring the concentration of target analytes within the calibration range: Post-Carbon 2 (480-111162-2), Post-Carbon 1 (480-111162-3), Pre-Carbon (480-111162-4) and Outside Sump (480-111162-5). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method(s) 608: The continuing calibration verification (CCV) recovered above the upper control limit for delta-BHC. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: Post-Carbon 3 (480-111162-1).

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

Metals

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

General Chemistry

TestAmerica Buffalo 12/23/2016

Case Narrative

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

Job ID: 480-111162-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Post-Carbon 3 (480-111162-1).

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

Organic Prep

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

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Lab Sample ID: 480-111162-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/15/16 13:00 Date Received: 12/15/16 13:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/19/16 23:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/19/16 23:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/19/16 23:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/19/16 23:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/19/16 23:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/19/16 23:39	1
1,2-Dichloroethene, Total	ND		2.0	0.81	ug/L			12/19/16 23:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/19/16 23:39	1
2-Hexanone	ND		5.0	1.2	ug/L			12/19/16 23:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/19/16 23:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/19/16 23:39	1
Acetone	ND		10	3.0	ug/L			12/19/16 23:39	1
Benzene	ND		1.0	0.41	ug/L			12/19/16 23:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/19/16 23:39	1
Bromoform	ND		1.0	0.26	ug/L			12/19/16 23:39	1
Bromomethane	ND		1.0	0.69	ug/L			12/19/16 23:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/19/16 23:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/19/16 23:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/19/16 23:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/19/16 23:39	1
Chloroethane	ND		1.0	0.32	ug/L			12/19/16 23:39	1
Chloroform	ND		1.0	0.34	ug/L			12/19/16 23:39	1
Chloromethane	ND		1.0	0.35	ug/L			12/19/16 23:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/19/16 23:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/19/16 23:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/19/16 23:39	1
Styrene	ND		1.0	0.73	ug/L			12/19/16 23:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/19/16 23:39	1
Toluene	ND		1.0	0.51	ug/L			12/19/16 23:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/19/16 23:39	1
Trichloroethene	ND		1.0		ug/L			12/19/16 23:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/19/16 23:39	1
Vinyl acetate	ND		5.0	0.85	ug/L			12/19/16 23:39	1
Xylenes, Total	ND		2.0		ug/L			12/19/16 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		12/19/16 23:39	1
Toluene-d8 (Surr)	101		80 - 120		12/19/16 23:39	1
4-Bromofluorobenzene (Surr)	90		73 - 120		12/19/16 23:39	1

Method: 8270D - Semivolatile O	rganic Compounds (GC/MS)
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0	0.65	ug/L		12/17/16 07:50	12/19/16 14:05	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/17/16 07:50	12/19/16 14:05	1
Acenaphthene	ND		5.0	0.41	ug/L		12/17/16 07:50	12/19/16 14:05	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/17/16 07:50	12/19/16 14:05	1
Anthracene	ND		5.0	0.28	ug/L		12/17/16 07:50	12/19/16 14:05	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		12/17/16 07:50	12/19/16 14:05	1
Benzo[a]pyrene	ND	F2	5.0	0.47	ug/L		12/17/16 07:50	12/19/16 14:05	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		12/17/16 07:50	12/19/16 14:05	1

TestAmerica Buffalo

Page 7 of 21

12/23/2016

6

8

40

TestAmerica Job ID: 480-111162-1

Project/Site: Gastown WWTP #915171

Client Sample ID: Post-Carbon 3

Date Collected: 12/15/16 13:00 Date Received: 12/15/16 13:55

Phenol-d5

2-Fluorophenol

2,4,6-Tribromophenol

a,a,a-Trifluorotoluene

4-Bromofluorobenzene

Client: New York State D.E.C.

Lab Sample ID: 480-111162-1

12/17/16 07:50

12/17/16 07:50

12/17/16 07:50

12/19/16 14:05 12/19/16 14:05

12/19/16 14:05

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		12/17/16 07:50	12/19/16 14:05	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		12/17/16 07:50	12/19/16 14:05	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/17/16 07:50	12/19/16 14:05	1
Carbazole	ND		5.0	0.30	ug/L		12/17/16 07:50	12/19/16 14:05	1
Chrysene	ND	F2	5.0	0.33	ug/L		12/17/16 07:50	12/19/16 14:05	1
Dibenz(a,h)anthracene	ND	F2	5.0	0.42	ug/L		12/17/16 07:50	12/19/16 14:05	1
Dibenzofuran	ND		10	0.51	ug/L		12/17/16 07:50	12/19/16 14:05	1
Fluoranthene	ND		5.0	0.40	ug/L		12/17/16 07:50	12/19/16 14:05	1
Fluorene	ND		5.0	0.36	ug/L		12/17/16 07:50	12/19/16 14:05	1
Indeno[1,2,3-cd]pyrene	ND	F2	5.0	0.47	ug/L		12/17/16 07:50	12/19/16 14:05	1
Naphthalene	ND		5.0	0.76	ug/L		12/17/16 07:50	12/19/16 14:05	1
Pentachlorophenol	ND		10	2.2	ug/L		12/17/16 07:50	12/19/16 14:05	1
Phenanthrene	ND		5.0	0.44	ug/L		12/17/16 07:50	12/19/16 14:05	1
Phenol	ND		5.0	0.39	ug/L		12/17/16 07:50	12/19/16 14:05	1
Pyrene	ND		5.0	0.34	ug/L		12/17/16 07:50	12/19/16 14:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		46 - 120				12/17/16 07:50	12/19/16 14:05	1
2-Fluorobiphenyl	85		48 - 120				12/17/16 07:50	12/19/16 14:05	1
p-Terphenyl-d14	85		67 - 150				12/17/16 07:50	12/19/16 14:05	1

16 - 120

20 - 120

52 - 132

43

59

62

108

96

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

Method: 608 - Organochlor	ine Pesticides in Wa	ter							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.048	0.0078	ug/L		12/16/16 08:06	12/19/16 13:31	1
alpha-BHC	ND		0.048	0.0074	ug/L		12/16/16 08:06	12/19/16 13:31	1
beta-BHC	ND		0.048	0.024	ua/L		12/16/16 08:06	12/19/16 13:31	1

63 - 129

64 - 128

TestAmerica Buffalo

12/16/16 14:32

12/16/16 14:32

Page 8 of 21

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

Lab Sample ID: 480-111162-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3

Date Collected: 12/15/16 13:00 Date Received: 12/15/16 13:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.048	0.0096	ug/L		12/16/16 08:06	12/19/16 13:31	1
gamma-BHC (Lindane)	ND		0.048	0.0077	ug/L		12/16/16 08:06	12/19/16 13:31	1
Chlordane (technical)	ND		0.48	0.28	ug/L		12/16/16 08:06	12/19/16 13:31	1
4,4'-DDD	ND		0.048	0.0088	ug/L		12/16/16 08:06	12/19/16 13:31	1
4,4'-DDE	ND		0.048	0.011	ug/L		12/16/16 08:06	12/19/16 13:31	1
4,4'-DDT	ND		0.048	0.011	ug/L		12/16/16 08:06	12/19/16 13:31	1
Dieldrin	ND		0.048	0.0094	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endosulfan I	ND		0.048	0.011	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endosulfan II	ND		0.048	0.012	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endosulfan sulfate	ND		0.048	0.015	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endrin	ND		0.048	0.013	ug/L		12/16/16 08:06	12/19/16 13:31	1
Endrin aldehyde	ND		0.048	0.016	ug/L		12/16/16 08:06	12/19/16 13:31	1
Heptachlor	ND		0.048	0.0082	ug/L		12/16/16 08:06	12/19/16 13:31	1
Heptachlor epoxide	ND		0.048	0.0071	ug/L		12/16/16 08:06	12/19/16 13:31	1
Toxaphene	ND		0.48	0.12	ug/L		12/16/16 08:06	12/19/16 13:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	74		23 - 120				12/16/16 08:06	12/19/16 13:31	1
Tetrachloro-m-xylene	70						10/10/10 00 00		
-	70		44 - 120				12/16/16 08:06	12/19/16 13:31	1
Method: 200.7 Rev 4.4 - Metals (ICP)			44 - 120				12/16/16 08:06	12/19/16 13:31	1
Method: 200.7 Rev 4.4 - Metals (ICP) Analyte)	Qualifier	44 ₋ 120 RL	MDL	Unit	D	12/16/16 08:06 Prepared	12/19/16 13:31 Analyzed	1 Dil Fac
)	Qualifier			Unit ug/L	D			•
Analyte	Result	Qualifier	RL			<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte	Result 92.7	Qualifier Qualifier	RL	19.3		<u>D</u>	Prepared	Analyzed	Dil Fac
Iron General Chemistry	Result 92.7		RL 50.0	19.3	ug/L		Prepared 12/16/16 09:15	Analyzed 12/19/16 16:31	Dil Fac
Analyte Iron General Chemistry Analyte	Result 92.7 Result	Qualifier	RL 50.0	19.3	ug/L Unit		Prepared 12/16/16 09:15 Prepared	Analyzed 12/19/16 16:31 Analyzed	Dil Fac
Analyte Iron General Chemistry Analyte Oil & Grease	Result 92.7 Result 2.2	Qualifier J	RL	19.3 MDL 1.4	ug/L Unit mg/L		Prepared 12/16/16 09:15 Prepared 12/16/16 17:51	Analyzed 12/19/16 16:31 Analyzed 12/16/16 22:00	Dil Fac
Analyte Iron General Chemistry Analyte Oil & Grease Cyanide, Total	Result 92.7 Result 2.2 0.060	Qualifier J	RL 50.0	19.3 MDL 1.4 0.0050	ug/L Unit mg/L mg/L		Prepared 12/16/16 09:15 Prepared 12/16/16 17:51 12/19/16 04:30	Analyzed 12/19/16 16:31 Analyzed 12/16/16 22:00 12/19/16 13:06	Dil Fac
Analyte Iron General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable	Result 92.7 Result 2.2 0.060 ND	Qualifier J	RL 50.0 RL 4.8 0.010 0.010	19.3 MDL 1.4 0.0050 0.0050	ug/L Unit mg/L mg/L mg/L		Prepared 12/16/16 09:15 Prepared 12/16/16 17:51 12/19/16 04:30	Analyzed 12/19/16 16:31 Analyzed 12/16/16 22:00 12/19/16 13:06 12/19/16 02:55	Dil Fac
Analyte Iron General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable Total Dissolved Solids	Result 92.7 Result 2.2 0.060 ND 716 ND	Qualifier J	RL 50.0 RL 4.8 0.010 0.010 10.0	19.3 MDL 1.4 0.0050 0.0050 4.0	Unit mg/L mg/L mg/L mg/L		Prepared 12/16/16 09:15 Prepared 12/16/16 17:51 12/19/16 04:30	Analyzed 12/19/16 16:31 Analyzed 12/16/16 22:00 12/19/16 13:06 12/19/16 02:55 12/20/16 12:27	Dil Fac
Analyte Iron General Chemistry Analyte Oil & Grease Cyanide, Total Phenolics, Total Recoverable Total Dissolved Solids Biochemical Oxygen Demand	Result 92.7 Result 2.2 0.060 ND 716 ND	Qualifier J F1	RL 50.0	19.3 MDL 1.4 0.0050 0.0050 4.0 2.0	Unit mg/L mg/L mg/L mg/L mg/L	<u>D</u>	Prepared 12/16/16 09:15 Prepared 12/16/16 17:51 12/19/16 04:30 12/16/16 19:40	Analyzed 12/19/16 16:31 Analyzed 12/16/16 22:00 12/19/16 13:06 12/19/16 02:55 12/20/16 12:27 12/17/16 08:08	Dil Fac 1 Dil Fac 1 1 1 1

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

Lab Sample ID: 480-111162-2

Matrix: Wastewater

Client Sample ID: Post-Carbon 2

Date Collected: 12/15/16 13:05 Date Received: 12/15/16 13:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	5.7	J	10	1.7	ug/L			12/16/16 15:04	50
1,3,5-Trimethylbenzene	ND		10	7.5	ug/L			12/16/16 15:04	50
Benzene	1100		10	1.2	ug/L			12/16/16 15:04	50
Ethylbenzene	76		10	1.4	ug/L			12/16/16 15:04	50
Isopropylbenzene	ND		10	1.4	ug/L			12/16/16 15:04	50
Methyl tert-butyl ether	ND		20	2.2	ug/L			12/16/16 15:04	50
m,p-Xylene	37		20	2.7	ug/L			12/16/16 15:04	50
n-Butylbenzene	ND		10	1.5	ug/L			12/16/16 15:04	50
n-Propylbenzene	ND		10	6.5	ug/L			12/16/16 15:04	50
o-Xylene	22		10	1.4	ug/L			12/16/16 15:04	50
p-Cymene	ND		10	1.5	ug/L			12/16/16 15:04	50
sec-Butylbenzene	ND		10	1.0	ug/L			12/16/16 15:04	50
Toluene	190		10	1.8	ug/L			12/16/16 15:04	50
Xylenes, Total	59		30	2.7	ug/L			12/16/16 15:04	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		63 - 129			-		12/16/16 15:04	50
4-Bromofluorobenzene	98		64 - 128					12/16/16 15:04	50

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

Lab Sample ID: 480-111162-3

Matrix: Water

Client Sample ID: Post-Carbon 1

Date Collected: 12/15/16 13:10 Date Received: 12/15/16 13:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	20		20	3.5	ug/L			12/16/16 18:22	100
1,3,5-Trimethylbenzene	ND		20	15	ug/L			12/16/16 18:22	100
Benzene	4900		20	2.3	ug/L			12/16/16 18:22	100
Ethylbenzene	350		20	2.9	ug/L			12/16/16 18:22	100
Isopropylbenzene	ND		20	2.7	ug/L			12/16/16 18:22	100
Methyl tert-butyl ether	ND		40	4.4	ug/L			12/16/16 18:22	100
m,p-Xylene	170		40	5.4	ug/L			12/16/16 18:22	100
n-Butylbenzene	ND		20	3.1	ug/L			12/16/16 18:22	100
n-Propylbenzene	ND		20	13	ug/L			12/16/16 18:22	100
o-Xylene	99		20	2.7	ug/L			12/16/16 18:22	100
p-Cymene	ND		20	3.0	ug/L			12/16/16 18:22	100
sec-Butylbenzene	ND		20	2.0	ug/L			12/16/16 18:22	100
Toluene	930		20	3.6	ug/L			12/16/16 18:22	100
Xylenes, Total	270		60	5.4	ug/L			12/16/16 18:22	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	111		63 - 129			-		12/16/16 18:22	100
4-Bromofluorobenzene	98		64 - 128					12/16/16 18:22	100

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Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

Client Sample ID: Pre-Carbon

Lab Sample ID: 480-111162-4

Matrix: Water

Date Collected: 12/15/16 13:15 Date Received: 12/15/16 13:55

Method: 8260C - Volatile Orga Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	82	ug/L			12/17/16 21:42	100
1,1,2,2-Tetrachloroethane	ND		100	21	ug/L			12/17/16 21:42	100
1,1,2-Trichloroethane	ND		100	23	ug/L			12/17/16 21:42	100
1,1-Dichloroethane	ND		100	38	ug/L			12/17/16 21:42	100
1,1-Dichloroethene	ND		100	29	ug/L			12/17/16 21:42	100
1,2-Dichloroethane	ND		100	21	ug/L			12/17/16 21:42	100
1,2-Dichloroethene, Total	ND		200	81	ug/L			12/17/16 21:42	100
1,2-Dichloropropane	ND		100	72	ug/L			12/17/16 21:42	100
2-Hexanone	ND		500	120	ug/L			12/17/16 21:42	100
2-Butanone (MEK)	ND		1000	130	ug/L			12/17/16 21:42	100
4-Methyl-2-pentanone (MIBK)	ND		500	210	ug/L			12/17/16 21:42	100
Acetone	ND		1000	300	ug/L			12/17/16 21:42	100
Benzene	5300		100	41	ug/L			12/17/16 21:42	100
Bromodichloromethane	ND		100	39	ug/L			12/17/16 21:42	100
Bromoform	ND		100	26	ug/L			12/17/16 21:42	100
Bromomethane	ND		100	69	ug/L			12/17/16 21:42	100
Carbon disulfide	ND		100	19	ug/L			12/17/16 21:42	100
Carbon tetrachloride	ND		100	27	ug/L			12/17/16 21:42	100
Chlorobenzene	ND		100	75	ug/L			12/17/16 21:42	100
Dibromochloromethane	ND		100	32	ug/L			12/17/16 21:42	100
Chloroethane	ND		100	32	ug/L			12/17/16 21:42	100
Chloroform	ND		100	34	ug/L			12/17/16 21:42	100
Chloromethane	ND		100	35	ug/L			12/17/16 21:42	100
cis-1,3-Dichloropropene	ND		100	36	ug/L			12/17/16 21:42	100
Ethylbenzene	370		100	74	ug/L			12/17/16 21:42	100
Methylene Chloride	ND		100	44	ug/L			12/17/16 21:42	100
Styrene	ND		100	73	ug/L			12/17/16 21:42	100
Tetrachloroethene	ND		100	36	ug/L			12/17/16 21:42	100
Toluene	940		100	51	ug/L			12/17/16 21:42	100
trans-1,3-Dichloropropene	ND		100	37	ug/L			12/17/16 21:42	100
Trichloroethene	ND		100	46	ug/L			12/17/16 21:42	100
Vinyl chloride	ND		100	90	ug/L			12/17/16 21:42	100
Vinyl acetate	ND		500	85	ug/L			12/17/16 21:42	100
Xylenes, Total	260		200	66	ug/L			12/17/16 21:42	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120			-		12/17/16 21:42	100
Toluene-d8 (Surr)	97		80 - 120					12/17/16 21:42	100

101		73 - 120					12/17/16 21:42	100
: Compounds (GC)							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
17	J	20	3.5	ug/L			12/16/16 16:09	100
ND		20	15	ug/L			12/16/16 16:09	100
4200		20	2.3	ug/L			12/16/16 16:09	100
	Compounds (Result 17 ND	Compounds (GC) Result Qualifier 17 ND	Compounds (GC)	Compounds (GC) Result Qualifier RL MDL 17 J 20 3.5 ND 20 15	Compounds (GC) Result Qualifier RL MDL Unit Unit Unit Unit Unit Unit	Compounds (GC) Result Qualifier RL MDL Unit D 17 J 20 3.5 ug/L ND 20 15 ug/L	Compounds (GC) Result Qualifier RL MDL Unit D Prepared	Compounds (GC) Result Qualifier RL MDL Unit D Prepared Analyzed

Ethylbenzene 20 2.9 ug/L 12/16/16 16:09 100 320 Isopropylbenzene ND 20 2.7 ug/L 12/16/16 16:09 100 Methyl tert-butyl ether ND 40 4.4 ug/L 12/16/16 16:09 100 m,p-Xylene 150 40 5.4 ug/L 12/16/16 16:09 100 n-Butylbenzene 12/16/16 16:09 ND 20 3.1 ug/L 100

TestAmerica Buffalo

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

Lab Sample ID: 480-111162-4

Matrix: Water

Client Sample ID: Pre-Carbon

Date Collected: 12/15/16 13:15 Date Received: 12/15/16 13:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Propylbenzene	ND		20	13	ug/L			12/16/16 16:09	100
o-Xylene	85		20	2.7	ug/L			12/16/16 16:09	100
p-Cymene	ND		20	3.0	ug/L			12/16/16 16:09	100
sec-Butylbenzene	ND		20	2.0	ug/L			12/16/16 16:09	100
Toluene	810		20	3.6	ug/L			12/16/16 16:09	100
Xylenes, Total	240		60	5.4	ug/L			12/16/16 16:09	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	106		63 - 129					12/16/16 16:09	100
	100							10/10/10 10 00	400
4-Bromofluorobenzene	100		64 - 128					12/16/16 16:09	100
			64 - 128					12/16/16 16:09	100
4-Bromofluorobenzene Method: 200.7 Rev 4.4 - Met Analyte	tals (ICP)	Qualifier	64 ₋ 128 R L	MDL	Unit	D	Prepared	12/16/16 16:09 Analyzed	
Method: 200.7 Rev 4.4 - Method	tals (ICP)	Qualifier			Unit ug/L	D_	Prepared 12/16/16 09:15		Dil Fac
Method: 200.7 Rev 4.4 - Mer Analyte Calcium	tals (ICP)	Qualifier	RL	100		<u>D</u>		Analyzed	
Method: 200.7 Rev 4.4 - Mer Analyte Calcium Iron	tals (ICP) Result 116000	Qualifier	RL 500	100	ug/L ug/L	D_	12/16/16 09:15	Analyzed 12/19/16 16:34	
Method: 200.7 Rev 4.4 - Met Analyte Calcium Iron Magnesium	result 116000 1130	Qualifier	RL 500 50.0	100 19.3 43.4	ug/L ug/L	<u>D</u>	12/16/16 09:15 12/16/16 09:15	Analyzed 12/19/16 16:34 12/19/16 16:34	
Method: 200.7 Rev 4.4 - Me	Result 116000 1130 57400	Qualifier	RL 500 50.0 200	100 19.3 43.4 100	ug/L ug/L ug/L	<u>D</u>	12/16/16 09:15 12/16/16 09:15 12/16/16 09:15	Analyzed 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34	
Method: 200.7 Rev 4.4 - Met Analyte Calcium Iron Magnesium Potassium Sodium	tals (ICP) Result 116000 1130 57400 4260	Qualifier	RL 500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L	<u>D</u>	12/16/16 09:15 12/16/16 09:15 12/16/16 09:15 12/16/16 09:15	Analyzed 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34	
Method: 200.7 Rev 4.4 - Met Analyte Calcium Iron Magnesium Potassium	Result 116000 1130 57400 4260 62900	Qualifier	RL 500 50.0 200 500	100 19.3 43.4 100	ug/L ug/L ug/L ug/L ug/L	D	12/16/16 09:15 12/16/16 09:15 12/16/16 09:15 12/16/16 09:15	Analyzed 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34	
Method: 200.7 Rev 4.4 - Method: Calcium Iron Magnesium Potassium Sodium General Chemistry Analyte	Result 116000 1130 57400 4260 62900		RL 500 50.0 200 500 1000	100 19.3 43.4 100 324	ug/L ug/L ug/L ug/L ug/L		12/16/16 09:15 12/16/16 09:15 12/16/16 09:15 12/16/16 09:15 12/16/16 09:15	Analyzed 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34	Dil Fac
Method: 200.7 Rev 4.4 - Met Analyte Calcium Iron Magnesium Potassium Sodium	Result 116000 1130 57400 4260 62900 Result		RL 500 50.0 200 500 1000	100 19.3 43.4 100 324 MDL 2.8	ug/L ug/L ug/L ug/L ug/L		12/16/16 09:15 12/16/16 09:15 12/16/16 09:15 12/16/16 09:15 12/16/16 09:15	Analyzed 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34 12/19/16 16:34 Analyzed	Dil Fac 1 1 1 1 1

12/23/2016

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

Lab Sample ID: 480-111162-5

Matrix: Water

Client Sample ID: Outside Sump

Date Collected: 12/15/16 13:30 Date Received: 12/15/16 13:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	53	J	100	17	ug/L			12/16/16 16:41	500
1,3,5-Trimethylbenzene	ND		100	75	ug/L			12/16/16 16:41	500
Benzene	8300		100	12	ug/L			12/16/16 16:41	500
Ethylbenzene	700		100	14	ug/L			12/16/16 16:41	500
Isopropylbenzene	ND		100	14	ug/L			12/16/16 16:41	500
Methyl tert-butyl ether	ND		200	22	ug/L			12/16/16 16:41	500
m,p-Xylene	290		200	27	ug/L			12/16/16 16:41	500
n-Butylbenzene	ND		100	15	ug/L			12/16/16 16:41	500
n-Propylbenzene	ND		100	65	ug/L			12/16/16 16:41	500
o-Xylene	ND		100	14	ug/L			12/16/16 16:41	500
p-Cymene	ND		100	15	ug/L			12/16/16 16:41	500
sec-Butylbenzene	ND		100	10	ug/L			12/16/16 16:41	500
Toluene	1400		100	18	ug/L			12/16/16 16:41	500
Xylenes, Total	290	J	300	27	ug/L			12/16/16 16:41	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		63 - 129			-		12/16/16 16:41	500
4-Bromofluorobenzene	99		64 - 128					12/16/16 16:41	500

12/23/2016

TestAmerica Job ID: 480-11119P-1

j ro/ect@ite: Wastown # # Tj 571y121

Client: New York State D.E.C.

Lab Sample ID: 480-111162-1

Matrix: Wastewater

Client Sample ID: Post-Carbon 3 Date Collected: 12/15/16 13:00

Date Received: 12/15/16 13:55

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total®IA	Anal6sis	8P90C		1	332128	1P 3 7 3 9 P3:37	NEA	TAL BUF
Total ® IA	j reM	3y10C			33974P	1P 3 2 3 9 02:y0	Spj	TAL BUF
Total ® IA	Anal6sis	8P20D		1	332039	1P3739 14:0y	Lp#	TAL BUF
Total ® IA	Anal6sis	80P1B		1	339824	1PG9G9 14:3P	p VB	TAL BUF
Total ® IA	j reM	3y10C			33924P	1P 3 9 3 9 08:09	Cj Z	TAL BUF
Total ® IA	Anal6sis	908		1	3320P2	1P 3 7 3 9 13:31	p AN	TAL BUF
Total ® IA	j reM	P00.2			339247	1P 3 9 3 9 07:1y	p Rv	TAL BUF
Total ® IA	Anal6sis	P00.2 VeH4.4		1	332P4P	1P 3 7 3 9 19:31	Ap Z	TAL BUF
Total ® IA	j reM	1994A			33971y	1P 3 9 3 9 12:y1	DSC	TAL BUF
Total®IA	Anal6sis	1994A		1	3397P2	1P3939 PP:00	DSC	TAL BUF
Total ® IA	j reM	Distill © N			332001	1P 3 7 3 9 04:30	DJS	TAL BUF
Total®IA	Anal6sis	33y.4		1	33213y	1P 3 7 3 9 13:09	p DL	TAL BUF
Total ® IA	j reM	Distill			3397P4	1P 3 9 3 9 17:40	DCB	TAL BUF
Total ® IA	Anal6sis	4P0.1		1	332000	1P 3 7 3 9 0P:yy	+pB	TAL BUF
Total ® IA	Anal6sis	Sp Py40C		1	332349	1P@0@19 1P:P2	E+B	TAL BUF
Total ® IA	Anal6sis	Sp Py40D		1	332177	1P (9 0 3 9 00:y4	+pB	TAL BUF
Total ® IA	Anal6sis	Sp 4y00 Zu B		1	332307	1P@039 10:PP	CEA	TAL BUF
Total ® IA	Anal6sis	Sp yP10B		1	3397yP	1PG2G9 08:08	JCL	TAL BUF

Client Sample ID: Post-Carbon 2

Date Collected: 12/15/16 13:05 Date Received: 12/15/16 13:55

Batch Batch Dilution Batch Prepared Method Run Factor Number or Analyzed Analyst Lab Prep Type Туре 339824 TAL BUF Total®IA 80P1B 1P**3**9**3**9 1y:04 p VB Anal6sis y0

Client Sample ID: Post-Carbon 1

Date Collected: 12/15/16 13:10 Date Received: 12/15/16 13:55

Lab Sample ID: 480-111162-3 Matrix: Water

Lab Sample ID: 480-111162-2

Matrix: Wastewater

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total®IA	Anal6sis	80P1B		100	339824	1P 3 9 3 9 18:PP	p VB	TAL BUF

Client Sample ID: Pre-Carbon

Date Collected: 12/15/16 13:15 Date Received: 12/15/16 13:55 Lab Sample ID: 480-111162-4 **Matrix: Water**

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total ® IA	Anal6sis	8P90C		100	339724	1PG2G9 P1:4P	NEA	TAL BUF
Total ® IA	Anal6sis	80P1B		100	339824	1P3939 19:07	p VB	TAL BUF
Total®IA Total®IA	j reM Anal6sis	P00.2 P00.2 VeH4.4		1	339247 332P4P	1PG9G9 07:1y 1PG7G9 19:34	p Rv Ap Z	TAL BUF

TestAmerica Bf =alo

Page 15 of 21

12/23/2016

Lab Chronicle

Client: New York State D.E.C.

Date Collected: 12/15/16 13:15

Date Received: 12/15/16 13:55

j ro/ect Site: Wastown # # Tj 571y121

Client Sample ID: Pre-Carbon

TestAmerica Job ID: 480-11119P-1

Lab Sample ID: 480-111162-4

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total®IA	Anal6sis	300.0		10	332y8y	1P @ 1 3 9 17:y3	CAR	TAL BUF
Total®IA	Anal6sis	310.P		У	3329P0	1P © 1 3 9 14:02	LED	TAL BUF

Client Sample ID: Outside Sump Lab Sample ID: 480-111162-5

Date Collected: 12/15/16 13:30

Matrix: Water Date Received: 12/15/16 13:55

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst 80P1B 339824 1PG9G9 19:41 p VB TAL BUF Total®IA Anal6sis y00

Laboratory References:

TAL BUF, TestAmerica Bf =aloz10 Zadelwooh DriHezAmKerstzNY 14PP8-PP78zTEL (219)971-P900

Certification Summary

Client: New York State D.E.C.

j ro/ect Site: Wastown # # Tj 571U1h1

TestAmerica Job ID: 480-11119P-1

Laboratory: TestAmerica Buffalo

d nless ot, erwise noteyf all analytes uor t, is laboratory were co2erey 6nyer eac, certiucation below.

thority	Program		EPA Region	Certification ID	Expiration Date
ew York	NELAj	NELAj		100P9	03-31-1h
T, e wollowing analytes a	re incl6yey in t, is reportf b6	St certiucation is not ouere	y bv t, e go2erning a	a6t, oritv:	
Analysis Met, oy	j rep Met, oy	Matrix	Analy	te	
80P1B		# astewater	mfp-X	vlene	
80P1B		# astewater	o-Xvle	ene	
80P1B		# ater	mfp-X	vlene	
80P1B		# ater	o-Xvle	ene	
8P90C		# astewater	1fP-Di	c, loroet, enef Total	
8P90C		# ater	1fP-Di	c, loroet, enef Total	
SM 4U00 H+ B		# astewater	pH		

Method Summary

Client: New York State D.E.C.

Project/Site: Gastown WWTP #915171

TestAmerica Job ID: 480-111162-1

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

I nieNt: weY k orS . tate DEPE E j ro/ectG ite: WastoYN# # Tj 5713121

TestAmerica Job ID: 480-11119C-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-11119C-1	j ost-l arboN6	# asteYater	103339 16:00	103339 16:33
480-11119C-C	j ost-I arboNC	# asteYater	103339 16:03	103339 16:33
480-11119C-6	j ost-l arboN1	# ater	103339 16:10	103339 16:33
480-11119C-4	j re-l arboN	# ater	103339 16:13	103339 16:33
480-11119C-3	Outside . ump	# ater	103339 16:60	103339 16:33

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Buffalo

10 Hazelwood Drive

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Chain of Custody Record

THE LEADER IN ENVIRONMENTAL TESTING

Amherst, NY 14228 phone 716.504.9852 fax 716.691.7991																	2			Te	stAmeric	a Labora	tories,	Inc.
Client Contact Project Manager: Glenn May (NYS)				(SDEC)		Site Contact: Thomas Palmer						Date: 12/15/16						CO	COC No:					
Groundwater & Environmental Services, Inc	Tel/Fax: (716) 851-7220					Lab	ab Contact: O. Johnson					Carrier:												
495 Aero Drive Suite 3	Analysis Turnaround Time					2.7 ₀	ister				8021	T			so	_		.2		Joh	b No.			
Cheektowaga, NY 14225		Calendar (C) or Work Days (W)						-		7.	8 - V			ibie	field		lids	M04						
(800) 287-7857 Phone	TAT if different from Below				1974	thod			M04	20			vera	Pes	- Total Suspended Solids	S po	OL							
(866) 902-2187 FAX Project Name: NYSDEC Gatown WWTP		2 weeks					r Me			10	list		asc	Reco	608_Pest - Priority Pollutant Pesticide 5210B - Biochemical Oxygen Demand	ygen d So	solve	SVOA -		SD	G No.			
						100	28D (MOD) Local Method			Llis	E E	3	Gre	otal		10x	I Di							
Site: 915171			2 days				(ar	ly.		TC	ST.	E	Sil &	cs, T	rity.	mic	Tot	TCI						
P O # Callout 120597			l day				E GO	calin		IOD	10D	d-+1	le - 0	noli	Prio	ocne	led-	(ao						
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Elitered Sa	306.7 - (MOD) Local Method		200.7 - fron	8260B - (MOD) TCL list OLM04.2	8021B - (MOD) STARS list - VOA - 335.4 - Cvanide, Total	SM4500_H+-pH	1664A_Cale - Oil & Grease	420.4 - Phenolies, Total Recoverable	608_Pest - Priority Pollutant Pesticides	2540D - Te	2540C_Caled - Total Disolved Solids	8270C-(MOD) TCL SVOA - OLM04.2			San	nple Specif	ic Notes	
Post-Carbon 3	12/15	1300	Grab	W	19	N			X	x	X X	X	X	X	X 2	X	X	X						
Post-Carbon 2	12/15	1305	Grab	W	3	N					X													
Post-Carbon I	12/15	1210	Grab	w	3	N					X													
Pre-Carbon	12/15	1315	Grab	W	9	N	x x	X		x	X											238		
Inside Outside Sump	12/15	1330	Grab	W	3	N					x											39		
																						480-1111	 62 COC	
																								20.20.20
	-																							
																							- 10	2. 41.
						Ш												L						
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaC	H; 6= Other																_	L						
Possible Hazard Identification Non-Hazard Flammable Skin Irritant Poison B Unknown							Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Months																	
Special Instructions/QC Requirements & Comments:																	20,411							
			\$0.										192											
Relinquished by:	Company.	112		Date/Tir	ne: /39	77 R	teceiv	ed by	72	1	2	K	01	N	- C	omp	an y.	-/	7	Dat	te/Time:	11511	6 1	355
Relinquished by:	Company:			Date/Tir		F	teceiv	ed by	/;						C	ompa	any:			. Dat	te/Time:			
Relinquished by:	Company: Date/Time:			ne:	Received by:						Company						Dat	Date/Time:						
							_	_					_			-	7 (21	Form	No. CA-C	-WI-002,	dated 04	/07/201

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-111162-1

Login Number: 111162 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

orditor, burnon, burn in		
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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